ABSTRACT

BACKGROUND: Refugee resettlement in the United States will reach record numbers in 2016. Approximately 200 refugees arrive in Rhode Island annually and require culturally and linguistically appropriate health care.

METHODS: Eight community health care workers (CHWs) were hired for the Refugee Community Health-care Worker Initiative (RCHWI) program. CHWs completed 30 hours of paid training. Health topic presentations were preceded by an initial knowledge assessment and an attitudes survey regarding the training. A final knowledge assessment and attitudes survey were administered after the presentations.

DISCUSSION: The initial and final responses were compared. Scores improved from the pre- to post-presentations in both knowledge assessments and attitudes surveys. The results support the program’s effectiveness in training. This pilot collaborative effort emphasizes the potential benefits to further enhance the medical community for newly arrived refugees.

KEYWORDS: refugee, community health worker, training

INTRODUCTION

Refugees flee their homes to escape political, religious or ethnic persecution, as well as war and famine. In the last three fiscal years, the U.S. State Department resettled close to 70,000 refugees across the country. Approximately 200 refugees arrive in Rhode Island each year, and nearly half are children. During fiscal year 2015, 47% of Rhode Island refugee arrivals were children under the age of 18, three out of four originating from one of four countries: The Democratic Republic of the Congo (DRC), Colombia, Iraq, or Somalia.

The United Nations High Commissioner for Refugees (UNHCR) reports that 2016 is likely to exceed all previous records for global forced displacement. There are over 55,000,000 refugees, asylum-seekers and internally displaced people worldwide. Trends suggest that this number will increase above 60,000,000 for the first time. In response to the Syrian refugee crisis, the United States has agreed to resettle another 15,000 refugees in 2016, bringing the total projected to 85,000. Currently, there are two volunteer refugee resettlement agencies in Rhode Island, Dorcas International Institute of RI (DIIRI) and the Diocese of Providence. Approximately 85% of the state’s refugees resettle through DIIRI.

In recent years, DIIRI has received an increasing number of refugees with complex medical and/or psychological histories. The US health care system is complicated and confusing; cultural differences in medical care make this even more challenging for refugees. Newly arrived refugee children and their families need culturally and linguistically appropriate support to navigate the health care system, along with health education directed to their specific health issues.

The mission of the Refugee Health Program (RHP) at Hasbro Children’s Hospital (HCH) is to close the gap in health care delivery for newly arrived refugees. The program, founded in 2007, emphasizes easy access, coordination of services, continuity and culturally appropriate services. A team of Brown University Alpert Medical School faculty pediatricians, pediatric residents and medical students provides initial medical evaluation as well as ongoing primary care. A psychologist provides integrated mental and behavioral health care. Pediatric dental residents from St Joseph’s Dental Center provide oral health screenings at initial evaluation and ensure ongoing oral health education and follow-up. There is also support for adjudication of lawful permanent resident status with a physician authorized by the U.S. Citizenship and Immigration Services [also known as civil surgeons] on site who is certified to sign the medical portion of their Lawful Permanent Resident [Green Card] application. We work closely with medical interpreters serving refugees for linguistic and cultural interpretation. However, despite our large team of providers, more help is needed to enhance the delivery of care for this population.

Prior to the development of the HCH Refugee Health Program, a chart review 2003–2006 by Watts et al found that only half of recently arrived refugee children were up-to-date on all vaccines 15 months after arrival to the US – the standard is within 12 months of their first appointment. The most common medical conditions for arriving refugee children continue to include elevated lead, infectious diseases [hepatitis B; Latent Tuberculosis Infection; and parasitic infections including giardia, schistosomiasis and strongyloides], oral health problems, nutritional deficiencies in iron, folate and vitamin D as well as mental health concerns such as depression, anxiety and PTSD. In addition to the
disproportionate health burden and difficulty accessing care, community-based support is lacking.

With support from the Rhode Island Foundation, The Refugee Community Health Worker Initiative (RCHWI) pilot program came into existence through collaboration between DIIRI, HCH RHP, Rhode Island Department of Health (RIDOH), Alpert Medical School of Brown University, and leaders of the local refugee communities.

The goal of the RCHWI Program is to develop and train a cadre of former refugees to serve as health liaisons for more recently arrived refugee families in order to improve outcomes. The use of community health workers (CHWs) has been shown to improve health outcomes in varied settings. Additionally, when CHWs come from the community they serve, there is greater accessibility and utilization of services.

**METHODS**

The Refugee CHWs were recruited through an application process executed by DIIRI. The CHWs are all refugees or former refugees. Inclusion criteria were English proficiency and preferably prior involvement in the health sector. Exclusion criteria included inability to commit sufficient time for the program. Moreover, the RCHW pilot program was focused on serving refugees from three of the most common countries of origin for refugees in RI: Iraq, the Democratic Republic of the Congo (DRC) and Somalia. Therefore, applicants from not these three countries were also excluded.

Once chosen, the CHW attended 30 hours of paid training over the course of six weeks. The first 10 hours focused on the role of a CHW, motivational interviewing, mental health, trauma, and self-care. Another 13 hours were adapted for refugees from a Community Health Worker training curriculum previously created through partnership with RIDOH and the former Community Health Worker Association of RI. Topics covered in these adapted sessions included: introduction to community health work, knowing your community/community assessment and resources, health literacy, effective communication, motivational interviewing, health information and the internet, heat education for behavior change, culturally and linguistically appropriate services, and health care in America. Five hours were focused on the pediatric health education topics of nutrition, lead, infectious diseases, care of the well and sick child, and adolescent and women’s health. The remaining two hours were spent with DIIRI’s medical caseworker reviewing the checklist of tasks to be completed with refugee families as part of the pilot RCHWI program. The aim of this checklist was to reinforce the role of the CHW as a teacher and to encourage sustainability of the acquired skills by the newly arrived refugee families.

At the submission of this report, CHWs had been matched with newly arrived refugee families. The relationship will last for approximately 6 months after a family arrives to Rhode Island with a total of 25 expected hours of contact time. The CHWs are compensated for their time. The six-month timeline and number of hours will be studied for feasibility in accomplishing the stated tasks and goals of the RCHWI.

As a part of the RCHWI evaluation, a participant knowledge assessment was conducted before and after the health curriculum portion of the training. A survey on perception of ability discussing curriculum topics was also administered. The knowledge assessment consisted of 36 questions, the format of which included true/false questions, multiple-choice questions, and fill-in-the-blank questions. The attitudes survey consisted of 11 statements, and response options were ordered according to a Likert scale, with 1 signifying “strongly disagree,” 3 signifying “neutral,” and 5 signifying “strongly agree.” In scoring the questionnaires, three questions were eliminated: two fill-in-the-blank questions and one multiple-choice question.

The project was approved for Quality Improvement [QI] by the Rhode Island Hospital Institutional Review Board.

**RESULTS**

For the RCHWI Pilot study, sixteen individuals applied, and eight were chosen. The demographics of the CHWs are shown in Table 1. There were five males and three females. The primary languages spoken included Arabic, Somali and Swahili. Within the four Swahili speakers, three also speak Kinyarwanda, one speaks Kirundi and one speaks French. All participants have been in the US less than three years. They come from a variety of educational backgrounds. All eight CHWs completed the 30 hours of training.

In the initial knowledge assessment, the mean accuracy score was 61.5%, ranging from 12–85%, excluding the questionnaire that was not completed. Of note, the participant with a score of 12% on the initial assessment only partially completed the questionnaire. One questionnaire was not answered at all and thus was omitted. In the final assessment, all eight participants finished the questionnaire. The mean score was 81.1%, ranging from 66.7% to 87.9%. The initial attitudes survey was completed by six of eight participants, and the average response was 4.01 on a Likert scale. All eight participants completed the final attitudes survey and the average response was 4.33 on the Likert scale. A Likert score of 4 signifies “agree.”

**Table 1. Demographics (N=8)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N (%)</th>
</tr>
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<tbody>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5 (62.5)</td>
</tr>
<tr>
<td>Female</td>
<td>3 (37.5)</td>
</tr>
<tr>
<td>Language</td>
<td></td>
</tr>
<tr>
<td>Arabic</td>
<td>3 (37.5)</td>
</tr>
<tr>
<td>Somali</td>
<td>1 (12.5)</td>
</tr>
<tr>
<td>Swahili</td>
<td>4 (50)</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
</tr>
<tr>
<td>Secondary school</td>
<td>2 (25)</td>
</tr>
<tr>
<td>Technical school</td>
<td>1 (12.5)</td>
</tr>
<tr>
<td>Some college</td>
<td>2 (25)</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>3 (37.5)</td>
</tr>
<tr>
<td>Years in the US</td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>1 (12.5)</td>
</tr>
<tr>
<td>1 year</td>
<td>2 (25)</td>
</tr>
<tr>
<td>1.5 years</td>
<td>2 (25)</td>
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<tr>
<td>2 years</td>
<td>3 (37.5)</td>
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</tbody>
</table>
DISCUSSION

The benefit of having a Community Health Worker (CHW) has been documented for initiatives in resource poor settings, and more recently in the domestic setting. In some states, such as Minnesota, the role of the CHW has been formalized such that Medicaid plans reimburse for these services. This is not currently the case in Rhode Island. The incorporation of a CHW into the care team of a refugee family is beneficial for all stakeholders. A CHW can help newly arrived refugee families acquire skills critical for operating the U.S. health care system. Examples include assisting with public transportation, helping with calls to the doctor’s office, and encouraging medication adherence. For physicians and other medical providers, the presence of a CHW allows the provider flexibility to focus on acute medical concerns while the CHW can further discuss general health topics in a culturally appropriate way within and outside of the office. For the CHW, working as a health liaison provides employment and the fulfillment of serving one’s community. Lastly, having a CHW designated to serve newly arrived refugees has been shown to improve health outcomes and be cost effective for the health system at large.

The RCHWI pilot project has completed the selection and training of the CHWs. They are now matched with newly arrived refugee families to put the program into action. The teaching process was successful in engaging CHWs and generating meaningful conversations on cultural differences regarding controversial issues such as discipline, teenage sexuality, and HIV/AIDS. The participation and scores on the knowledge questionnaires improved from before to after the teaching sessions. The questionnaires were anonymous and were not released to instructors until after the completion of the teaching sessions. The questionnaires were improved from before to after the teaching sessions. The questionnaires were anonymous and were not released to instructors until after the completion of the teaching sessions.

This is the initial phase of what the partnership hopes will be the development of a larger RCHWI program. Ultimately, the collaboration will work to expand the RCHWI to more families and also address the needs of adult refugee patients with chronic diseases. The group will also obtain data on medical outcomes to evaluate success and review the cost-effectiveness of the RCHWI as it operates in Rhode Island. Sustainable financing is needed to ensure lasting benefits to refugee families.

CONCLUSION

This pilot study of the Refugee Community Health Worker Initiative highlights the successful partnership of DIIRI, HCH, RIDOH, and The Rhode Island Foundation in successfully engaging the refugee and former refugee communities and transferring applicable health knowledge to CHWs. This pilot collaborative effort emphasizes the potential benefits of this program to further enhance the medical community for newly arrived refugees.

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