

Caring for Refugee Children

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Practice Gap

Managing the medical, developmental, and psychosocial needs of children and adolescents in the resettled refugee population is a complex task. Primary care clinicians who encounter these patients after their arrival to the United States must be familiar with their unique customs and common illnesses as well as the barriers to health-care access that these populations face.

INTRODUCTION

The office of the United Nations High Commissioner for Refugees reported 10.4 million refugees worldwide at the beginning of 2013, 50% of whom were children. (1) These refugees are spread around the world, with 50% in Asia and approximately 28% in Africa. A total of 58,179 persons were admitted to the United States (U.S.) as refugees in 2012, 32% of whom were younger than 18 years of age. (1)

A refugee is defined as any person who is outside his or her country of origin and cannot return because of persecution or the well-founded fear of persecution due to race, religion, membership in a particular social group, or political opinion. Refugees are recognized before arrival to the U.S., while an asylum seeker seeks to be recognized as someone seeking asylum from persecution in his or her home country after arrival. Compared to an immigrant, who chooses to settle in another country, a refugee is forced to flee his or her country. (2)

This review is directed toward the primary care clinician initially evaluating refugee children and adolescents following arrival to the U.S., but should also prove useful for those providing longitudinal or sporadic care to this population. The goal is to summarize the unique medical, developmental, and psychosocial needs of refugees and the screening process designed to identify these needs. In addition, the intent is to describe the extensive system of services in place designed to help with resettlement so that refugees can become productive, self-sufficient members of U.S. society.

OVERSEAS AND DOMESTIC HEALTH ASSESSMENTS

Clinicians should be familiar with the overseas and domestic health assessments completed as part of the emigration process. Before being accepted for resettlement into the U.S., all refugees must pass the overseas medical screening examination, which is under the oversight of the Centers for Disease Control and Prevention (CDC). (3) The examination is performed in refugee camps or

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areas of significant refugee resettlement to identify conditions that might prevent entry to the U.S. or require follow-up after arrival (Table 1). The overseas evaluation is designed to prevent emigration of individuals who have communicable diseases of public health significance, physical or mental disorders with harmful behaviors, and a history of drug abuse or addictions.

Chronic health conditions and disabilities are not reliably identified during the overseas medical screening examination. (7) For this reason, the domestic health assessment is crucial to ensure the good health of each individual child after arrival. The DS-2053 form (formerly OF-157) documents the overseas health assessment and should be reviewed at the time of the initial domestic health assessment so that follow-up for previously identified conditions can be facilitated. This form will be in the refugee's International Organization for Migration bag, also known as the "blue and white" bag, along with immunization records and overseas chest radiographs. Lack of an identified condition before arrival should not be assumed to mean absence of a condition. Each state develops its own protocol for completing the domestic health examination, which is conducted in the state of initial arrival (Table 1). Although the domestic assessment is strongly recommended by the CDC, it is not mandated. (4) For this reason, when initially evaluating a patient with a history of refugee emigration, clinicians should not assume that an extensive initial domestic health evaluation has taken place.

UNIQUE CUSTOMS

The leading countries of nationality, accounting for 71% of admitted refugees to the U.S. in 2012, were Bhutan, Burma, and Iraq. Other leading countries included Somalia, Cuba, Democratic Republic of Congo, Iran, and Eritrea. (8) Attempting to understand a sometimes wide variety of health beliefs, practices, and life experiences is no easy task. It is important for clinicians to remember that a patient may come from a different culture, but so do you. (5) For example, being aware of the Southeast Asian healing practice of coining can prevent mistaken concerns for child abuse, and awareness of a female teen's desire not to be examined by a male physician can avoid unnecessary conflict. Some valuable resources for gaining cultural knowledge include:

- ethnoMED (Integrating cultural information into clinical practice): <http://ethnomed.org>
- Cultural Orientation Resource Center, Center for Applied Linguistics: <http://www.culturalorientation.net>

- BRYCS (Building Refugee Youth and Children's Services): <http://www.brycs.org/publications/index.cfm>, which provides well-written cultural summaries for a number of refugee populations (Burmese, Iraqi, Bhutanese, Hmong, Liberian, Somali, Somali Bantu, Sudanese)
- CDC Refugee Health Profiles: provide key health and cultural information for specific refugee groups resettling in the U.S. Available refugee health profiles at present address Bhutanese (<http://www.cdc.gov/immigrantrefugeehealth/pdf/bhutanese-health-profile.pdf>) and Congolese refugees (<http://www.cdc.gov/immigrantrefugeehealth/pdf/congolese-health-profile.pdf>). Profiles of Iraqi and Burmese refugees are currently under development (<http://www.cdc.gov/immigrantrefugeehealth/profiles>).

Although no one can ever discount the value of knowing as much as possible about the culture and health-care practices of the culture being served, true mastery is difficult to achieve. The concept of placing priority on cultural humility rather than cultural competency addresses this difficulty. Being culturally competent implies mastery of a finite body of knowledge, but cultural humility encourages the practitioner to be flexible and humble enough to assess anew the cultural dimensions of the experiences of each new patient. (9) An important aspect of cultural humility is its focus on letting go of any false sense of security based upon a perceived feeling of being "competent" in regard to a patient's culture. Stereotyping is often the result of perceived competence. Cultural humility implies flexibility and humbleness that allows the practitioner to release the false sense of security associated with stereotyping. This is a lifelong process that individuals continuously renew with patients, communities, colleagues, and themselves. It allows the flexibility to admit what we do not know when we truly do not know and to search for and access resources that might enhance both immediate patient care and future clinical practice. (9)

UNIQUE HEALTH-CARE NEEDS

The refugee population arrives with unique health-care needs and is more likely to immigrate with pre-existing health problems than other immigrants because of their turbulent migration histories. (7) Most arrive from situations of little or no available medical care and prevalent infectious diseases. High rates of mental health problems such as posttraumatic stress disorder (PTSD), depression, and anxiety result from the persecution and conflict that many flee.

TABLE 1. Overseas and Domestic Health Assessments Completed as Part of the Emigration Process(3)(4)(5)(6)

THE OVERSEAS MEDICAL EXAMINATION (valid for 6 months before departure for the United States [U.S.])

- Conducted by panel physicians appointed by U.S. consul of the International Organization of Migration
- Technical oversight provided by the Centers for Disease Control and Prevention (CDC) Division of Global Migration and Quarantine
- Documented on DS-2053 form (formerly OF-157)
- To identify individuals with Class A health conditions that prevent entry into the U.S. (waivers may be issued, in which case immediate follow-up upon entry to U.S. is required)
- To identify individuals with Class B health conditions that require follow up soon after arrival to the U.S.
- All refugees must pass examination before being accepted for resettlement into the U.S.

| Examination Components | Class A Conditions A physical or mental condition that renders a person ineligible for admission or adjustment of status | Class B Conditions Significant health problems affecting ability to care for oneself or attend school or work or that require extensive treatment or possible institutionalization |
|---|--|--|
| • Full medical history | • Active or infectious tuberculosis | • Inactive or noninfectious tuberculosis |
| • Physical examination | • Quarantinable diseases (tuberculosis, cholera, diphtheria, plague, smallpox, yellow fever, severe acute respiratory syndrome, pandemic flu) | • Treated syphilis |
| • Mental status examination | • Untreated syphilis, chancroid, gonorrhea, granuloma inguinale, lymphogranuloma venereum | • Other sexually transmitted infections |
| • Blood test for syphilis and physical examination for evidence of other sexually transmitted infections if ≥ 15 y (positive results require treatment before travel to U.S.) | • Hansen disease (laboratory-confirmed disease requires 6 months of treatment before travel to U.S. and treatment must be continued in U.S.) | • Pregnancy |
| • Tuberculosis testing screen • Review of vaccination | • Addiction to or abuse of a specific substance (amphetamine, cannabis, cocaine, hallucinogens, inhalants, opioids, phencyclidines, sedative-hypnotics, and anxiolytics) without harmful behavior and/or any physical or mental disorder with harmful behavior, along with likelihood that behavior will recur | • Treated Hansen disease • Sustained, full remission of substance abuse and/or any physical or mental disorder without harmful behavior or with a history of such behavior considered unlikely to recur |

Domestic Health Assessment (to be completed within the first 30 to 90 days after arrival)

- This examination is recommended by the CDC but is not mandatory
- Purpose is to eliminate health-related barriers to successful resettlement and to ensure follow-up of any Class A or Class B conditions identified during the overseas medical examination
- Completed in the state of initial arrival in the U.S.
- Each state develops its own protocol for completing this initial medical examination (generally coordinated by state-level refugee health programs)
- Services can be delivered by local health departments, community health centers, academic medical centers, and private practice physicians
- Health-care providers can bill Refugee Medical Assistance (RMA) for all components of the domestic health assessment
- History and physical examination guidelines available at www.cdc.gov/immigrantrefugeehealth/pdf/guidelines-history-physical.pdf

Continued

TABLE 1. (Continued)

- Recommended laboratory analysis: Complete blood cell count with red blood cell indices and white blood cell differential count, lead testing, urinalysis (if old enough to provide a clean-catch urine), metabolic screening in newborns (according to state guidelines), basic metabolic panel (in presence of concerning signs, symptoms, or comorbidities)
- Review vaccination records and administration of needed age-appropriate vaccinations in accordance with Advisory Committee on Immunization Practices recommendations
- Testing for infectious diseases (Table 3)
- Prescription of an age-appropriate multivitamin with iron (for all between 6 and 59 months of age); empiric treatment with antiparasitic(s) or send stool samples for those who did not receive predeparture treatment
- Referral for subspecialty consultation, mental health services, Women, Infants and Children and social work services as needed

Examples of State Refugee Health Assessment Forms

Texas: http://www.dshs.state.tx.us/idcu/health/refugee_health/reporting/

Pennsylvania: http://www.portal.state.pa.us/portal/server.pt/document/909016/refugee_health_assessment_form_pdf

Minnesota: <http://www.health.state.mn.us/divs/idepc/refugee/assesfrm.pdf>

Guidance on developing state level health screening programs available at www.cdc.gov/immigrantrefugeehealth/guidelines/domestic-domestic-guidelines.html

Nutritional Status and Development

Nutritional assessment is not a required component of the overseas predeparture examination, which focuses on diseases of public health significance. However, refugee children have a high prevalence of malnutrition and growth retardation and are at high risk for developmental delay and behavioral issues. Many arrive from crowded refugee camps that are plagued by malnutrition and illness. An accurate age is often unknown (legal documentation commonly shows a standardized birth date of January 1), which can increase the difficulty in accurately assessing growth and development following arrival to the U.S. Immunization records, school transcripts, and other narrative histories (eg, age of child in relation to other children in the family, time of year at birth) can be helpful if a concern for true age arises.

Undernutrition is a common condition among refugees, but concerns are increasing for overweight and obesity among certain populations arriving to the U.S. This is most notable in certain African populations and in newly arriving Iraqi populations. (10) Given the high-risk nature of their past and current diet, refugee children 6 to 59 months of age should be given an age-appropriate daily multivitamin with iron.

The CDC *Guidelines for the Evaluation of the Nutritional Status and Growth in Refugee Children During the Domestic Medical Screening Examination* delineates appropriate methods for conducting such an assessment. For children younger than 2 years of age, growth indicators should be compared to World Health Organization (WHO) standardized growth

references. For children age 2 years and older, growth indicators should be compared to CDC/National Center for Health Statistics references. (10) Micronutrient deficiencies common among refugees are summarized in Table 2. Additional information and recommendations for treatment of these deficiencies can be found in the CDC guidelines.

Developmental screening is important but may not be straightforward. Ideally, at the time of the initial screening in the U.S., the child’s developmental stage can be assessed via standardized historical and examination milestones such as the Denver Developmental Screening Test. However, most developmental screening in the U.S. depends on the acquisition of skills that have at least partial cultural and experiential bases. Not all children in refugee camps have been exposed to stackable blocks or pens/pencils and pictures. A child can fail a screening tool and potentially still be at a developmentally appropriate level. Diagnosing “delays” based on U.S. cultural assessments might not be helpful. A more appropriate approach may be to ask the parents how the child is developing compared with other siblings or other children from his or her culture.

Immunizations

Refugees, unlike most immigrant populations, are not required to have vaccinations before arrival to the U.S. Further, many vaccines have limited or no availability in some developing countries or in specific refugee settings. To ensure that every refugee child is appropriately immunized against vaccine-preventable diseases, which immunizations

TABLE 2. **Common Micronutrient Deficiencies Among Refugees (10)**

| DEFICIENCY | FACTS/PHYSICAL FINDINGS | SYMPTOMS |
|--------------------------|--|---|
| Iron | <ul style="list-style-type: none"> • Estimated to affect 50% of children in the developing world (particularly prevalent among refugee children) • Results from inadequate bioavailable dietary iron • Groups at high risk: <ul style="list-style-type: none"> - Age 6–24 mo (period of rapid growth) - Breastfed infants > 6 mo (who are not receiving iron supplementation) - Those with a history of infrequent consumption of animal sources of iron • Nondietary factors associated with deficiency • Parasitic infections (hookworm, malaria) • Hemoglobinopathies (sickle cell trait/diagnosis, thalassemia) • Chronic infections | Impaired psychomotor and mental development, cognitive impairment, fatigue |
| Vitamin D | <ul style="list-style-type: none"> • Prevalent in both resource-rich and resource-limited countries • Cause is multifactorial (including inadequate dietary intake of calcium and vitamin D, prolonged breastfeeding without supplements) and heavily dependent on nondietary determinants such as: <ul style="list-style-type: none"> - Limited sun exposure (protective/religious clothing, movement to temperate climates, tradition of keeping infants indoors) - Increased skin pigmentation | Rickets |
| Vitamin A | <ul style="list-style-type: none"> • Very common in the developing world • Established policy in refugee camps for supplementation (but high rates persist, particularly among children) • Leading cause of preventable blindness among children in the world | Poor night vision, Bitot spots (areas of abnormal squamous cell proliferation and keratinization of the conjunctiva that can progress to blindness), impaired bone growth, dry skin and hair, impaired humoral and cell-mediated immunity |
| Zinc | <ul style="list-style-type: none"> • Populations consuming plant-based diets are at greatest risk • Required for the catalytic activity of >100 enzymes | Growth retardation, loss of appetite, impaired immune function, hair loss, diarrhea, delayed sexual maturation, delayed wound healing |
| Vitamin B12 | <ul style="list-style-type: none"> • Bhutanese refugees are particularly at risk • Results from inadequate dietary intake (found in eggs, meat, milk) as well as impaired absorption and malabsorption • Laboratory studies reveal macrocytic red blood cells (with or without anemia), hypersegmented neutrophils | Commonly asymptomatic but may exhibit fatigue, weakness, numbness/tingling in the extremities, loss of coordination, ataxic gait |
| B3/Niacin and tryptophan | <ul style="list-style-type: none"> • Deficiency is known as pellagra, typically occurs in combination with lack of other amino acids and micronutrients • Results from inadequate dietary intake (most common in areas where corn is the primary constituent of the diet and in areas of South Asia where people eat millet) | Advanced pellagra (not typically seen in infants and children) may cause a symmetric photosensitive dermatitis ("glovelike rash"), diarrhea, stomatitis, and neurologic symptoms |
| Iodine | <ul style="list-style-type: none"> • Affects ~31.5% of school age children worldwide • Most common cause of thyroid disease • Results from inadequate dietary intake • Universal salt iodization has reduced the burden of iodine deficiency | Physical and developmental growth abnormalities, goiter |
| Vitamin B1/Thiamine | <ul style="list-style-type: none"> • Plays an important role in energy metabolism and tissue building • May result from inadequate dietary intake (diets heavy in white or milled rice), altered metabolism (fever, liver disease), or losses (diarrhea) | May lead to beriberi (anorexia, constipation, fatigue, irritability, memory loss, neuropathy, heart failure) |
| Vitamin C | <ul style="list-style-type: none"> • Most at risk are those with chronic malnutrition and diets devoid of fruits and vegetables • Outbreaks reported in refugee camps in Somalia, Bhutanese refugees in Nepal, Ethiopia, Kenya, Somalia, and Sudan | Results in scurvy and symptoms due to impaired collagen synthesis (eg, ecchymoses, petechiae, bleeding gums) |

have been administered must be determined following arrival and needed vaccines should be initiated or completed. Vaccines administered outside the U.S. can generally be accepted as valid if the schedule was similar to that recommended in the U.S. Only written documentation should be accepted as evidence of previous vaccination. Written records are more likely to predict protection if the vaccines, dates of administration, intervals between doses, and the person's age at the time of vaccination are comparable to U.S. recommendations. Under mass vaccination campaigns intended for outbreak control (eg, polio, varicella, or measles), documentation often is not provided. Frequently, the name of the vaccine is in another language or the name or components of vaccines are unfamiliar to the U.S. clinician. In these cases, online resources may be valuable in deciphering the names encountered. (11) Language translations for vaccine names are available at:

- www.immunize.org/izpractices/p5121.pdf
- www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/B/foreign-products-tables.pdf

Vaccinations often must be repeated for multiple reasons, including vaccine records that indicate a vaccine dose was given before birth (after taking into account the possible transposition of month and day), vaccine records for which the clinician has concerns about falsification, and severe malnutrition in a child at the time of immunization that could impair adequate immune response. The decision to reimmunize a child is best made after discussion of the options available for the various vaccines. Clinicians should be aware that adverse events attributed to excess immunization are rare. Mild local adverse effects are more common with certain vaccines when revaccination is performed after a short interval, most notably tetanus and diphtheria toxoid and more rarely pneumococcal polysaccharide vaccine. (11)

If records are unavailable or questionable, an age-appropriate vaccination schedule should be initiated. A useful table for approaching revaccination is available at: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5515a1.htm#tab12>. Live-virus vaccines should not be administered when there is clinical suspicion of immunosuppression due to human immunodeficiency virus (HIV). Vaccine Information Statements explaining the benefits and risks of a vaccine should be given to families before a vaccine is administered. They are available in more than 40 languages at: www.immunize.org/vis.

Serologic testing for immunity is an alternative for certain antigens when the clinician believes the refugee was likely to have had a previous infection that conveyed immunity or received a full series of vaccines but did not have appropriate vaccination records. The CDC provides

a table that may be useful to clinicians when deciding between revaccinating and serologic testing (www.cdc.gov/mmwr/preview/mmwrhtml/rr5515a1.htm#tab12).

Follow-up care of the refugee child is essential to ensure completion of vaccinations and the establishment of primary care. Proof of vaccination is required at the time a refugee applies for permanent U.S. residence, typically 1 year after arrival in the U.S. CDC-mandated immunizations for all immigrants and refugees requesting adjustment of status to Permanent Resident Alien ("Green Card") can be found at www.cdc.gov/immigrantrefugeehealth/exams/ti/civil/vaccination-civil-technical-instructions.html#assessment.

Infectious Disease

Resettled refugees are a tightly controlled population, with pre- and postmigration screening for and prophylactic treatment of infectious diseases. Therefore, this population accounts for less international spread of infectious disease than international travelers and other migrant populations. (12) Predeparture and postarrival screening requirements and recommended postarrival laboratory testing for infectious diseases encountered within refugee populations are detailed in Table 3.

Although infectious diseases are not the most prevalent condition in refugees, the possibility of their presence should be high on the clinician's differential diagnosis. (19) The worldwide presence of parasitic infections is staggering, and the enormous morbidity from parasitoses reflects the number of people affected. All refugees should be screened for parasitic infections whether or not they appear symptomatic. Negative results do not rule out a parasitic infection, and serologic testing for antibodies may be needed, particularly if stool samples are negative and the child has abdominal pain, hematuria, or failure to thrive. (4) (13) Tuberculosis is one of the most common infectious diseases in refugees, and all refugees should be screened after arrival in the U.S. to ensure effective treatment, prevention, and control. Interpretation of tuberculin skin test results in those who have received bacille Calmette-Guerin (BCG) is the same as for children who have not received BCG vaccine. (15) A high percentage of refugee children are immune to hepatitis A due to previous exposure and routine testing of asymptomatic children is not recommended. All refugees coming from hepatitis B endemic areas should be screened, as should any child who is at high risk for hepatitis C infection. (17)

Risk of sexually transmitted infections is highest in refugees ages 15 to 24 years. Younger sexually active patients and those with a history of sexual abuse also are at risk. (16)

TABLE 3. **Recommended Disease Specific Laboratory Testing (I3)(I4)(I5)
(I6)(I7)(I8)**

**Intestinal and Tissue
Invasive Parasites (ITIP)**

- Postarrival screening for invasive parasites depends on the region of departure and predeparture presumptive therapy received.
- Currently, all refugees from the Middle East, South and Southeast Asia, and Africa without contraindications receive a single dose of albendazole before departure. In addition, all sub-Saharan African (SSA) refugees without contraindications receive treatment with praziquantel for schistosomiasis. The only population currently receiving presumptive therapy for strongyloides is Burmese refugees, who receive ivermectin if they do not have contraindications.
- For those who have contraindications or who did not receive complete predeparture therapy, the following ITIP screening is recommended:
 - For refugees who had no predeparture presumptive treatment or incomplete presumptive treatment
 - **Giardia lamblia** (all refugees): Conduct stool ova and parasites examination (two or more samples) or provide presumptive treatment.
 - **Roundworms/nematodes** (all refugees): Conduct stool ova and parasites examination (two or more samples) or provide presumptive treatment.
 - **Strongyloides** (all refugees): Provide presumptive therapy or conduct diagnostics for *Strongyloides* (eg, serologies for *Strongyloides*, two or more stool ova and parasites examinations, or *Strongyloides* culture/agar method).
 - **Schistosomiasis** (SSA refugees): Provide presumptive therapy or conduct serologies for schistosomiasis (for SSA refugees who did not receive praziquantel).
 - **Complete blood cell count with an absolute eosinophil count** (routinely recommended as part of the hematology testing and is not sensitive or specific for invasive parasites, but a persistently elevated count indicates the need for further investigation).
 - For refugees who received incomplete presumptive treatment:
 - **Strongyloides** (all refugees): Provide presumptive therapy or conduct diagnostics for *Strongyloides* (eg, serologies for *Strongyloides*, two or more stool ova and parasites examinations, or *Strongyloides* culture/agar method).
 - **Schistosomiasis**: Provide presumptive therapy or conduct serologies for schistosomiasis (SSA refugees who did not receive praziquantel).
 - **Complete blood cell count with an absolute eosinophil count** (routinely recommended as part of the hematology testing and is not sensitive or specific for invasive parasites, but a persistently elevated count indicates the need for further investigation).
 - For refugees who received complete predeparture presumptive treatment:
 - **Absolute eosinophil count** (routinely recommended as part of the hematology testing and is not sensitive or specific for invasive parasites, but a persistently elevated count indicates the need for further investigation)

Detailed Centers for Disease Control and Prevention (CDC) recommendations for medical therapy and follow-up evaluations are available at: <http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/intestinal-parasites-domestic.html>

Tuberculosis

- Predeparture screening results and treatment information should accompany the refugee to the domestic health assessment (in the International Organization for Migration bag) and is provided through the Electronic Disease Notification (EDN) system to individual state health departments.
 - Tuberculosis is one of the most common infectious diseases in refugees and all refugees should be screened after arrival.
 - Conduct a Mantoux tuberculin skin test (TST)* or interferon-gamma release assay (IGRA) (use of IGRA in children < 5 y or immunocompromised children of any age is not recommended); chest radiography and sputum testing is indicated for a positive screening test result.
 - TST can be performed in those with a history of Bacille Calmette-Guérin (BCG) vaccination, but this may result in a positive reaction in some patients. Interpretation of TST results in BCG recipients is the same as for children who have not received BCG vaccine. Prompt radiographic and specialty evaluation of all children with a positive TST is required.
 - IGRA testing is not affected by prior BCG vaccination and is not expected to give a false-positive result in people who have received BCG. IGRA testing, therefore, may be useful for testing immunocompetent children > 5 y who have received BCG.
- *TST and any vaccine can be administered on the same day; if patient received a live injectable vaccine (eg, measles-mumps-rubella or varicella) the previous day or earlier, TST must be delayed for at least 4 weeks (no need to wait if the TST was placed first).

Malaria

- The most sensitive test for persons with subclinical malaria is polymerase chain reaction (PCR); when PCR is not available, traditional blood films or a rapid antigen test may be used but have limited sensitivity in asymptomatic persons.
- All SSA refugees who arrived from **countries that are endemic for *Plasmodium falciparum*** should be assumed to have received predeparture presumptive antimalarial therapy with artemisinin-based combination therapy unless they had a contraindication to treatment (pregnant or lactating women or children weighing < 5 kg at the time of departure.)

Continued

TABLE 3. (Continued)

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|--------------------|---|
| | <ul style="list-style-type: none"> - Refugees who require postarrival testing or presumptive treatment, include: <ul style="list-style-type: none"> ■ SSA refugees receiving no presumptive treatment before departure (including those for whom presumptive treatment was contraindicated). ■ Any refugee from a malaria-endemic country (SSA, Southeast Asia, eastern Mediterranean region, Mexico, Central and South America, South Pacific) with signs or symptoms of infection (should be referred immediately for specialty consultation). - Refugees who do not require postarrival testing or presumptive treatment include: <ul style="list-style-type: none"> ■ SSA refugees receiving presumptive treatment before departure. ■ All refugees from malaria-endemic countries outside SSA. |
| Hepatitis A | <ul style="list-style-type: none"> • Routine testing in asymptomatic children is not recommended (screening for asymptomatic infection in children is expensive and a high proportion of refugees are immune due to previous exposure). |
| Hepatitis B | <ul style="list-style-type: none"> • Screen all refugee children <18 y who were born in intermediate- or high-endemicity (rate of chronic hepatitis B virus [HBV] infection $\geq 2\%$) countries (Africa, Southeast Asia, China, Pacific Islands, Alaska, Peru, Northwest Brazil, Mediterranean Basin, Eastern Europe, Central Asia, Japan, Amazon Basin, Middle East). <ul style="list-style-type: none"> - Testing should be obtained for hepatitis B surface antigen (HBsAg), regardless of vaccination history (the only exception is if a negative HBsAg test result is documented on overseas medical forms). - Checking antibody to hepatitis B surface antigen (anti-HBs) and total antibody to hepatitis B core antigen (anti-HBc) may be reasonable in older children in populations with high prevalence rates ($> 8\%$) or who are at risk of infection. • Although screening for HBsAg is recommended for all refugee children from countries with intermediate or high ($\geq 2\%$) prevalence of HBV infection, some experts do not routinely check anti-HBc or anti-HBs in children from countries with HBV prevalence of $< 8\%$ to avoid false-positive results and because of concerns that routine testing in this group is not cost-effective. However, factors that increase the pretest probability for past or current HBV infection should prompt testing for anti-HBc and anti-HBs. These factors include: <ul style="list-style-type: none"> - Children with an immediate family member, particularly the mother, who is chronically infected with HBV. - Children from a low-prevalence country who are members of a subpopulation with prevalence of $\geq 2\%$ (eg, some indigenous populations). - Human immunodeficiency virus (HIV)-infected children. - Children who received whole blood products or blood components before migration. - Children who are injection drug users, have multiple sex partners, or have a history of sexual exploitation. • All children ≤ 18 y who are HBsAg-negative should receive the complete hepatitis B vaccination series according to Advisory Committee on Immunization Practices guidelines. The vaccine series can be started while waiting for HBV screening test results. • Any refugee child who had a potential exposure to HBV within 60 d of the new arrival examination should have repeat testing 3-6 mo after arrival. |
| Hepatitis C | <ul style="list-style-type: none"> • The CDC does not recommend hepatitis C virus (HCV) screening for refugee children during the domestic health assessment unless they are members of high-risk groups, which include: <ul style="list-style-type: none"> - All biological children of HCV-positive mothers. - Children with the same risk factors as for adults. - Persons who have ever history of injecting illegal drugs. - Persons who are HIV-positive. - History of receiving whole blood or blood components before migration. - History of female genital cutting with contaminated instruments or of tattoos. • Additional risk factors may be indications for HCV screening. Visit the CDC website for updated information on HCV infection. • Screening tests that can be used are antibody to HCV (anti-HCV), recombinant immunoblot assay (RIBA), or HCV RNA polymerase chain reaction. Immunocompromised persons, such as those infected with HIV, those who have end-stage renal disease, and those receiving immunosuppressive therapy, may have false-negative tests and should be screened by HCV RNA testing. |
| HIV | <ul style="list-style-type: none"> • As of January 4, 2010, refugees are no longer tested for HIV infection before arrival in the U.S. - All refugees > 12 y should be screened unless they opt out. - Screening should be repeated 3-6 mo following resettlement for refugees who had recent exposure or are at high risk. - Screen children < 12 y unless the mother's HIV status can be confirmed as negative and the child is otherwise believed to be at low risk of infection (no history of high-risk exposures such as blood product transfusions, early sexual activity, or sexual abuse). In most situations, complete risk information is not available; thus, most children < 12 y should be screened. - For children < 18 mo who test positive for HIV antibodies, test with DNA or RNA assays. Results of positive antibody tests in this age group can be unreliable because they may detect persistent maternal antibodies. - Provide chemoprophylactic trimethoprim/sulfamethoxazole for all children born to or breastfed by an HIV-infected mother, beginning at 6 weeks of age and continuing until they are confirmed to be uninfected. |

Continued

TABLE 3. (Continued)

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|----------------------------|--|
| Syphilis | <ul style="list-style-type: none"> • If no documentation, obtain Venereal Disease Research Laboratory (VDRL) or rapid plasma reagin (RPR) testing for the following: <ul style="list-style-type: none"> - All refugees \geq 15 y - Refugees $<$ 15 y if sexually active or history of sexual abuse • Conduct confirmation testing for positive treponemal test results |
| Gonorrhea/Chlamydia | <ul style="list-style-type: none"> • Urine nucleic amplification test for the following: <ul style="list-style-type: none"> - Females who are sexually active - Leukoesterase-positive urine sample - Children with history of or at risk for sexual assault - Any refugee with symptoms |
| Ebola | Any person who has been in contact with an individual with confirmed Ebola virus disease or who has recently traveled from a country with widespread Ebola transmission (Guinea, Liberia, and Sierra Leone) should be evaluated using the CDC algorithm for <i>Evaluation and Management of Patients With Possible Ebola Virus Disease</i> to determine if notification of the State Department of Health and Ebola testing is indicated. (18) |

Refugees from malaria endemic areas should be assumed to have received predeparture presumptive antimalarial therapy, although the presence of any signs or symptoms of infection (eg, fatigue, pallor, hematologic abnormalities, and possibly an enlarged spleen) warrant serologic testing and consultation with an infectious disease expert experienced in the diagnosis and appropriate treatment of malaria. (14)

The 2014 Ebola epidemic is the largest in history, affecting multiple countries in West Africa (Guinea, Liberia, and Sierra Leone), with a small number of cases in Nigeria and a single case reported in Senegal. Symptoms may appear 2 to 21 days after exposure to Ebola. Therefore, any person who has recently traveled from or who has been in contact with someone who has traveled from these areas should be evaluated using the CDC algorithm for *Evaluation and Management of Patients With Possible Ebola Virus Disease* to determine if notification of the local department of health and Ebola testing is indicated. (18)

Dental Problems

Poor oral health can compromise a person's ability to eat properly, affecting nutritional status, and chronic oral conditions can have a profound effect on general health and quality of life. Dental caries affect almost 100% of adults and 60% to 90% of children worldwide. (20) Poor oral health may be a result of limited diet and lack of access to dental health. Poor oral health was the most common problem in refugee children arriving to Massachusetts in a 2004 study. (21) Of note, some refugee demographic groups may have very good oral health status on arrival as a result of excellent oral health practice and a diet low in refined sugar, but they become more susceptible to poor oral health with the adoption of a Western diet. This is particularly true if they do not have adequate access to adequate dental care and have not adopted Western oral hygiene guidelines. (22) A

thorough oral examination should be part of the domestic health-care assessment and all subsequent visits. High-risk children should receive professionally applied fluoride varnish and have their teeth brushed daily with an age-appropriate amount of fluoridated toothpaste. Children should be referred to a pediatric dentist or a dentist comfortable caring for children, with follow-up appointments to ensure that the child is being cared for in the dental home. (23) Refugee Medical Assistance (RMA) covers dental care, and the federal government requires that states provide dental (and vision services) to children who are covered by Medicaid (but states choose whether to provide these services to adults). (24)

Lead

Arriving refugee children have much higher rates of elevated blood lead levels (BLL) than U.S. children on average when they enter the United States. An analysis of new arrival screening data from Massachusetts in the late 1990s revealed the prevalence of elevated BLL (\geq 10 mcg/dL) among newly arrived refugee children who were younger than 7 years of age as 7%, 25%, 27%, 37%, and 40% among those from Northern Eurasian countries, the Near East (predominately Iraq), Africa, Asia (predominately Vietnam), and Central American/Caribbean countries, respectively. (25) In contrast, the prevalence of lead poisoning among children in the U.S. from 1996 through 2002 was 1.6%. (26) Potential past lead exposures among refugees include lead-containing gasoline; industrial emissions; ammunition manufacturing and use; burning of fossil fuels and waste; and lead-containing traditional remedies, foods, ceramics, and utensils. Malnourished children, particularly those who are iron-deficient, are at increased risk of lead poisoning due to increased intestinal lead absorption. (27)

Refugee children are not screened for lead before departure for the U.S. The CDC recommends lead screening after arrival with a complete blood cell count with red blood cell indices and a BLL. Continued follow-up testing is mandatory for all children with documented elevated venous BLLs. Ongoing lead exposure among refugee children within the U.S. has been well documented. Anywhere from 6% to 29% of children who have normal BLLs at new arrival screening may have elevated values when retested several weeks to months later, based on reports from Massachusetts and New Hampshire. (28)(29) All refugee children ages 6 months to 6 years require follow-up testing regardless of their initial BLL, given their above-average risk for lead poisoning from exposures within the U.S. because they typically settle into high-risk areas and substandard housing, which increases the risk of lead exposure. (27) Appropriate treatment of children with confirmed (venous) elevated BLLs is based on the extent of the elevation. Information on case management and follow-up of elevated BLL is available in the CDC guidelines *Managing Elevated Blood Lead Levels Among Young Children: Recommendations from the Advisory Committee on Childhood Lead Poisoning Prevention*. (30)

Mental Health

The U.S. has a long history of providing refugee status to populations driven from their homelands by war; political change; and social, religious, and ethnic oppression. Many of these are children who have experienced threats, persecution, torture, and killings and witnessed the destruction of their homes and communities. Children who have experienced such events suffer a profound disruption in the basic experiences of structure and security that must be in place for children to develop and thrive. Journeys from their home countries are often marked by violence and instability and characterized by long periods without proper nutrition, housing, and education. A small subset of refugee children suffers the additional trauma of entering the U.S. unaccompanied, arriving without parents or caregivers.

Although most states currently do not have a mental health component to their *Initial Refugee Health Assessment* (the domestic health assessment) at this time, addressing mental health issues during the screening process is critical. Studies have shown a high prevalence of depression, PTSD, panic attacks, behavior problems, somatization, and traumatic brain injuries in refugees. (31) Many refugees do not share a Western perspective or vocabulary in terms of psychology, necessitating that questions be explained through specific examples or adapted to accommodate the refugee's frame of reference with the assistance of an interpreter or bicultural worker. Patients

and their guardians should be asked about "stress" rather than mental problems, which are not culturally acceptable in many societies. (5) Somatic expression of emotional difficulties is common, and clinicians can gain relevant information on mental health by inquiring about activities of daily living (appetite, sleep quality, language acquisition, social contact) and levels of fatigue. Unexplained somatic symptoms (headaches, backaches, or abdominal pain), sleep difficulties, behavior problems, and social withdrawal may all be related to psychological distress in the resettled refugee child.

The CDC *Guidelines for Mental Health Screening During the Domestic Medical Examination for Newly Arrived Refugees* (31) identify the following important components:

1. **Review of records from overseas:** The overseas medical examination of refugees applying for refugee status includes an evaluation for mental disorders and substance-related disorders.
2. **History and physical examination related to mental health:**
 - History of head trauma, loss of consciousness, or seizures, the presence of which raises concern for conditions such as traumatic brain injury
 - History of known psychiatric conditions or past evaluations and treatments
 - History of witnessing violence and other traumatic events
 - Alcohol or drug use
 - Patterns of child development
 - Physical signs of maltreatment, such as scars and other deformities (important to differentiate traditional medical or cultural practices, which may resemble nonaccidental trauma [eg, burn sticks, scarification] from maltreatment)
 - Unexplained somatic symptoms that may be related to psychological distress (eg, unexplained headaches, backaches, or abdominal pain)
3. **Mental status examination:** This is generally informal and carried out throughout the routine screening. The clinician should pay close attention to body language and behavior that may indicate higher levels of anxiety or depression and the ability to communicate.
4. **Screening for depression and PTSD:** Clients older than 16 years can be screened for these conditions using readily available standardized questionnaires. The PRIME-MD PHQ-9 has been used to screen for depression in a variety of cultural groups. A standardized self-reporting rating scale known as the PCL-C-17 is useful in screening for PTSD. Screening children is more difficult and time-consuming and requires a set of

specific skills. The Refugee Services Toolkit (RST) is a useful assessment tool for screening children (see later discussion in this article).

5. **Referral for refugees considered at significant risk:** If significant positive findings emerge from history, clinical observations, or relevant information provided by resettlement agencies, clinical judgment and availability of services should determine whether emergency or routine follow-up care is needed and how quickly these services need to be accessed. If symptoms of depression or PTSD affect daily function, more urgent follow-up care is recommended. The presence of suicidal or homicidal ideation should prompt referral for emergency follow-up.

Once children resettle in a host country, new challenges often await. They need to integrate into unfamiliar school settings that may be academically beyond their educational backgrounds. Children must learn a new language and culture and frequently must navigate between a markedly different home and host country. In addition, their religion, ethnicity, or race may make them targets of harassment and misunderstanding at school. (32) Unexplained somatic complaints, sleep difficulties, and behavioral problems are common signs of psychological distress in this setting. Referral to appropriate psychiatric or psychological services is of the utmost importance when there is evidence of psychological distress, whether due to past traumatic experience or resettlement stress.

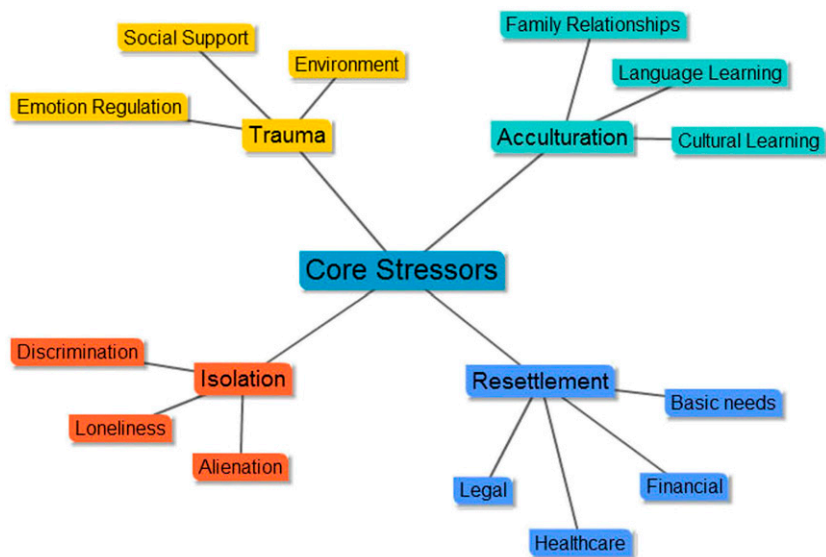
The RST is a very useful web-based tool available through The National Child Traumatic Stress Network (NCTSN) at: <http://learn.nctsn.org/course/view.php?id=62>. (33) The RST is designed to help clinicians understand the

experiences of refugee children and families, identify the needs associated with their mental health, and ensure that they are connected with the most appropriate available interventions. This assessment tool identifies the impact that strengths predisposing to resilience may have on the mental health and general well being of children and families and the experience of four core stressors that they may face: trauma, resettlement, acculturation, and social isolation (Fig 1). It also identifies community resources and support services designed to build resilience and reduce stress in refugee families. The tool is user-friendly and provides specific recommendations for interventions and referrals based upon the “at-risk” level for each of the four stressors. (33)

Unaccompanied Refugee Minors

The State Department identifies refugee children and adolescents overseas who are younger than 18 years and eligible for resettlement in the U.S. but do not have a parent or relative available and committed to providing for their long-term care as unaccompanied refugee minors (URMs). This is a population hidden within the statistics that is increasingly being recognized as a group requiring greater attention. The recent humanitarian crisis of thousands of unaccompanied young Central American migrants fleeing violence who arrived at the southern U.S. border illustrates the blurring of lines that can occur when trying to differentiate between an undocumented immigrant and a refugee. Unaccompanied, undocumented immigrant children are not technically classified as refugees by the U.S. and are released into the custody of the Office of Refugee

Figure 1. Four core stressors faced by refugee children. National Child Traumatic Stress Network. *Refugee Services Toolkit Core Stressors Overview*. Retrieved July 22, 2014, from <http://learn.nctsn.org/mod/book/view.php?id=4518&chapterid=36>



Resettlement (ORR) by immigration authorities. The ORR provides food, shelter, and medical care until it is able to release the child into safe settings with sponsors (usually family members) while they await immigration proceedings. Minors identified by the State Department as refugees are enrolled in the URM Program, which establishes legal responsibility for the state in which the minor arrives to act in place of the child's unavailable parents. (34),(35) This process is further detailed in the section of this article reviewing the U.S. refugee services system.

Health-care needs unique to URMs focus primarily on mental health. Very little research has been conducted on unaccompanied young refugee children, but unaccompanied refugee adolescents have higher rates of depression, anxiety, behavior problems, and PTSD symptoms compared to accompanied refugee adolescents. URMs are more vulnerable because they are deprived of the close relationships that could help them cope better with difficult events. A "triple stigma" has been described, resulting from their refugee/asylum-seeking status, mental health problems, and unaccompanied status. Fortunately, this is a resourceful population and the literature suggests that the long-term adjustment of URMs in the West is very successful, particularly when they are cared for in stable foster care. (36)(37)(38) Primary care clinicians should consider early referral of all URMs for psychiatric or psychological services and should ensure that they are enrolled in the URM Program. The RST can be very useful in connecting patients with the most appropriate available interventions.

Rheumatic Heart Disease

Rheumatic heart disease (RHD), caused by acute rheumatic fever (ARF), is a disease of poverty and poor living conditions and is the most common cause of acquired cardiac disease in children and young adults in the developing world. (39)(40)(41) ARF and RHD have been practically eradicated in wealthy countries but remain endemic in Asia, the Pacific Islands, and Africa. (42)(43)(44) Data on the prevalence of ARF and RHD in the refugee population are scarce, but the association with poverty and unhealthy living conditions make this potential diagnosis an important consideration. Specific screening for a history of ARF or RHD in refugees is not part of the overseas medical examination or the domestic health assessment (Table 1). Any history of RHD documented on the overseas medical records, historical (signs and symptoms of ARF in the past, symptoms referable to the cardiovascular system), or physical examination features (cardiac murmur) present during screening could be consistent with these

conditions. Such findings warrant appropriate documentation to ensure follow-up, referral for cardiology consultation, and the initiation of secondary prophylaxis with penicillin if warranted. Until more data on the prevalence of RHD in refugee populations are available, a reasonable management strategy appears to be maintaining a high index of suspicion for RHD and making a cardiology referral for refugees from high-prevalence regions (Fig 2) with historical or physical examination features potentially consistent with RHD.

Female Genital Mutilation

Female genital mutilation (FGM) is recognized as a human rights violation by the international community, and targeted efforts to eliminate the practice have been undertaken by leading public health organizations, including the United Nations Children's Fund (UNICEF) and the WHO. (45) FGM (also referred to as female genital cutting) is defined as any removal or mutilation of any part of the female genitalia for cultural or religious reasons without any therapeutic indication. The practice of FGM is concentrated within Africa and some parts of the Middle East and Asia but can also be found in some other parts of the world. Current estimates are that more than 100 million girls and women alive today have been subjected to FGM. (46) Most girls undergo the mutilation sometime between infancy and age 15 years. Immediate consequences include pain, bleeding, difficulty voiding, urethral obstruction, and difficulty passing stool due to localized swelling. Among the long-term consequences are extreme narrowing of the vaginal orifice due to keloid formation, chronic pain, and chronic urinary tract infections with subsequent renal damage. There is also an increased risk of both common and lethal infections, ranging from bacterial vaginosis and chronic vulvovaginitis to herpes simplex virus and HIV. The psychological consequences include disrupted sexual functioning, PTSD, depression, and anxiety. (46)(47)

Evidence of FGM is unlikely to be detected on the overseas health assessment and can easily be missed if the external genital examination during the domestic health assessment is skipped or cursory. A review of systems positive for genitourinary complaints should be investigated. However, the victim may be reluctant to offer this information. Historical reporting is unreliable because few girls and women report this past history as a surgical procedure. When a patient who has suffered FGM is identified, the complex medical and psychosocial nature of this issue warrants referral to appropriate and experienced gynecologic, urologic, and psychiatric

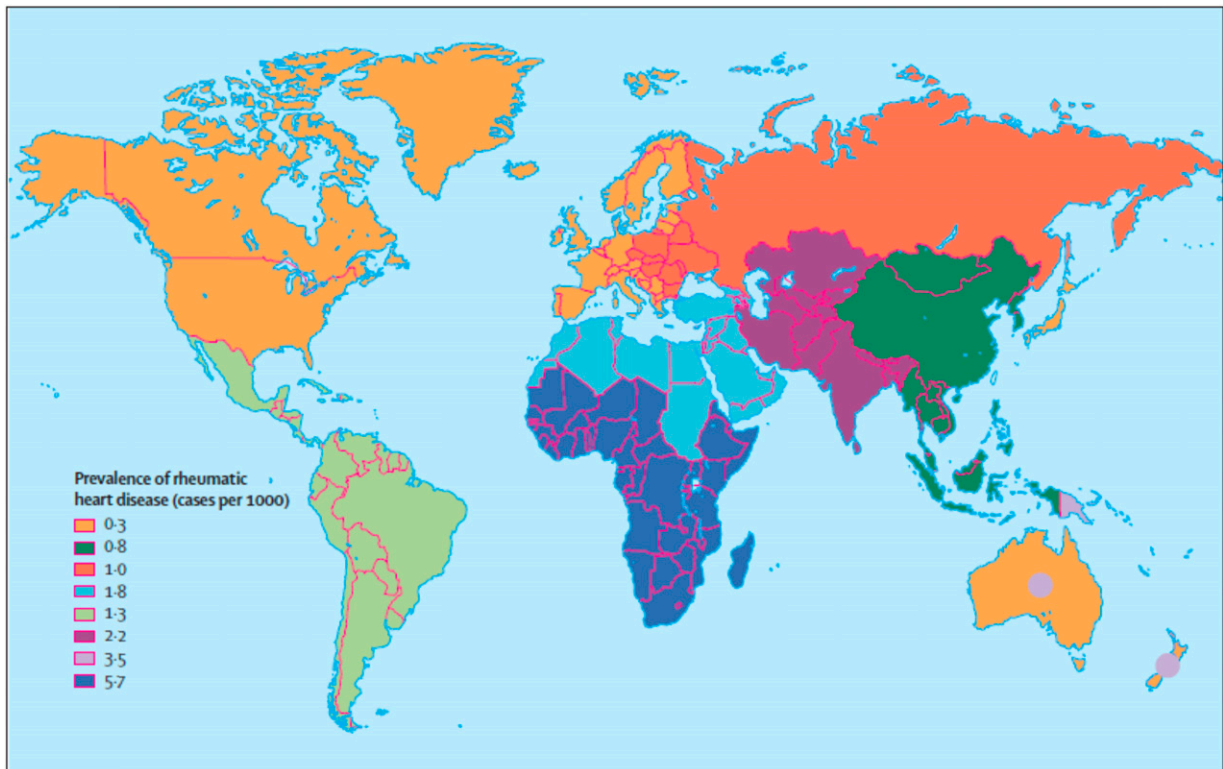


Figure 2. Prevalence of rheumatic heart disease in children ages 5 to 14 years. Reprinted from *The Lancet Infectious Diseases*, Vol. 5, Issue 11, Carapetis JR, Steer AC, Mulholland EK, et al. The global burden of group A streptococcal diseases, pages 685–694, Copyright 2005, with permission from Elsevier.

clinicians. Primary care clinicians must be careful to not alienate the family when recommending such specialty referral.

BARRIERS TO HEALTH-CARE ACCESS

The primary barriers to health-care access in the U.S. for refugee populations have been identified by clinicians, social service providers, and resettled refugee community leaders as: inadequate health insurance, language and communication barriers, and a complex maze of service systems. (7) These barriers operate at systems, provider, and individual levels and are problematic for both healthy refugees and those with chronic health problems.

Most research on access to health-care for refugees has been conducted outside the U.S. A 2013 Canadian study demonstrated the impact of a partnership between a dedicated health clinic for government-assisted refugees, a local reception center, and community providers. (48) With the availability of this clinic, wait times to see a health-care clinician decreased by 30%, the likelihood of refugees being referred to physician specialists decreased by 45% (although those referred were more likely to require multiple referrals due to increasingly complex medical needs), and referrals to

non-physician specialist health-care clinicians nearly doubled. The presence of such health centers in the U.S. varies by state and community, but clearly primary care clinicians can provide better care of this population when they are knowledgeable about established federal and state refugee services and support mechanisms. A medical practice can become “refugee-friendly” by taking the extra step beyond understanding the unique health-care needs reviewed in this article and ensuring access to translation services and engagement with refugee-serving agencies in the community.

Understanding the U.S. Refugee Service System

Working with refugee children and families often appears complex and daunting. Existing social and health-service systems at the federal, state, and local levels can appear to be a complex maze to both the clinician and the resettled refugee. This barrier may be somewhat ameliorated by having a working knowledge of the extensive system of services designed to help refugees become productive, self-sufficient members of society (Table 4). The U.S. Refugee Admissions Program is a consortium of federal agencies and nonprofit organizations working together, both overseas and domestically, to identify and admit qualified

refugees for resettlement into the U.S. The Department of State has cooperative agreements with nine voluntary resettlement agencies (VOLAGs) to sponsor refugees and deliver refugee reception and placement service. The local affiliates of these national VOLAGs (eg, Interfaith Ministries of Greater Houston, Refugee Transitions of San Francisco, Catholic Charities of Milwaukee) are responsible for refugee resettlement throughout the state, working with refugees on issues such as employment, English language training, and housing and health service referrals. (5)(49) The ORR is administered by the U.S. Department of Health and Human Services and provides refugees with RMA for their first 8 months in the U.S. The Office also funds social services aimed at promoting a smooth integration into American society. (50) URM's are enrolled in the URM Program, which is administered by ORR and places each child in a licensed foster home or other licensed care setting (eg, therapeutic foster care, residential treatment centers) according to individual needs. (34) Every state has a Coordinator of Refugee Resettlement, who manages state-awarded ORR social service funding and can help to make a connection with refugee-serving agencies in the local area. (50) Clinicians can locate their state coordinator's office at: www.acf.hhs.gov/help/programs-by-state.

Inadequate Health Insurance

RMA is a 100% federally funded program providing refugees with medical insurance for the first 8 months after their arrival. Until they receive their RMA card (a 4- to 5-week wait), refugees can receive primary and emergency care but no specialized or nonemergency care. Healthy and non-disabled refugees generally can complete all necessary medical interventions such as immunizations within this 8-month period. This is typically an inadequate period for those with disabilities and chronic health conditions, who require specialized and longer-term care. (7)

Refugees have limited or no prior exposure to medical insurance systems, rules, and regulations, which can make the U.S. system appear daunting. (7) Fortunately, the health insurance landscape for refugees is changing under the Affordable Care Act. Many refugees should be able to obtain ongoing health insurance after expiration of RMA through the Health Insurance Marketplace. The Marketplace (www.healthcare.gov) was created to help people shop for health insurance at lower costs and determine eligibility for Medicaid or the Children's Health Insurance Program (CHIP). In general, most refugees are eligible for Medicaid.

ORR has developed specific tools for refugees and service providers to navigate the health insurance landscape. A

6-minute video to introduce the Health Insurance Marketplace to refugees is available in six languages (English, Arabic, Kinyarwanda, Nepali, Sgaw Karen, and Somali). In addition, a fact sheet is available to explain immigration statuses qualifying for Marketplace coverage, including Medicaid and CHIP. The Marketplace consumer application is translated into many languages, and ORR has developed a training curriculum designed to educate Marketplace Navigators and Certified Application Counselors about refugees and other vulnerable populations. A telephone health center is available at 1-800-318-2596 (TTY: 1-855-889-4325), with operators available 24/7 to answer questions in 150 languages. (50) These resources can be found at www.acf.hhs.gov/programs/orr/health.

Language and Communication Barriers

The use of qualified translators is essential to caring for refugee patients. Studies completed within and outside the U.S. have consistently identified lack of language support as one of the most common barriers to health-care success for resettled refugees. (7) The need for clarity and understanding in the medical setting is of utmost importance because the consequences of poor communication can be devastating. This is particularly true when a refugee is disabled, chronically ill, or dealing with mental health issues. Federal law recognizes the significance of language barriers and has mandated "linguistic accessibility to health care" under Title VI of the Civil Rights Act. Refugees are not required to bring their own translator to an appointment, and health-care organizations and clinicians that receive federal financial payment for services without providing free language-assistance services could be in violation of the Civil Rights Act. (52) Insurance plans typically pay for translation services, but it is the responsibility of the health-care organization or clinician's office to make arrangements for provision of those services. (4) National voluntary resettlement agencies (VOLAGs) and their local affiliates often have a cadre of translators who can accompany patients to clinic visits and can be of tremendous value in providing translation services. (5)

Access to informative resources is as important as ensuring the availability of translation services at the time of a health-care visit. For example, what good is an asthma action plan for a Somali-speaking refugee if it is written in English with no illustrations? Basic injury prevention may be a foreign idea to many refugee families who have never seen or heard of car seats, seat belts, or bike helmets. Clinicians should work to help families with such basic health education concepts. Building Refugee Youth and Children's Services is one VOLAG that has created a useful

TABLE 4. Understanding the U.S. Refugee Admissions Program

NATIONAL LEVEL

Two federal agencies provide services to refugees once they arrive in the United States (U.S.)

1. **The Bureau of Population, Refugees and Migration (PRM), U.S. Department of State** (www.state.gov/j/prm/): funds initial reception and placement services through an extensive network of national and local voluntary agencies.

- Each refugee approved for admission to the U.S. is sponsored by one of nine PRM-funded national voluntary resettlement agencies (VOLAGS):

- Church World Service

- Ethiopian Community Development Council

- Episcopal Migration Ministries

- Hebrew Immigrant Aid Society

- International Rescue Committee

- U.S. Committee for Refugee and Immigrants

- Lutheran Immigration and Refugee Service

- United States Conference of Catholic Bishops

- World Relief Corporation

- The sponsoring agency (VOLAG) is responsible for placing refugees with one of its affiliated local offices (eg, Interfaith Ministries of Greater Houston, Refugee Transitions of San Francisco, Catholic Charities of Milwaukee) and for providing initial services (housing, food, clothing, community orientation) and referrals to other social, medical, and employment services for the refugee's first 30–90 days in the U.S.

2. **The Office of Refugee Resettlement (ORR), Administration for Children and Families, U.S. Department of Health and Human Services** (www.acf.hhs.gov/programs/orr/): provides social services through a network of State Coordinators of Refugee Resettlement and through federal programs and direct agreements with service providers, the goal being to speed integration into American society.

- Programs funded by ORR and administered by either the State or resettlement agencies provide cash and medical assistance, employment services, English-language training, and other support services during the refugee's initial transition period.

- ORR provides refugees with Refugee Medical Assistance (RMA) for their first 8 months in the U.S.

- Unaccompanied Refugee Minors Program is administered by ORR and places unaccompanied minors in licensed foster homes or other licensed care settings.

In general, refugees can obtain ongoing health insurance under the Affordable Care Act following expiration of their RMA benefits. The Health Insurance Marketplace (www.healthcare.gov) helps to determine eligibility for Medicaid or the Children's Health Insurance Program (CHIP).

State Level

Every state has a Coordinator of Refugee Resettlement, who manages state-awarded ORR social service funding and can help to make a connection with refugee-serving agencies in a local area.

To locate a State Coordinator's office, go to: www.acf.hhs.gov/help/programs-by-state

Local Level

State-level refugee health programs contract with local health departments, community health centers, academic medical centers, and private physicians to provide the initial domestic health assessment and follow-up needed medical services.

- These providers receive the refugee arrival forms from the State-level refugee health program or VOLAG and are required to contact the refugee or sponsor by phone to explain that the initial domestic health assessment is strongly recommended for their personal health and well-being, as well as for public health concerns.

A range of organizations may be available at the local level to assist refugees. Resettlement sites with large numbers of established refugee populations are more likely to have available services than are cities of secondary migration.

- Different types of organizations have different strengths. Some may be well established and have experience with partnering/contracting with public agencies, while others may be less well established but may offer valuable connections to refugee families looking for places of worship, celebration and community.

- Examples include:

- Resettlement agencies

Continued

TABLE 4. (Continued)

- Mutual Assistance Associations (MAA): programs created by immigrants and refugees to provide an array of social and support services for people from their own country (state-sanctioned MAAs receive limited funding from both the federal and state governments)
- Ethnic community-based organizations

portal to ensure that refugees have easy access to multilingual resources on the topics of health/mental health, family life and parenting, early childhood, children's books, and the U.S. school system (K-12). These are available in the six most common languages spoken among refugees resettled in the U.S.: Arabic, Nepali, Burmese, Somali, Karen, and Spanish. Information is available at: <http://www.brycs.org/refugee-portal/index.cfm>.

CONCLUSION

Refugee children and adolescents arrive to the U.S. with a variety of medical, developmental, and psychosocial needs, which can be significant. Many resources are available help clinicians address these needs.

References for this article are at <http://pedsinreview.aappublications.org/content/36/8/323.full>.

PIR Quiz

1. A medical student working in your office has seen a 2-year-old child who is a refugee from Burma. A translator has accompanied the family. When the student presents the case to you, he tells you that he performed a Denver Developmental Screening Test on the child. The child could put two words together and walked up steps easily but could not stack two cubes or scribble spontaneously with a pencil. The student wonders if the child has a delay in his fine motor skills. You discuss the different possibilities. Of the following, the best response to the medical student is that:
 - A. Diagnosing "delays" based on United States (U.S.) cultural assessments is helpful in determining services for the refugee child.
 - B. It is important to administer the Denver Developmental Screening Test more than once to refugee children.
 - C. Most developmental screening in the U.S. depends on the acquisition of skills that are at least partly culturally and experientially based.
 - D. The child most likely has a fine motor delay due to malnutrition.
 - E. The Denver Developmental Screening Test is used worldwide for assessing a child's developmental stage and is likely accurate in this case in diagnosing a fine motor delay.
2. You are seeing a 3-year-old girl from the Sudan for tuberculin skin testing (TST) with a pediatric resident. Although her presettlement medical screening included testing for tuberculosis infection, the family reports that since the time of the test, they have been in contact with a cousin who was diagnosed with pulmonary tuberculosis. The resident notes a bacille Calmette-Guerin (BCG) scar on the child's shoulder. Of the following, which is the most accurate statement regarding testing for tuberculosis in this child?
 - A. Interferon gamma release assay (tuberculosis blood test) should not be used in a patient with a history of BCG vaccination because it will provide a false-positive result.
 - B. Interpretation of TST results in BCG recipients is the same as for children who have not received BCG vaccine.
 - C. The child requires sputum testing to look for acid-fast bacilli.
 - D. TST should not be performed in a patient with a history of BCG vaccination because it will result in a positive reaction.
 - E. Use of interferon gamma release assay is recommended instead of TST in children younger than age 5 years.
3. You are working in a refugee clinic in the U.S. screening children before their resettlement. A 7-year-old boy from Central America presents with physical findings of moderate malnutrition. His mother tells you that he has complained of abdominal pain and loss of appetite for several months. He has been very fatigued and had difficulty with constipation. The child has premigration screening documentation that includes iron levels, TST, and vaccination history. Although you consider intestinal parasites, you are very concerned about lead poisoning. Of the following, which is the most accurate statement regarding lead screening or lead poisoning in refugee children?
 - A. Lead is an uncommon problem in refugee children because they are well cared for in refugee settlement camps before migration.
 - B. Lead screening is performed before departure for the U.S. and does not need to be repeated.
 - C. Lead screening should include a blood lead level and reticulocyte count.
 - D. Lead screening should include a complete blood cell count with red blood cell indices and a blood lead level.
 - E. A Coombs test should be performed before lead screening.
4. Unaccompanied refugee minors are children younger than 18 years who are eligible for resettlement in the U.S. but who do not have a parent or relative available and committed to providing for their long-term care. Health-care needs unique to these children are primarily:
 - A. Dental problems.
 - B. Mental health problems.
 - C. Parasitic infections.
 - D. Severe malnutrition.
 - E. Tuberculosis.

REQUIREMENTS: Learners can take *Pediatrics in Review* quizzes and claim credit online only at: <http://pedsinreview.org>.

To successfully complete 2015 *Pediatrics in Review* articles for *AMA PRA Category 1 Credit™*, learners must demonstrate a minimum performance level of 60% or higher on this assessment, which measures achievement of the educational purpose and/or objectives of this activity. If you score less than 60% on the assessment, you will be given additional opportunities to answer questions until an overall 60% or greater score is achieved.

This journal-based CME activity is available through Dec. 31, 2017, however, credit will be recorded in the year in which the learner completes the quiz.

5. You are discussing malnutrition with a group of pediatric residents, focusing on the various micronutrient deficiencies that are prevalent in refugee children. Which of the following statements is most accurate?
- A. Iron deficiency is often multifactorial and estimated to affect 50% of children in the developing world, especially refugee children.
 - B. Vitamin A deficiency is an uncommon cause of blindness in refugee children.
 - C. Vitamin B12 deficiency is usually the result of chronic malnutrition, especially in diets low in fruits and vegetables.
 - D. Vitamin D deficiency is rare among dark-skinned individuals.
 - E. Zinc deficiency is often the result of heavy parasitic infections in refugee children.

Caring for Refugee Children
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Caring for Refugee Children

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