When refugees resettle in the United States, their health burdens are many and often unusual, their stories are unique and compelling and their access to health care difficult. The evolution of the Hasbro Hospital Refugee Health Clinic has not only addressed refugee health, but has provided an opportunity for medical student education. In the Refugee Health Clinic, medical students can combine their medical knowledge and clinical skills, while putting advocacy at center stage.

WHO ARE REFUGEES?

Refugees are foreign-born people who cannot return to their home or last residence for fear of persecution. This persecution may be due to race, ethnicity, nationality, political beliefs, or membership in a particular social or religious group. Refugees usually come from nations where conflict, war, and genocide are extreme. They flee from violence, leaving family, belongings, and legal and medical documents behind. The United Nations High Commissioner for Refugees (UNHCR) awards refugee status after an identifiable group has been displaced from their home or country of origin. Generally refugees flee to neighboring countries.

UNHCR estimates that there are 31.7 million “people of concern” worldwide. This number includes 16 million refugees, of whom approximately half are children.1 This number does not reflect those refugees who are internally displaced. When they are unable to return to their country of origin, refugees seek resettlement in a third country, usually the United States, Canada, Western Europe or Australia. Strikingly, less than 1% of refugees ever resettle in a third country. Those fortunate enough to navigate the resettlement application process, adjudicated in the US by the Citizenship and Immigration Service, are interviewed. They have an overseas medical exam and receive cultural orientation. Panel Physicians, designated by the US State Department, perform medical examinations to identify Class A conditions, such as active TB, HIV, drug abuse and some mental health disorders, which are potential barriers to resettlement. These overseas examinations and cultural orientation are often cursory.

The United States, under the direction of the State Department, invites over 70,000 individuals annually for resettlement. The countries of origin depend on the geography of political strife.2 The International Institute of Rhode Island reports that over 1400 refugees have resettled in Rhode Island since the year 2000; approximately half have been children. Between 2003 and 2006 a majority of the refugee children were from Liberia. More recently, Rhode Island has welcomed refugees from Burma, Burundi, Central African Republic, Eritrea, Ethiopia, Haiti, Iran, Laos, Liberia Rwanda, Somalia, and Togo. This last year, we have welcomed increasing numbers from Iraq and Nepal.

REFUGEE HEALTH BURDENS AND BARRIERS TO HEALTH CARE

Research from pediatric refugee populations in other states has found high rates of malnutrition, lead poisoning, anemia, mental health problems, oral health problems and infectious disease.3-7 Similar maladies have been identified in the Rhode Island refugee population.

Approximately 80 refugee children arrive in Rhode Island per year. They may suffer from lead poisoning, Hepatitis B, HIV, latent tuberculosis infection, pathogenic parasites and malaria. (Table I).8 Malnutrition is common, as are iron and Vitamin D deficiency. We have cared for children with typhoid fever, congenital syphilis and miliary tuberculosis. Many children have never received dental care. Mental health issues are pervasive, including PTSD, depression and anxiety.

The linguistic barriers are obvious given the unfamiliarity of many refugees’ languages. Recent refugees speak Kirundi, Krahn, Kunama, Arabic, Somali, Maa-Mai, Swahili, Kinyarwanda, Nepali, Kissi and Mandingo. Trained medical interpreters for these languages are scarce. Cultural barriers exist, particularly due to patients’ unfamiliarity with our primary preventive care and mental health care systems. Our health care system is difficult to navigate, especially for those with special needs.

Refugees have left possessions, legal and medical documents, family, and basic social and cultural supports. They arrive with nothing, Often they do not have an anchor family or community in Rhode Island. Nevertheless, they exhibit resiliency, resourcefulness and determination.

DEVELOPMENT OF A MEDICAL HOME FOR REFUGEE CHILDREN AND THEIR FAMILIES

The Hasbro Children’s Hospital Refugee Health Clinic was established in October 2007 to address the health care needs of our newest refugee families as

**Table I. Health Status of Rhode Island Refugee Children at Arrival. Nov 2003-Nov 2006.**

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>INCIDENCE AMONG R.I. REFUGEE CHILDREN</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV Positive</td>
<td>2%</td>
</tr>
<tr>
<td>Positive RPR</td>
<td>3%</td>
</tr>
<tr>
<td>Malaria</td>
<td>5%</td>
</tr>
<tr>
<td>Positive Hepatitis B Surface Antigen</td>
<td>10%</td>
</tr>
<tr>
<td>Stool Ova and Parasites</td>
<td>17%</td>
</tr>
<tr>
<td>Lead Intoxication</td>
<td>25%</td>
</tr>
<tr>
<td>Positive PPD</td>
<td>28%</td>
</tr>
</tbody>
</table>
well as provide ongoing care that is comprehensive, family-centered and culturally appropriate, in coordination with other community providers.

The Medical Home concept has gained favor as an alternative to the more traditional model of seeking health care for acute care or exacerbation of chronic problems. Introduced in 1967 by the American Academy of Pediatrics (AAP) as a means of storing medical records, the concept was expanded in 2002 to include these characteristics: accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective. It has proven a useful, cost-saving model for children with other special health care needs. The American Academy of Family Physicians, the American Academy of Pediatrics, the American College of Physicians, and the American Osteopathic Association issued the “Joint Principle of the Patient-Centered Medical Home” in 2007. It presents the principles and support for the Patient-Center Medical Home approach to health care. The American Academy of Medical Colleges has also given a preliminary endorsement to this approach.

The Hasbro Hospital Refugee Health Medical Home model consists of three major components:

- Development of the Refugee Health Clinic, which provides timely intake exams and addresses specific medical needs of refugee children, including screening tests.
- Development of a coalition of providers who provide medical and community services.
- Ongoing needs assessment with information gleaned from the refugee community and their interpreters to improve access to health care.

The Refugee Health Clinic offers intake evaluations within 30 days of the child’s arrival to the United States. The specific needs of the population are addressed at this visit. The subsequent visit, usually one month later, occurs in the pediatric clinic where the children are “mainstreamed” into the general pediatric population; the same provider who performed their intake exam continues to see the children. This provides continuity for the patients and allows for one provider to coordinate their care. This approach also allows us to more easily develop a tracking system to identify needs of the different refugee populations.

Approximately 80 refugee children arrive in Rhode Island per year.

The coalition of providers includes: The International Institute of Rhode Island, RI Department of Health, Samuels Sinclair Dental Center, psychologists from Brown University and Rhode Island College, The Providence Public School Department, Family Services of Rhode Island, Rhode Island Housing, RIH Med/Peds Clinic, Neighborhood Health Plan of RI, Interpreter Services, Alpert Medical School of Brown University students, and Brown University Pediatric Residents and Brown University Medical/ Pediatric Residents. This coalition has given voice to the needs of the population and provided access to care in this community.

A targeted needs assessment was completed through focus groups within the community, and with interpreters speaking Kirundi, Iraqi Arabic, Swahili, Krahn as well as a group of English-speaking refugee adolescents. Three themes emerged: first, we need interpreters who can also navigate through our complex health care system. Second, patients must trust their providers. Initially patients trust their interpreters; but over time this trust can be transposed to the health care providers. Third, patients felt an overwhelming gratitude to those who support their health and transition to their new community.

Participation of Medical Students from Alpert Medical School

The Wärren Alpert Medical School has a reputation for enrolling students who are passionate, dedicated to their life-long endeavor as physicians. Many have a deep compassion for the community, both locally and globally. The Hasbro Children’s Hospital Refugee Clinic has afforded some of them the opportunity to experience health delivery via the Medical Home Model. AMS students have participated in the union of Refugee Health and the Medical Home Model in three venues.

- The Refugee Health Longitudinal Clerkship. This builds on the required fourth year Longitudinal Ambulatory Clerkship. Each month in the Refugee Health clinic, the student participates in refugee intake examinations. Subsequently, the student follows up with these same patients in their regularly scheduled pediatric longitudinal clinic. The students integrate these refugee families into their general pediatric patient panel. They also have the opportunity to work with the Refugee Health Coalition of providers. They experience coalition-building and work across all elements of the health care system and community agencies.

- Students have been invited to participate in the Refugee Health Promoter Series. This curriculum for refugee interpreters is designed to arm them with basic health information to function as health promoters in their communities. We have recruited first year medical students, paired with pediatric attendings, and Pediatric or Medicine/Pediatric residents to present a topic to the refugee interpreters (e.g., lead, nutrition, oral health, women’s health, STI prevention, mental health, health literacy, infectious diseases, immunizations and injury prevention). Students are encouraged to “shadow” a provider in the refugee clinic.

- During their Community Health Clerkship, students have the opportunity to develop educational materials or presentations. Both are provided directly to the refugee community. This work is undertaken in collaboration with the International Institute, the refugee resettlement agency. The student is encouraged to observe how this information is pertinent to our direct patient care by participating in the Refugee Health Clinic.
We believe that this project not only ensures good medical care for a marginalized population but also affirms the Medical Home Model as an effective form of medical delivery. In the process, it helps to train a new generation of doctors for whom the ability to treat patients across all cultural barriers will increasingly be a vital skill.

REFERENCES

Carol Lewis, MD, is Assistant Professor of Pediatrics (Clinical) at the Warren Alpert Medical School of Brown University, a member of the Division of Ambulatory Pediatrics at Hasbro Children’s Hospital, and director of the Refugee Health Clinic.

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The author has no financial interests to disclose.

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A Risk Management CME Presentation
Presented by NORCAL Mutual Insurance Company
A jointly-sponsored CME activity with the Rhode Island Medical Society

“Pain Management for Primary Care”
—Strategies and Resources for Improving Pain Management and Reducing Risk

Featured Speakers:
Frederick W. Burgess, MD
Clinical Associate Professor of Surgery
(Anesthesiology)
Brown University School of Medicine

Frank Connor, Esq.
Taylor Duane Barton & Gillman, LLC

Diane Post, MA
Risk Management Specialist/NORCAL Mutual Insurance Company

Agenda and learning objectives to follow.
Please RSVP by September 26 to Sarah Stevens at RIMS: (401) 331-3207 or sstevens@rimed.org.