Refugee Health Education: “Learn to Succeed. Together We Build Our Community.”

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Refugee Health Education: “Learn to Succeed. Together We Build Our Community.”

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Date of Submission: April 25, 2017
Dedication

God provided the opportunity and guided me to this path, walking with me when the spirit is low. I would like to dedicate this capstone project to the refugee population I worked with; they taught me patience and humility as I learned their challenges. My husband Rodolfo lovingly and patiently afforded me space to be self-absorbed in academic work. My daughter Christia has taught me to embrace and pursue my passion, and never fails to show me her love. My sister Mary Ann who shared in my journey from across the ocean reflecting how proud Papa would have been. My family and friends offer ongoing support and encouragement. Lastly, our best buddies at home Mackey, Tara, and Casper faithfully witnessed every emotion poured into this chosen path. To all, thank you so much.
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Abstract

Background: The United States Refugee Resettlement Program (RRP) advocates and supports resettled refugees towards self-sufficiency within 8 months of arriving in the US. The program assumes that refugees are able to attain autonomy within a limited time frame notwithstanding a lack of English language proficiency, low literacy, and socio-cultural discordance. After the RRP support, resettled refugees continue to experience disparities in health knowledge and a gap in socio-cultural awareness, which contribute to poor health outcomes. Purpose: To develop, implement, and evaluate the impact of a comprehensive culturally sensitive health education program in addressing resettled refugees’ identified health needs resulting from a lack of support after the RRP period ends. Results: Eleven of the thirteen (85%) resettled refugee participants completed the health education program. Descriptive statistical analysis was used to compare pre- and post-health education program surveys and revealed improvement in knowledge and skills in the following key areas: emergency care (38% vs. 54%), medication utilization (69% vs. 91%), nutrition (38% vs. 64%), child immunization (77% vs. 91%), signs of stroke (0% vs. 18%) and management of bleeding (0% vs. 55%). Conclusion: The comprehensive culturally sensitive health education program demonstrated improvement in knowledge and skills in selected health education areas. The resettled refugees were empowered with health knowledge, skills, and support after the RRP that facilitated the attainment of the program’s expected goal of health outcome improvement. The program’s long-term effects on health-related knowledge and skills have the potential to change the refugees’ health outcome.

Keywords: refugee health, refugee resettlement, health education
Introduction and Background

Resettled refugees in the United States (US) face challenges in health care, resulting in poor health outcomes. Refugees flee their homes in haste, leaving behind the “dignity of being human” (Bah, 2016) because of armed conflicts, tyranny, human rights abuses, poverty, and environmental catastrophes (United Nations High Commissioner for Refugees [UNHCR], n.d.). The consequences of being a refugee include short- and long-term physical and psychological suffering, including chronic medical conditions, depression and post-traumatic stress reaction (Rhema, 2014).

The UNHCR reported that in mid-2015 there were approximately 15.1 million refugees internationally requiring massive humanitarian assistance across nations (UNHCR, n.d.). According to UNHCR, this was an unprecedented increase from the 10.5 million in 2012. The United States is one of the many countries that assist in the refugee humanitarian crisis financially and through resettlement programs (Bruno, 2015).

The US has resettled approximately 70 thousand refugees in 2015 across the various contiguous states. The US Department of Health and Human Services Office of Refugee Resettlement (ORR) refugee resettlement program (RRP) provides basic needs, including limited cash and medical assistance, to newly arrived refugees (Bruno, 2015; ORR, 2016). RRP is delivered through credentialed voluntary agencies (VOLAGS) for eight months from the date of arrival (Bruno, 2015; ORR, 2016). The program support is time-limited (Rhema, 2014), and most often refugees receive eight months or less based on eligibility criteria, such as early employment (ORR, 2016).

ORR’s program goal is to assist refugees to attain self-sufficiency in six to eight months. However, RRP has been regarded as insufficient to meet the complex needs of newly resettled
refugees, offering support in a very short period of time and with a lack of resources to advance the goal (Agbenyiga, Barrie, Djelaj, & Nawyn, 2012; Morris, Popper, Rodwell, Brodine, & Brouwer, 2009; Pavlish, Noor, & Brandt, 2010; Rhema, 2014; Sastre & Haldeman, 2015). There are several reasons why the RRP goal is unattainable. Namely, refugees have various complex challenges that include unemployment, low income, lack of English language proficiency, lack of knowledge of the health care system and socio-cultural discordance (Agbenyiga et al., 2012; Morris et al., 2009; Yun et al., 2015). Resulting consequences from lack of support include poverty, living in low-income housing in dangerous neighborhoods, poor health and low self-esteem (Betancourt et al., 2015; Rhema, 2014) that further compromises pre-existing physiologic and mental health problems (Joshi et al., 2013; Mirza et al., 2014; Mitschke, Mitschke, Slater, & Teboh, 2011; Morris et al., 2009; Rhema, 2014; Swe & Ross, 2010). The risk of retraumatization that can lead to post-traumatic stress disorder (PTSD) is another major threat to refugees, as the population is further confronted by persistent impoverishment, hostile environments, and economic problems in the area of resettlement (Mitschke et al., 2011).

Due to the aforementioned issues identified among refugees, the author conducted a community needs assessment in the fall of 2015 on refugees resettled in Rhode Island ZIP code 02907, a primary refugee resettlement area. The Fall 2015 community needs assessment shows refugees have low English language proficiency, face socio-cultural discordance in health practices, including child-care, and have a limited understanding of the US health care system and practices. Other concerns identified in the assessment included lack of knowledge about US health insurance, frequent visits to the clinic and physician for preventative care and follow-up, lack of physical activity, and socio-cultural discordance with health care providers, contributing to stressful and detrimental acculturation (Panizales, 2015).
The community health needs assessment and review of literature indicate that refugees confront modifiable barriers during resettlement and is aggravated when the RRP support ends (Agbenyiga et al., 2012; Mitschke et al., 2011; Morris et al., 2009). The current survey of the refugees resettled in Rhode Island ZIP code 02907 validates that the risk of poor health outcomes imposed by the social determinants of health such as economic instability, poor conditions of the physical environment, low education level, and socio-cultural difference result in functional limitations, poor health status, lower life expectancy and higher morbidity rate. The risks of negative health outcomes are higher after the RRP ceases to provide much needed resources and support for the refugee population.

**Problem Statement**

The risk of poor health outcomes among resettled refugees post-RRP from the date of arrival in the resettlement area is indicated by increased utilization of emergency room services, poor medical compliance, and lack of preventive health is moderated by factors such as lack of knowledge of the US healthcare system, low English proficiency, socio-cultural discordance, and low literacy; all of which is exacerbated by a lack of resettlement support and a lack of comprehensive culturally sensitive community health education programs.

The literature confirms the existence of disparities in health knowledge and access that the refugees experience after the resettlement program ends (Agbenyiga et al., 2012; Mitschke et al., 2011; Morris et al., 2009). The community needs assessment conducted in Rhode Island ZIP code 02907 is parallel to the findings in studies conducted by Agbenyiga, Barrie, Djelaj, and Nawyn (2012), Boise et al. (2013), Elwell, Junker, Sillau, and Aagard (2014), Mirza et al. (2014), Mitschke, Mitschke, Slater, and Teboh (2011), Swe and Ross (2010), and Worabo et al. (2016). To meet the challenges of resettled refugees health needs, it is important to develop a
creative approach in program development. The use of refugees as educators, navigators and interpreters (Berkson, Tor, Mollica, & Cosenza, 2014; Reavy, Hobbs, Hereford, & Crosby, 2012; Yun et al., 2015), and establishing a comprehensive refugee-focused case management (Joshi et al., 2013) are examples of a modified health care delivery services that have demonstrated improvement in refugees’ health outcomes.

**Organizational “Gap” analysis of project site**

Rhode Island ZIP code 02907, where the program was implemented, has a population that is highly diverse, with 43.1% foreign-born compared to 12.1% in the entire state of Rhode Island and with a predominantly Hispanic and Black population (59%) (City-data, 2015). According to Healthy People 2020 data for 2013, Black or African Americans in Rhode Island experienced higher incidence of bullying (20.4%) compared to other ethnic groups (19.6%) and nationally (12.7%). Notably, the occurrence of violent crime in the area is higher than the entire state of Rhode Island (345 vs. 252) (County Health Rankings, 2015). The data also shows that unemployment is the higher than in other counties within the state. The estimated household income at ZIP code 02907 in 2013 was $28,819.00, versus the Rhode Island states’ average of $55,902.00, where 31.3% of the income is below poverty level. Two-thirds of households are single-parent households and 72% are renters (City-data, 2015). Communities with highly diverse populations have a higher risk of experiencing health disparities and inequality (Betancourt et al., 2015; Rhema, 2014), and such is the case of most of the population living in Rhode Island ZIP code 02907. Refugees, a population at risk resettled in the neighborhood by resettlement agencies, are further impacted by pre-existing social determinants of health that the existing community experiences.
The Doctor of Nursing Practice (DNP) student used an individualized qualitative survey tool to conduct the refugee community health needs assessment. The survey tool was modeled from the site agency Refugee Dream Center, Inc.; an expanded inquiry on health experiences, beliefs and practices were integrated. The assessment was conducted between November and December 2015, with a total of 21 refugees (4 that did not meet the criteria were excluded, and 1 refused further participation) with a completion rate of 76% (16/21). The sample included Africans, South Americans, and Asians resettled in the US from various refugee camps internationally. Respondents were mostly young adults, 45 years old and younger, with children under 18 years old and an average of 5.3 family members.

Refugee health visits data shows high utilization of emergency room services (56%), potentially unnecessary hospital admissions (13%), and lack of access to dental, mental and women’s health care. The current data from Healthy People 2020 confirms that the county’s rate for acute hospital admission is 20.92% compared to 19.48% in the state and 18.64% nationally, while ER visits are >50% of the state total visits in 2012 (Healthy People 2020, 2016). The survey revealed that eighty percent (80%) of refugee women at childbearing age have not seen a gynecologist and only one refugee performed self-breast examination. The use of pharmacy services for over-the-counter medications (44%) without sufficient health care knowledge and professional guidance is an avoidable safety risk. The other alternative that refugees resort to is calling their MD clinics with questions (38%). Appendix A provides detailed data of the community health needs assessment.

The issue of not knowing where to secure healthcare assistance, and not knowing how to complete and process insurance related documents, are part of the challenges that refugees face
in navigating the complex US health care system. These issues are further exacerbated with limited English proficiency, low literacy, and limited understanding of the US healthcare system.

An important concept relevant to Western healthcare is preventative care, which is not likely valued from the refugees’ country and culture (Morris et al., 2009; Pavlish et al., 2010). Refugees complain of frequent medical follow-ups, series of examinations and other health related requirements. On the contrary, refugees verbalized the importance of maintaining health by adapting to US food sources, understanding labels (i.e. expiration dates, contents, nutritional values), cooking nutritious foods using local produce, and increasing physical activity.

Currently, refugees receive basic health service education within the first six months of arrival (ORR, 2016). During the early months of resettlement, refugees adjust to learn multiple things hence health service orientation may not necessarily be a priority to remember. As the RRP ends within eight months or earlier, the opportunity to secure support, to understand how to navigate the health care system and to learn Western healthcare concepts comes to an end as well, leaving the resettling refugees with limited or unknown options for further education.

**Review of the Literature**

The literature review examined studies that evaluated resettled refugees challenges after RRP and explored various program models adapted to meet the identified disparities. Given the paucity of relevant studies to that aim, the review was enhanced to include resettled refugees at any time period.

**Search Strategy**

A literature review was conducted on the following electronic databases: Cumulative Index of Nursing and Allied Health Literature (CINAHL), PubMed and Google Scholar. Snowball searches from key article references and reports were also performed. A combination
of the following search terms were used: *US resettled refugee health, resettled refugee health and US, US refugee health services, refugee health services and US, US refugee health and refugee health and US*. In PubMed Medical Subject Headings (MeSH), similar terms were used and the only term that generated results was *refugee health*. Furthermore, the strength and quality of evidence was evaluated using the Johns Hopkins Nursing Evidenced-based Practice (JHNEBP) Rating Scale (Newhouse, Dearholt, Poe, Pugh, & White, 2005).

**Inclusion Criteria**

The search was limited to full-text articles published 2005 and 2016, articles published in English, and articles featuring US-based interventions. Ninety-nine articles were retrieved and duplicates were eliminated. Twenty publications were selected for review, including one congressional report, two systematic reviews and 17 qualitative studies.

The two systematic reviews of literature were based in Australia and included studies from different countries and the US. The two reviews were incorporated because they included studies conducted in the US (Hao Cheng, Drillich, & Schattner, 2015; Joshi et al., 2013), and the evidence for both reviews was rated a Level IV in JHNEBP, indicating good quality. Three of the 17 qualitative studies were significant for the proposed health education program because they evaluated the challenges that refugees experienced after RRP (Agbenyiga et al., 2012; Mitschke et al., 2011; Morris et al., 2009). The remaining 14 studies discussed the barriers to health care access and presented sets of recommendations ranging from primary health care models, community advisor roles, culturally tailored education programs, and the importance of community support and partnerships (Berkson et al., 2014; Betancourt et al., 2015; Boise et al., 2013; Carroll et al., 2007; Elwell, Junker, Sillau, & Aagard, 2014; Mirza et al., 2014; Pavlish et
Barriers to Healthcare Access

Refugees find the US health care system complex and difficult to navigate, resulting in confusion regarding how to access care, frustration with the intricacy, and discontent with the provision of care which leads to mistrust of providers (Boise et al., 2013; Pavlish et al., 2010; Swe & Ross, 2010; Worabo et al., 2016). The absence of trust in a patient-provider relationship is detrimental to the health outcome of the patient (Agbenyiga et al., 2012; Pavlish et al., 2010) and can result in limited or poor medical care compliance (Berkson et al., 2014).

The Somalian women refugees (N=57) attributed the complexity and difficulty of obtaining health care due to socio-cultural discordance (Pavlish et al., 2010). In the same investigation, the responses from the provider sample group (N=11) revealed similar themes as the refugees (Pavlish et al., 2010). The exploratory study has limited generalizability because it only focuses on Somalian women that received services from Minnesota-based providers. The ability of providers to comprehend and respond appropriately within the context of refugee socio-cultural mores impacts physical and psychological health (Boise et al., 2013; Caroll et al., 2007; Elwell et al., 2014; Hao et al., 2015; Mitschke et al., 2011; Morris et al., 2009; Pavlish et al., 2010; Swe & Ross, 2010). Refugees who are resettled bring their rich culture, practices and beliefs that provide a safety net from the traumatic experience of displacement (Rhema, 2014).

Health Program Interventions

The Culturally Appropriate Resources and Education Clinic, a multidisciplinary care center serving prenatal and pediatric refugees was started in Boise, Idaho using refugees as Clinic Health Advisor (CHA) (Reavy et al., 2012). Drawing on the qualitative study of Reavy,
Hobbs, Hereford, and Crosby, (2012), the CHA works as cultural broker, educator, advocate, navigator and support to refugees. Another similar navigator program proposed by the Bhutanese community is “Health Focal Points” (HCF). This program was implemented in Philadelphia, where an outcome evaluation to measure the service impact was conducted by Yun and colleagues (2015). The presence of CHA and HCF has shown improvement in health care delivery and navigation and patient-provider relationships and has decreased language and transportation barriers (Reavy et al., 2012; Yun et al., 2015). CHA programs increased childhood immunization compliance to 100% and reduced missed appointments from 25% to 2.5% (CHA program), and 22.6% to 0% (HCF program); furthermore, the CHA and HCF refugee participants have reported improvement in self-satisfaction and confidence as role models (Reavy et al., 2012; Yun et al., 2015).

The CHA evaluation was based on a one-year implementation of 163 services (Reavy et al., 2012). Both CHA and HCF models have a limited sample size, specific to an ethnic population, and a potential Hawthorne effect because of agency relationship; beyond its limitations, the approach of utilizing refugees as navigators resulted in improvement in health care outcomes among refugees, a remarkable feat for consideration. The value of regaining self-worth and re-building lost dignity after displacement is immeasurable (Betancourt et al., 2015; Rhema, 2014).

A rigorous literature review of 25 studies appraising the effectiveness of refugee-focused primary health care models identified that integrated case management and care planning, use of interpreters, and culturally sensitive providers improved service utilization, communication, and satisfaction (Joshi et al., 2013). While the study demonstrated improvement among the refugee population, the model also had a positive impact on the staff resulting in enhanced refugee-
provider communications and relationships (Joshi et al., 2013; Reavy et al., 2012; Yun et al., 2015). Moreover, the providers fostered better care delivery and multidisciplinary collaboration (Joshi et al., 2013; Reavy, et al., 2012; Yun et al., 2015). Seven of the 25 interventional studies in Joshi and associates’ (2013) literature review originated from the US, giving credence to its inclusion and contribution to the proposed education program.

The role of education in social transformation has been well established and recognized in the US. Culture is distinctly unique and an important means of identity for a population; the need for a culturally sensitive education for resettled refugees is an important tool in the acculturation and learning process (Boise et al., 2013; Elwell et al., 2014; Mitschke et al., 2011; Morris et al., 2009; Sastre & Haldeman, 2015; Swe & Ross, 2010; Yun et al., 2015).

The Cambodian Health Promotion Program (CHPP) in Massachusetts is culturally tailored, designed to meet the literacy level of Cambodian participants, and taught by a Cambodian Health Worker. The CHPP includes a five-session education program that aims to improve health behaviors by providing strategies to manage stress, sleep problems, nutrition, physical activity, and provider-patient communication (Berkson et al., 2014). Through a survey of 126 conveniently selected participants, the CHPP demonstrated significant improvement in reducing depressive symptoms (52.8%-44%), a decrease in poor health status ratings (20%-7.2%), improved physical activity (56% - 80.8%), and increased confidence in health care utilization (Berkson et al., 2014). The CHPP was able to exemplify the positive outcomes that refugees gain from a culturally sensitive community health education program delivered by an educator from the same ethnicity. However, Berkson and colleagues (2014) acknowledged that the sample lacked ethnic representation, with risk of biases in response, sample selection, and the educator-evaluator dual role.
The literature corroborates the negative impact of low literacy, low English proficiency, lack of support (financial, community), low socio-economic status, and lack of health care knowledge (US health care system and health education) on refugee health, and resettlement acculturation. Investigators presented evidence of promising interventions centered within community health programs (Berkson et al., 2014; Betancourt et al., 2015; Joshi et al., 2013; Mirza et al., 2014; Pavlish et al., 2010; Sastre & Haldeman, 2015; Swe & Ross, 2010; Wagner et al., 2013; Worabo et al., 2016; Yun et al., 2015). To address the experiences and challenges of refugees after the end of the US RRP support, Agbenyiga et al. (2012), Morris, Popper, Rodwell, Brodine, and Brouwer, (2009), Mitschke et al. (2011), and Rhema (2014) underscore the significance of integrated models that highlight cultural competence, adequate resource allocation, community support, and collaboration in program development.

Berkson et al., (2014), Joshi et al. (2013), Reavy et al. (2012), and Yun et al. (2015) emphasized the significance of culturally sensitive community-based programs that meet the unique needs of the refugee population. The importance of “cultural intelligence” cannot be understated, raising personal awareness and respect of another culture improves how we relate to and work with each other (Liao, 2015). In the context of community programs, cultural intelligence expands the depth of our understanding of the community where health professionals work. Overall, the CHPP initiative, culturally sensitive multidisciplinary primary health care, FHP and CHA are programs that have shown positive outcomes in reducing barriers to health care as experienced by resettled refugees.

Given the limitations of qualitative studies such as smaller sample sizes, JHNEBP evidence rating scale of III B-C, community and culture specific findings, the evidence presents with limited generalizability, potential Hawthorne effect, sampling bias and response bias. Taken
together, the findings provide a scientific background that supports a comprehensive culturally sensitive health education program in a mutually reinforcing refugee-provider relationship, with active community engagement. The comprehensive health education program included education relevant to the US health care system, socio-cultural practices, and essentials in health care – physiologic, physical and mental health. Given this premise, the program addressed the resettled refugees’ identified needs, and decreased their risk of negative health outcomes as a result of socio-cultural discordance, limited knowledge of the US health care system, and basic health care.

**Theoretical Framework**

Albert Bandura’s Social Cognitive Theory (SCT) posits that learning occurs through observation, imitation and modeling. The underpinning concept of the theory is that behavior modification relies on self-regulation, self-efficacy and positive reinforcement (Grusec, 1992; Horn, Jarrett, Anesetti-Rothermel, Tompkins, & Dino, 2014). Banduras’ SCT was applied to address the health care knowledge and skills needs of the refugee population resettled in Rhode Island ZIP code 02907 and to design a comprehensive health education program to meet those needs.

SCT is an important theoretical framework in health education (Whitehead, 2001). The refugees resettled in this area have strong community relationship with their ethnic group and community leaders who serve as support and motivators in learning. The health education curriculum employed during this study integrated didactic, skills training, and collegial mentoring to enhance learning through observation, imitation and modeling.

In keeping with SCT, the knowledge and skills learned by the refugees in the program can be cognitively transferred from one refugee participant to another through modeling more so
when the positive outcome incentivizes the observer or learner (Horn et al., 2014). Refugees resettling in the US are learning from what they see, hear, and read. It is important to use this learning opportunity to provide the knowledge that refugees most need to attain self-sufficiency. Banduras’ SCT provides concepts related to observation, imitation, role modeling and positive reinforcement, which serve as pillars in the program designed and implemented by the DNP student.

**Project Design**

The comprehensive culturally sensitive health education program “Learn to Succeed: Together We Build Our Community.” is a quality improvement project developed based on the refugees’ community health needs assessment (CHNA) conducted in Rhode Island ZIP code 02907 by the DNP student in the fall of 2015. The one-on-one CHNA interview conducted by the DNP student was guided by a health-focused questionnaire.

The curriculum was designed in response to the results of the community needs assessment and covered topics related to preventive health care measures, such as medication safety, nutrition, first-aid with hands-only cardiopulmonary resuscitation, common illnesses, health care systems and childcare. The project delivered five health education sessions, including sessions about lead poisoning, nutrition, hand washing, personal hygiene, child care, first-aid, and common chronic illnesses, and one community socio-cultural activity for resettled refugees. The class utilized power point presentations using various health education materials. Handouts of the presentations were distributed at the end of the program.

The Thanksgiving socio-cultural event provided the opportunity to learn about nutrition and Thanksgiving Day traditions. Thanksgiving is a well-celebrated US holiday, and this holiday was chosen because it fits into the fall season when the program started. A brief
history of the celebration, the food preparation and the meaning of Thanksgiving were shared with the participants.

The health education program engaged subject matter experts from the community stakeholders. The community health education program staff from the organization, Lifespan, taught hands-only cardiopulmonary resuscitation and health topics based on a community-centered Healthwise book, and the pediatrician addressed child care and behavior management. The other three stakeholders were refugee participants with health education experiences and a newly trained instructor who spoke about lead poisoning. The number of trainers varied depending on date and time availability. The DNP student, also the program manager (PM), had the overall responsibility of teaching the course and providing supplemental information, such as facts about the US health care system, chronic health conditions first aid, to classes conducted by other instructors. Interpreters assisted participants to complete the consent and survey forms during the class.

Each day started with a quick review of previous topics to ensure that prior health topics were understood. Survey results were critically analyzed to evaluate the curriculum and program efficacy using measures of spread where the percentage of pre-training baseline values of key outcomes such as health knowledge and skills were compared with post-training results.

**Project site and sample.** The program site, Refugee Dream Center, Inc. (RDC) in Providence, Rhode Island, serving ZIP code 02907 and is a non-profit organization supported by grants, and donations from the community. The organization is a post-resettlement not for profit 501(c)(3) founded in 2014 by a refugee who currently serves as CEO. The agency’s goal is to develop opportunities for refugees through various sustainable, and life-enhancing programs in collaboration with community stakeholders within the government (GO), civic organizations and
non-government organizations (NGO). The site agency, RDC, has provided the author the opportunity to independently network with stakeholders that include community refugee leaders and service providers.

Program participants were recruited through flyers, meeting announcements, contact with community leaders, and by word of mouth. The sample targeted 30 resettled refugees post RRP support in RI ZIP code 02907. The total enrolled participants were 15 representing from Somalia, Congo and Angola. The average number of participants in attendance per session varied from 10-12, male (6) or female (4-6), aged 18 and above, and all participants were post-resettlement program support. Two of the initially enrolled participants were new arrivals from Somalia who did not meet the inclusion criteria and later dropped out. Three of the participants relocated in the middle of the session to another town, but they maintained their attendance in the program. Two other participants dropped out because of conflicts in work schedules, and community and home responsibilities.

**Setting facilitators and barriers.** The strengths, weakness, opportunities and threats analysis tool, commonly known as SWOT, provided a comprehensive guidance to gain insight in critical and potential internal and external factors that would affect the program implementation (Perrin, 2016). This included identifying and understanding internal strengths and external opportunities as facilitators, and internal weaknesses and external threats as barriers.

The health education program implementation facilitators included strong organizational and community relationships, the DNP student’s expertise, on-site training venue accessibility, pre-existing refugee resilience, community engagement, and alignment of the program with Healthy People 2020. A major facilitator of the program was the strong partnership of the site agency leader with stakeholders.
Two anticipated major barriers for program implementation included availability of refugees and community organization lecturers such as Genesis, Farmer’s Market organizers, Red Cross, Lifespan Diabetes Program, and a Primary Care Physician. The refugees’ attendance in the education program was affected by work schedules, by community and family responsibilities and by new employment obligations. Other barriers for the health education program implementation were limited organizational funding and logistics, refugee transportation, childcare service for participants, and inclement weather.

**Goals, Objectives and Outcomes**

The overarching goal of the program was to develop, implement and evaluate the impact of a community based health education program in improving the identified health education needs of the resettled refugee post-RRP, as well as to create a program framework that the program site can sustain and continue. The objectives of the program were to:

**Table 1. Objectives and Expected Outcome of the Refugee Health Education Project**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Expected Outcomes</th>
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<tbody>
<tr>
<td>1. Develop the essential program infrastructure to implement health education program.</td>
<td>By the first week of October 2016, - CEO and PM identified health program support staff and community leaders who served as ad hoc health program advisors. - PM explored scientific literatures and program reports on refugee health education and preventative care, basic health care interventions, and the US health care system. - PM developed knowledge and skills evaluation tools that were administered before and after the session with a post-test outcome improvement of 50% from pre-test scores. - PM developed a program evaluation tool with a 90% completion rate of defined goals and objectives. - Advertised the program through multi-media resources and stakeholders.</td>
</tr>
</tbody>
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| 2 - Collaborate with refugees, GO and NGO stakeholders. | By the end of the first week of October 2016,  
- Program information was shared to all government, non-government and community stakeholders.  
- PM collaborated with at least 75% of the NGO and GO stakeholders for program education support.  
- A community resource flyer was developed and completed by January 2017. |
|---|---|
| 3 - Develop a health education/training curriculum. | -100% of the program materials were obtained in October 2016.  
-100% of the curriculum was completed. |
| 4 - Implement comprehensive culturally sensitive health education program for refugees resettled at ZIP code 02907 in RI and post RRP support. | - Conducted the first session of the health education program on November 19, 2016.  
- Completed pre and post-session knowledge and skills evaluation in January 2017.  
- Completed program evaluation in February 2017.  
- PM presented the program status and preliminary summary of evaluations to the stakeholders in February 2017. |

**Educational Intervention**

The quality improvement health education program was guided by Avedis Donabedian’s (1988) quality framework that encompasses structure, process and outcome and utilized a Plan-Do-Study-Act (PDSA) cycle methodology for continuous process and program improvement (Deming, 2016). The program curriculum topics (see Appendix B) were based on the CHNA qualitative findings. The CHNA was a health-focused one-on-one survey completed by resettled refugees residing at ZIP code 02907 from 6 months. The CHNA report, health education program design and curriculum plan were presented and validated with the community stakeholders in various meetings from March to July 2016.
The PM recruited participants using various methods of marketing strategies such as an email blast to stakeholders, distribution of flyers, announcements during stakeholders meetings, and phone calls to community leaders. Phone calls and text messages were also found effective for promoting the program and for reminding the leaders and participants of forthcoming scheduled classes. The PM sent text messages and called leaders, as well as participants who preferred to be called during the week of class and the day before. The PM was directly responsible for conducting the entire health education program.

The program site provided support and assistance in marketing and setting up the classroom. Three of the participants who were previously trained as community health workers volunteered to teach their selected health education topic(s). Four community stakeholders were involved in the health education class, three (3) were from Lifespan and one (1) was a practicing pediatrician.

The curriculum was divided into three parts: (1) health education, (2) community socio-cultural activity and (3) case management. The Thanksgiving Dinner served as the socio-cultural and nutrition event where participants learned the significance of Thanksgiving Day celebration and food choices served for the event. The two other cultural events were excluded because of the wintry weather and delay in program start date. The community farmer’s market ended in October while the health education program started in November.

A total of three (3) classes were cancelled and rescheduled. The two class cancellations were due to winter storms. One class was cancelled because of poor attendance related to activity conflicts and misremembering of the schedule.

The program utilized several methods of instruction to enhance health education, including Power Point presentation, educational handouts and flyers, open discussion, and
memorization techniques such as hand washing songs. In addition, hands-only cardio-pulmonary resuscitation (CPR) was demonstrated with return demonstration from refugees, and canned food samples were provided during lessons on nutrition. The participants were more enthused and actively participated in the following activities: hands-only CPR, hand washing return demonstrations, and understanding food labels.

The program, which was delivered in English, was translated by an interpreter in Swahili.

The health education topics included the following:

1). Lead Poisoning
2). Healthy Habits, and Personal Hygiene
3). Hand Hygiene
4). My Plate, Nutrition, and Obesity
5). Nutrition Labels on Food Items
6). Environmental Health, and Waste Management
7). Food Safety
8). Physical Activity
9). Ways to Reduce Injury at Home and Outside, Pedestrian Safety, and Falls
10). Flu, Colds, and Allergies
11). Preparing for Physician visits, During and After Appointments
12). United States Health Care Services
13). Medication Management and Safety
14). Chronic Conditions: Hypertension, Diabetes, and Stroke
15). First Aid: Bleeding, Poison Prevention, and CPR
16). Frostbite
Childcare: Immunization, Discipline, and Burn Safety

The project was implemented in phases as described below.

Phase 1: The PM developed an operational program structure that included curriculum, guidelines, handouts and marketing strategies. The PM, in consultation with site preceptor, engaged the community through forums and one-on-one meetings. The education program plan was presented in a community forum, and at stakeholder meetings in 2016. Community leaders served as ad hoc health program advisors to validate program implementation.

- Solicited ideas and support from attending community leaders and select attendees.
- Collaborated with community stakeholders to identify program support.
- Conducted a literature review, and collaborated with stakeholders to identify refugee health education program and training materials.
- Developed program guidelines.
- Developed and deployed marketing strategies using multi-media resources such as flyers, announcement during meetings, one-on-one meetings with stakeholders, and social media (see Appendices C and D).
- The PM applied and secured approval from the Institutional Review Board of the University of Massachusetts Amherst.

Phase 2: The PM finalized all operational and curriculum documents. All documents were organized systematically in a file folder.

- Developed guidelines for the health education program (participant code of conduct, evaluation of the curriculum and general program orientation, and consent forms).
• Developed health education program curriculum outline and survey tools.
• Finalized class schedules with trainers.
• Secured classroom and developed training calendar.
• Solicited, developed, and printed training materials.

Phase 3: The health education program was started during the 3rd phase.

• PM conducted orientation, completed the consent, and pre-knowledge survey tool (KST) in the first session. The skills survey tool (SST) was conducted at the beginning of the second session because of time constraints.
• The first education program session was limited by time, and overlapped with a community socio-cultural event. The second through the fifth sessions covered the program curriculum extensively.
• PM conducted post-survey using KST and SST after completion of the last session.
• PM conducted general program survey tool (PST) on completion of the entire training.

Phase 4: All evaluations were collated, analyzed and documented for reporting purposes.

• Results of the survey were shared, and reviewed with the participants during the refugee mental health stakeholders’ meeting.
• Abstract was accepted for poster presentation at the 2017 Sigma Theta Tau International Nursing Research Congress. Abstract submitted at the American Public Health Association 2017 Conference.

An abbreviated community resource handout with basic health information (see Appendix E) was developed in collaboration with one of the community leaders for RDC case...
management use and was distributed during the culmination activity. Certificates of completion were distributed on the final day of the program.

**Data Collection**

The survey was conducted 30 minutes to one hour before and after the five sessions of didactic and skills training by the PM. The interpreter/community leader provided assistance as an interpreter and helped in the distribution of the survey tools. PST was used to obtain quantitative data to determine program efficiency based on the program goals and objectives (see Appendix F). The general program evaluation tool was completed by the PM after the program. The PM also received the stakeholders’ feedbacks. Resettled refugee participants completed the KST and SST before and after the program (see Appendices G and H).

The collected data consisted of qualitative and quantitative variables. The qualitative data comprised of open-ended questions from community stakeholders, including participants. The survey items include closed questions (yes [1], no [2] or not sure [3]) and open-ended questions; -99 was assigned to items with no response. Participants completed pre and post-knowledge and skills survey tools to identify strengths and weaknesses of the curriculum, teaching methodology and program structure. The quantitative data for program evaluation was extracted from the program administrative records such as enrollment, dropouts, etc.

**Knowledge survey tool.** The pre-KST comprised questions related to health service delivery, medication management, nutrition and childcare. There were five open-ended questions on nutrition and psychosocial wellbeing. KST was distributed during the first session of the program. Fifteen attendees completed the pre-survey form and two of the participants were excluded because of they had only recently resettled in the US and were still within the RRP timeline for services.
The first day was focused on program orientation, and consent and completion of pre-KST. During the first day, participants also listened to a lecture on lead poisoning and participated in the socio-cultural event “Thanksgiving Dinner”. The pre-SST, with the consensus of the participants, was deferred to the first 30 minutes of the second session to allow for the Thanksgiving dinner preparation. During this time, the participants were getting distracted with increase in the noise level. The diners and volunteers were instructed to tone down their voices as the class was in progress. The session was then resumed.

During the fifth session, after the last topic and before dismissal, post-KST was distributed for completion. Eleven participants completed the survey.

**Skills survey tool.** The pre-SST questions included topics on home management of simple illnesses, such as fever, cough and bleeding. Other questions were related to the use of emergency room services, such as with cases of stroke and bee stings. The SST was distributed prior to the second session of the program. The attendees were instructed to complete only the first section of SST because the other sections were relevant only to the socio-cultural activity participation, use of provided resources and general program. The major content of the curriculum was conveyed during the second to the fifth sessions. Twelve attendees completed the pre-SST tool.

Post-SST was completed during the fifth session after the last lecture. Eleven participants completed the survey.

**Program survey tool.** The PST was used to evaluate the programs’ structure, process and outcomes. The areas of focus were health education curriculum and its implementation process, marketing strategies, community engagement and refugees’ participation. The PM used the attendance sheets to complete part of the PST.
An email was sent to the agency site preceptor, and involved NGO community stakeholders for their feedback. The PM received responses from three stakeholders and was recorded on the PST.

**Data Analysis**

For analysis, the results of the health education program were categorized into two, quantitative and qualitative. The total number of enrollees who completed the consent form and KST on the first day was 15 and two were ineligible based on the inclusion criteria. Two participants dropped out related to conflicts in work and community activity schedules. The program completion rate was 85% (11/13).

The general program evaluation tool appraised the following variables: marketing strategies, enrollment, community stakeholder’s participation, and program delivery. The PM collected all raw data, conducted the data analysis based on expected outcomes, and provided the aggregate report. Analysis of the program survey data was utilized to determine if the program goals and objectives were met. All responses were considered confidential, and tools did not contain any identifiable participant information.

Quantitative responses were collated as aggregate data and were analyzed using descriptive statistics. The responses were either yes, no or not sure. The responses were entered in an electronic spreadsheet into two sections, pre and post-survey responses. Percentage aggregate rate was computed using the total number of responses over the total number of respondents x 100. Baseline pre-test percentage aggregate rate was compared with the post-test to determine incremental improvement in knowledge and skills. The bar graphs in Figures 1-3 show the participants’ pre and post-test aggregate results in various areas of health knowledge and skills improvement.
The qualitative responses were analyzed and examined to identify patterns and themes. The text data were read and reread to identify coherent categories that helped to reflect back on the program’s purpose. The key concepts expressed in the open-ended questions were synthesized into a report.

**Cost-Benefit Analysis**

The health education project was a community-based program that brought all stakeholders together for support. As with any project it is important to determine costs and benefits derived from the program (see Appendix I). Some costs were non-monetary in nature such as qualitative impact on personal commitment to improve health.

The nature of the project was limited in its capacity to demonstrate immediate improvement in a short-term implementation. The anticipated costs and benefits were expected to demonstrate gradient evidence if evaluated longitudinally using refugee-specific data. The current challenge of securing explicit data on decreased re-hospitalization, ER visits, unnecessary clinic visits, and a qualitative outcome measure of improved health and psychosocial well-being is impacted by the inability of organizations and government systems to code refugee specific health data indicators. There are no specific codes that define the refugee population in an electronic data system, and the lack thereof creates the complexity of measuring and developing indicators on refugee health outcomes.

**Timeline**

The program utilized the phases described in the implementation plan to chronologically describe the tasks and target dates by inclusive months. The timeline provided a template on what workflow to expect and the progression of the implementation (see Appendix J).
Results

Demographics Characteristics

The total number of enrolled participants was 15. Participants were from Somalia, Congo and Angola. There were more males than females (6 vs. 4-6, respectively). Two (13%) of the participants did not meet the inclusion criteria. Two (13%) other participants dropped out of class because of schedule conflicts at work and with community activities.

Knowledge About General Health

Knowledge improvement about general health information (Figure 1) was noted in understanding access to emergency care services (38% vs. 54%), and medication utilization, such as using medications for other people (69% vs. 91%) and use of antibiotics (31% vs. 64%).

Figure 1. KST pre and post test comparison – General Health
Knowledge About General Nutrition

Figure 2 shows increased comprehension of healthy food choices and understanding of food labels (38% vs. 64%; 85% vs. 100%, respectively). Ten percent of the participants remained uncertain whether canned foods are healthy or not, a decreased from the 22% at the start of class.

Figure 2. KST pre and post-test comparison – General Nutrition

Knowledge About Childcare

Figure 3 shows participants’ improvement regarding childcare knowledge. The graph shows improvement regarding the importance of immunization (77% vs. 91%), and the role of family or care providers on children’s education at home (64% agreed that learning also takes place at home). The graph shows that refugees need to learn more about appropriate and acceptable ways to discipline children (15% vs. 36% post health education); the 10% that responded “not sure” may indicate that the participants remained uncertain as to how to discipline their children even after the health education class. Most of the discussions about childcare were socio-culturally linked to refugees’ practices in their country of origin, which challenges the US acceptable norms for disciplining.
Health Education Skills

The post-health education SST results showed improvement in knowledge and skills related to managing a simple cough using common household interventions such as steam inhalation, increase fluid intake, and consumption of vitamin C rich-foods. Figure 4 shows the difference between pre and post-survey results from the SST, notably there was a 9% decrease in knowledge acquisition on interventions for fevers, small wounds, bee stings and use of antibiotics.
Figure 4. SST pre and post-test comparison

![Comparison of Pre and Post Health Education Skills Survey](chart.png)

Items left blank or unanswered were coded -99; post-health education SST’s have more -99 responses (5 items) compared to pre-health education SST (2 items). The increase in the -99 responses post-SST may indicate that some participants are still not sure of what the appropriate response would be, especially regarding antibiotics prescriptions, small wound care, and bee stings. Interestingly, the refugees gained a better understanding about how antibiotics must be completed per MD prescription per post-knowledge survey.

**Qualitative Data**

The qualitative data included open-ended questions regarding the following: what they do when they are sad, what is important to them, what food choices do they make, and what knowledge do they have about stroke. It was noteworthy that the participants’ responses after the health education class delineated more specific actions. The participants’ knowledge and skills in identifying signs of stroke (0% vs. 18%), and their first aid skills for handling bleeding (0% vs. 55%), improved post-health education. Interestingly during the open discussion and call-out review, more than half of the participants were able to verbalized at least one sign of
stroke based on the American Heart Association (AHA) FAST mnemonics (see Appendix K), and participants identified interventions for managing bleeding compared to the post-survey skills written assessment. The participant education level, ability to write, sensory limitations (e.g., sight) and past experiences can be a factor to consider in written evaluations.

The participants were more engaged and built trust as the program progressed, which contributed to a better response on the personal questions related to food, health, and emotions. The post-health education overall completion rate range, with no -99, was higher than pre-health education (55%-82% vs. 37%-85%, respectively). Some of the participant responses from the survey tools are quoted below:

What is important to me …

Pre-health education responses

“Good Health.” “Health Protection.”

“Better Life.”

“Car.”

“Better at school and home.”

Post-health education responses

“Care for self. Be healthy.”

“Learn more on health issues.”

“Live healthy lifestyle.”

“Protect health from disease.”

When sad, I …

Pre-health education responses

“Music.”
“Sleep.”

“Talking to someone.”

“Leave the house.”

Post-health education responses

“Music.” “Pray.”

“Sleep.” “Take care of myself.”

“No money.”

I like the program …

“Teaching me to take care of myself and be healthy.”

“All presentations are helpful.”

“I like to know more about my health.”

“Motivational.”

The program is not good because …

“Poor time management.”

“Being late.”

“It’s not taking more time.”

For program improvement, the participants mentioned issues on timeliness (late start) and preference for extended learning time (see Appendix L). Only two participants arrived on time while others were late due to transportation problems and overnight or evening shift work. On two occasions the delay was a result of overlapping activity schedules between the health education and resettlement agency activities.

Feedbacks from community stakeholder trainers were received via email and in person. The stakeholders recommendations are to include more discussion on child-care behavior
management based on culturally and psychologically acceptable methodologies and to secure community parental support for parent refugees. Another stakeholder recommended focusing on hands-only CPR skills. The Lifespan trainers are available to provide the support for this program. Two additional comments from the community indicated that they were not aware of the class and were interested in participating; one of the responder joined the class on the last day. Recommendations were forwarded to RDC as part of the agency initiated health education program scheduled in March.

**Ethical Considerations/Protection of Human Subjects**

The University of Massachusetts Amherst Institutional Review Board approved the program in November 9, 2016 (see Appendix M). The practice site does not require IRB approval. There was no harm anticipated post program nor was there any harm during the health education program. No personal identifiable information was used to link the participant to the completed evaluation.

There was no risk involved in the implementation of this project. Participation was voluntary, open to the first 30 registered resettled refugees with no RRP support, and participants had the right to refuse further participation at any time. Names and country of origin were collected on the registration and attendance sheet for aggregate data analysis. No other identifiable information was collected. On the latter part the participants were voluntarily adding their cell phone numbers so they could be called and reminded of the class meeting times.

The purpose of the program, consent and use of survey tools were discussed prior to initiation of class. Participants were reminded of maintaining confidentiality of all personal information shared by co-participants during the class. All data were secured electronically in a
password-protected laptop and locked cabinet at the site agency office. Hard copies were scanned and shredded after data entry.

**Evidence of Stakeholder Support**

The stakeholder support and letter of agreement is provided in Appendix N at the end of this paper.

**Discussion**

The population of resettled refugees in ZIP code 02907 experiences disparities in health knowledge after the resettlement program support ended as evidenced in the community needs assessment and the pre-health education survey. Resettled refugees in other US locations such as Minneapolis, Colorado, and Texas, etc. have notably experienced disparities in health knowledge and access to health care after the resettlement program support ends (Agbenyiga et al., 2012; Mitschke et al., 2011; Morris et al., 2009). Understandably, causation is multidimensional and it includes socio-cultural factors, poor acculturation, language, and layers of personal fears and trauma carried over during resettlement (Agbenyiga et al., 2012; Boise et al., 2013; Elwell et al., 2014; Mirza et al., 2014; Mitschke et al., 2011; Swe & Ross, 2010; Worabo et al., 2016). As a host country, we have a responsibility to identify and address the modifiable causes that impact refugee health outcomes after RRP support.

The community-based comprehensive culturally sensitive health education program’s primary expected outcome was to advance the resettled refugees’ health knowledge and skills. Attendance in the health education program provided opportunity to ask and learn more about health. Salient subjects were reviewed before the start of the next session to ensure common understanding and retention of prior health information. The participants demonstrated their improvement in knowledge and skills during class discussion. Class interaction was dynamic in
such that the participants asked healthcare related questions regarding health maintenance and health care management. Each participant shared prior health knowledge with the group, and sought guidance regarding personal health related questions.

To facilitate acculturation, the education program emphasized the importance of prevention in the context of the current US health care practices. During resettlement, the refugees need educational support to continue learning and understanding the new socio-cultural milieu and Western health practices. The participants unanimously agreed that the health education program motivated them to learn more about how to maintain healthy living through nutrition, exercise and healthy habits such as good personal hygiene.

One important area of discussion in the program that needs increased focus is child discipline, and behavior management. The participants were unable to grasp the concept of what they call, a “US way of disciplining children.” The refugees felt that they were restrained regarding how to manage their children’s behavior as practiced in their own culture and religion. The following recommendations were shared with RDC preceptor: conduct a separate class taught by professional experts on child-care and behavior management and provide access to refugees for family or parental support.

The program did not demonstrate substantial improvement across all spheres of the health education concepts as an expected outcome. This is attributable to the wide range of topics that the curriculum covered in a short span of time. The participants may have had selective retention of topics significant only to their personal health needs. As the tools are not linked to individual participants, KST and SST are only able to provide aggregate data.

The refugees’ experience demonstrates a substantial gap in the socio-cultural aspect of resettlement (Agbenyiga et al., 2012; Morris et al., 2009; Yun et al., 2015) and is unique for each
encountered refugee and culture, as is the case regarding discussion about childcare and food choices. Healthcare professionals and community health program staffs need to be cognizant of the importance of cultural humility and competency when working with a community of heterogeneous refugees.

The program instructors provided a safe confidential place where participants were able to share their personal health experiences and questions without fear of being judged. Mutual respect and confidentiality were maintained through gentle reminders during class.

**Limitations**

One major limitation of this project was that it was based only on refugees resettled and post-RRP support in Providence, Rhode Island ZIP code 02907. Some resettled refugees have relocated in various parts of the country and other towns in Rhode Island and may also have similar or other health or healthcare related challenges that were not included in this program. Other limitations of the health education program include the small sample size, with participants were only from Angola, Congo and Somalia.

The survey outcomes may be influenced by sample bias due to the selection of the study population by community leaders of the selected site. Participants’ responses may be influenced by social-desirability and acquiescence biases to maintain a friendly and desirable relationship with the instructor and interpreter. Another noted potential bias was the existence of leading questions on the KST and SST questionnaires. These types of questions may lead the respondents to respond toward an answer other than reflecting on their personal response. The KST and SST were simplified into one and made easier to understand for RDC use in the next cohort of health education participants by consolidating the two survey tools to one page,
removing duplicate questions, improving clarity and simplifying some questions for ease in understanding.

**Conclusion**

Community participation is an important component in community development. The successful implementation of the culturally sensitive refugee health education program supported the Healthy People 2020 goal, which outlined the importance of community-based education (Healthy People 2020, 2016) with community participation.

The health education program’s impact is parallel to the Healthy People 2020 goal to “increase the quality, availability, and effectiveness of educational and community-based programs designed to prevent disease and injury, improve health, and enhance quality of life” (Educational and Community-Based Programs Overview section, 2016, para.1). Knowledge and skills education were sources of improvement that empowered refugees’ increased their self-worth, and increased their motivation to attain and sustain healthy living.

The strength of the project was the close collaboration with community stakeholders. Partnership with stakeholders help build a political platform for advocacy to support the refugees’ intricate health needs. Collaboration plays an important role in public health (Curley & Vitale, 2012). The community health education program created an alliance with stakeholders in addressing refugee health needs.

The community-based, comprehensive, and culturally sensitive refugee health education program survey results confirmed the knowledge gaps that existed prior to the class and the benefits that the resettled refugees attained after the entire session. Some topics did not demonstrate knowledge and skills improvement in the five-week program duration as noted on the survey tool but the qualitative data, on the other hand, supported that the refugees gained new
knowledge and skills. As one participant stated, “the program was motivational.” This statement demonstrates how health education can influence healthy living now and in the future.

**Implications for Practice**

The data collected from the community needs assessment in the fall of 2015 provided the core health topics of the refugee community-based health education program. The art of knowing the resettling refugees’ lived experiences in ZIP code 02907 after the RRP support helped to validate the modifiable barriers uncovered in the literature (Agbenyiga et al., 2012; Mitschke et al., 2011; Morris et al., 2009) including lack of access to education programs about health knowledge and skills. After the RRP support, refugees are preoccupied with job searches, new jobs, and responsibilities in their community programs. Such is the case with the two participants who dropped out of the class. Hence, it is important to design a health education program responsive to the identified needs of refugees and adapted to the schedules of resettled refugees.

The refugees’ engagement in the development and delivery of the program helped to empower growth, independence, and leadership. The three participants with prior experience as community health workers lectured on selected topics, such as flu and influenza, hand washing and lead poisoning. According to the SCT principle, role modeling significantly increases and facilitates the spread of knowledge and skills to the community (Horn et al., 2014). The engagement of the refugee community in the needs assessment, program development, and evaluation were essential sources of motivation and self-efficacy enhancement. The refugees’ feeling of self-worth and value are important to build up their resilience and develop skills to acculturate in a new society (Betancourt et al., 2015).
An important goal of the program is sustainability. One strategy is to share the findings at conferences and in publications to bring awareness to the challenges and alternative solutions for the needs of resettling refugees after the RRP support. The refugee health education program findings were shared with the participants, site agency, and community stakeholders. The site agency has received a grant from the Rhode Island Foundation to continue the health education program.

The author submitted two abstracts based on this program’s findings for national and international presentations: American Public Health Association Conference, and Sigma Theta Tau International Nursing Research Conference (STTINRC). The abstract was accepted for poster presentation at the STTINRC in Ireland in July 2017. The author plans to prepare and submit manuscripts in public health and nursing journals.
References


Hopkins University School of Nursing; Baltimore, MD.


### Appendix A

#### Community Needs Assessment

<table>
<thead>
<tr>
<th>Variables</th>
<th>Aggregate Response</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td></td>
<td>5 excluded (4 recently resettled 2-3 months, 1 refused to participate)</td>
</tr>
<tr>
<td>Birth Year: 1960 (3); 1970 (7); 1980 (3); 1990 (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Origin: Somalia, Burundi, Kenya, Congo, Colombia, Burma</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average # family members: 5.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family with children &lt;18: 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td># year resettled in US: 4 – 48 mos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Visits</td>
<td></td>
<td>Some went to the MD more than once for several reasons</td>
</tr>
<tr>
<td>MD/Clinic Visit</td>
<td>Yes: 15</td>
<td></td>
</tr>
<tr>
<td>No: 1</td>
<td>Average # of times the last 6 months: &gt;5 (10); &lt; 5 (5)</td>
<td></td>
</tr>
<tr>
<td>Where: RI Hospital, RICE Clinic, Miriam Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obstetrics: 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sick: 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE/Immunization/TB ff-up: 14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental Health (problem): 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health: 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital admission</td>
<td>2 (ear infection, surgery)</td>
<td></td>
</tr>
<tr>
<td>ER Visit</td>
<td>9 (post surgery negative outcome, GI signs and symptoms: epistaxis, swollen eye)</td>
<td></td>
</tr>
<tr>
<td>Use of Local Healer</td>
<td>Not in US: In my country</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Use of herbs from home: 1</td>
<td></td>
</tr>
<tr>
<td>Health Practices for common ailments (fever, cough, pain)</td>
<td>Self care/personal remedies: 3</td>
<td>Note: Refugees who have been here 2-3 months responded that they will call MD or go to ER.</td>
</tr>
<tr>
<td></td>
<td>Call case worker/interpreter: 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Call MD: 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pharm/OTC: 7 (1 decides by pictures, others use key words or ask around)</td>
<td></td>
</tr>
<tr>
<td>Women's Health</td>
<td>Seen by OB/GYN: 4 (2 because of pregnancy)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self breast exam: 1</td>
<td>56% were not seen (4/9)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 refused to answer (private matter)</td>
</tr>
<tr>
<td>Health Support</td>
<td>Self, Family, Case Worker, Friend, Pharmacy, MD, Hospital</td>
<td></td>
</tr>
<tr>
<td>Priority Needs for Healthy Community</td>
<td>-English language education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Understanding US health care services.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Insurance: paper works, payments/bills, what to do</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Health Education: cultural child care, bullying/violence/safety, women’s health, nutrition/diet, physical activity/exercise, dental care, common illness, preventive care, environmental cleanliness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Communication with health providers: cultural difference talking to patients, discordance, not respectable, rushing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Socio-cultural practices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Hospital and ER Care</td>
<td></td>
</tr>
</tbody>
</table>
# Appendix B

## Curriculum Outline

<table>
<thead>
<tr>
<th>Topics</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essentials of Health Care</td>
<td>Navigating the US Healthcare System</td>
</tr>
<tr>
<td></td>
<td>Essentials of Health Care</td>
</tr>
<tr>
<td></td>
<td>- Culture of prevention: physical, emotional, environmental</td>
</tr>
<tr>
<td></td>
<td>- Basic care of common health illness</td>
</tr>
<tr>
<td></td>
<td>- Basic diet and nutrition</td>
</tr>
<tr>
<td></td>
<td>- Basic child care and developmental stages</td>
</tr>
<tr>
<td>Immersion (Socio-Cultural Activities)</td>
<td>Exploring our community, as feasible</td>
</tr>
<tr>
<td></td>
<td>Exploring the market, as feasible</td>
</tr>
<tr>
<td></td>
<td>Thanksgiving Dinner, socio-cultural event</td>
</tr>
<tr>
<td>Case Management</td>
<td>Resource Handout (local government and non-government)</td>
</tr>
<tr>
<td></td>
<td>Health Insurance Pathway (Discussion)</td>
</tr>
</tbody>
</table>
Appendix C

Program Flyer

JOIN US

NOVEMBER 19 – JANUARY 28, 2017
10-12 NOON

LEARN TO
SUCCEED:
TOGETHER WE
BUILD OUR
COMMUNITY

HEALTH EDUCATION PROGRAM
2 Hours weekly for 5 weeks
Limited to first 30 participants

NOTE: Participants will be given time to complete a survey before the start of class and at the end of the last class to evaluate learning.

LOCATION: REFUGEE DREAM CENTER 340 LOCKWOOD ST., PROVIDENCE, RI

TO JOIN, CONTACT:
YOUR COMMUNITY LEADERS
REFUGEE DREAM CENTER, (401) 300-0544
EMAIL: REFUGEEDREAMCENTER@GMAIL.COM

SPONSOR: REFUGEE DREAM CENTER, INC.
Appendix D

Thanksgiving Dinner Flyer

RDC is organizing the 2nd annual Thanksgiving Dinner to share information about the meaning of Thanksgiving and good nutrition, to thank the Refugee Community for participating in our programs and provide an opportunity to meet other refugees.

WHO: REFUGEE COMMUNITY
WHEN: 2-5 pm • November 19th • 2016
WHERE: 340 Lockwood Street, Providence, 02907

www.RefugeeDreamCenter.org
Appendix E

Refugee Dream Center Community Resource Handout

---

**Health Tips**

**SPOt A STROKE**

(American Heart Association)

- Face drooping
- Arm weakness
- Speech difficulty
- Time to call 9-1-1

**Are You Prediabetic?**

- Pre-diabetes - blood sugar is higher than normal but not high enough than those with diabetes.
- do you have a sister or brother with diabetes?
- does your parents have diabetes?
- are you overweight?
- if a woman, did you have a baby more than 9 lbs at birth?
- are you between 45-64 years old?
- are you less than 65 and get little to no exercise/day?

Contact: 401-222-9900

---

**Services**

The Refugee Dream Center provides the following:

- post resettlement services
- referral for social level assistance
- skills development
- youth mentoring
- health education
- cultural orientation
- mental health support
- after-school program
- adult English language class
- job skills development
- interpreting

Refugee Dream Center, Inc.
341 Lockwood St.
Providence, Rhode Island 02908
Phone: 401-222-9900

---

**Learn To Succeed. Together We Build Our Community**

Sponsored by: Refugee Dream Center, Inc.

---

**Refugee Common Community Resource Guide**

Edited by
Isabel Kaye, Community Leader (Angola)
Tina Fortunato, MSI, RN
(UMass Amherst DNP)

---

**Questions to Ask Your Doctor**

1. What is the test for?
2. How many times have you done this procedure?
3. What will I get the results?
4. Why do I need this treatment?
5. Are these alternatives?
6. What are the possible complications?
7. Which hospital is best for my needs?
8. How do you spell the name of that drug?
9. Are these side effects?
10. Will this medicine interact with medicines that I’m taking?

---

1. Doctor of Providence
   1 Cathedral Square, Providence, RI 02903
   Phone: 401-222-9900

2. City of Providence, HealthWorks Community Office
   1500 Weybosset St., Providence, RI 02905
   Phone: 401-783-1310

3. Childcare
   - Calvary Arts Program
   - ESL Classes
   - Financial Coaching, etc.

4. Providence Community Health Centers
   335B Providence Rd., Providence, RI
   Phone: 401-444-0600

5. Dental Clinic
   - Medical
   - Eye Doctor

6. Rhode Island Coalition Against Domestic Violence
   222 Post Road, Suite 102, Warwick, RI 02886
   Phone: 401-467-9940

7. Rhode Island Department of Health
   200 Weybosset St., Providence, RI
   Phone: 401-222-9900

8. Office of Special Needs
   - RI Parent Information Network
   - Diabetes Program, 513.RI.gov
   - Public Health: Communication, Zika

9. SANKOFa
   300 Pine St., Providence, RI 02906
   Phone: 401-222-9900

10. University of RI SNAP Outreach Project
    Phone: 1-866-306-0270

---

**Refugee Common Community Resource Guide**

Edited by
Isabel Kaye, Community Leader (Angola)
Tina Fortunato, MSI, RN
(UMass Amherst DNP)
### General Program Survey Tool

**Inclusive Period of Training:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Strategies</td>
<td></td>
</tr>
<tr>
<td>Total # of Registered Participants</td>
<td></td>
</tr>
<tr>
<td>Total # Drop-outs</td>
<td></td>
</tr>
<tr>
<td>Total participant completed</td>
<td></td>
</tr>
<tr>
<td>Community Health Program Advisory meeting/Consultation, Total Number</td>
<td></td>
</tr>
<tr>
<td>Number of staff involved</td>
<td></td>
</tr>
<tr>
<td>Number of community volunteer trainers</td>
<td></td>
</tr>
<tr>
<td>Number of community paid trainers</td>
<td></td>
</tr>
<tr>
<td>Number of education program completed</td>
<td></td>
</tr>
<tr>
<td>Number of cultural activity completed</td>
<td></td>
</tr>
<tr>
<td><strong>Community Feedback</strong></td>
<td></td>
</tr>
<tr>
<td>What participant like best about the program</td>
<td></td>
</tr>
</tbody>
</table>
# Appendix G

## Knowledge Survey Tool (KST)

**Health Education**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>I learned about</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can get insurance from</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The hospital I go to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I need to pay the hospital if I need emergency care</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>I can ask for an interpreter when needed</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>Prevention of disease or being sick is important</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>I can take any medicine my friend or family gives me</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>I can always stop taking the antibiotics when I feel good</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>For fever, I will</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TO stop bleeding, I will</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food in the can is good for me</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expired foods are still good to eat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vegetables I buy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmers Market is located at</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food I ate Yesterday</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My child will only learn to read and write in school</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>I can yell to my child when they are having tantrums</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>My child do not need immunization</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

**What is important to me**

<table>
<thead>
<tr>
<th>Topic</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>When I am sad, I</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix H

Skills Survey Tool

<table>
<thead>
<tr>
<th>Skills and Activity Survey Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code:  ___________________________________________</td>
</tr>
</tbody>
</table>

### What I learned

<table>
<thead>
<tr>
<th>Activity</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>With fever I will: drink more water, use light clothes, wipe the body with tap water and dry immediately</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>For cough, I will drink more water, lemon and ginger, and do steam inhalation</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>Only take antibiotics that the doctor gave</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>With a small wound, I will stop bleeding with direct pressure, wash with clean water and soap, cover with <strong>band-aid</strong></td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>For bee bites, take to Emergency Room (ER)</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

**Signs of stroke**

**What to do with a lot of bleeding**

### Activity I attended

<table>
<thead>
<tr>
<th>Activity</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploring <strong>Providence</strong> CANCELLED - limited by season</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>Exploring the seasonal farmers market or etc. CANCELLED - limited by season</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>Thanksgiving socio-cultural Dinner</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

### I used

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community resource book/ handout</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
<tr>
<td>Health Insurance Pathway/Handout/Healthwise Book</td>
<td>Yes</td>
<td>No</td>
<td>Not sure</td>
</tr>
</tbody>
</table>

### What I like about the program

### What is not good about the program
Appendix I

Cost Benefit Analysis Table

<table>
<thead>
<tr>
<th>Costs</th>
<th>Benefits</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Program Cost</td>
<td>Return on investment</td>
<td>- decrease rehospitalization (long term)</td>
</tr>
<tr>
<td></td>
<td>- average savings of $1000.00 to $3000.00</td>
<td>- decrease ER visits (long term)</td>
</tr>
<tr>
<td></td>
<td>over index admission (2015)</td>
<td>- decrease unnecessary clinic visits (long term)</td>
</tr>
<tr>
<td></td>
<td>- average savings of $1233.00 for ER visit</td>
<td>- improved health and psychosocial well-being</td>
</tr>
<tr>
<td></td>
<td>(typical actual cost 2015)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- average savings of $155.00 (typical actual</td>
<td></td>
</tr>
<tr>
<td></td>
<td>cost 2015) for urgent care clinic visit for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>common illnesses</td>
<td></td>
</tr>
<tr>
<td>Education Program: Training</td>
<td>First refugee comprehensive culture centric</td>
<td>- progressive increased in enrolment</td>
</tr>
<tr>
<td>curriculum</td>
<td>program for site agency</td>
<td>- site agency ownership and program integration of completed health</td>
</tr>
<tr>
<td></td>
<td></td>
<td>education program</td>
</tr>
<tr>
<td>Labor Costs</td>
<td>Increased Staff and stakeholders donated</td>
<td>- sufficient number of volunteers</td>
</tr>
<tr>
<td></td>
<td>time - volunteering</td>
<td>- increased stakeholders</td>
</tr>
<tr>
<td></td>
<td>Build self confidence of volunteers</td>
<td>- increased stakeholders</td>
</tr>
<tr>
<td>Community Engagement</td>
<td>Address the community centered needs</td>
<td>- increased refugee enrollees</td>
</tr>
<tr>
<td></td>
<td>Empowers community with</td>
<td>- increased trained refugees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- participation as program assistant</td>
</tr>
<tr>
<td>Knowledge and Skills Gained by Refugees</td>
<td>New knowledge and increase community collegial relationship for support</td>
<td>Improved confidence in providing family care - incremental results of post program evaluation</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Site Agency Organizational Image</td>
<td>Acknowledgement from stakeholders and recipients</td>
<td>Increased stakeholders support and visit to site agency - program gained recognition among stakeholders</td>
</tr>
<tr>
<td>Refugee Morale, Self Confidence</td>
<td>Increased self-confidence</td>
<td>Increased refugee volunteer work and assistance in the project or where needed</td>
</tr>
</tbody>
</table>
## Appendix J

### Timeline

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan - Feb</th>
<th>Feb - Mar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Identified community health program advisors.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Collaborated with community stakeholders.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Developed program documents such as orientation and evaluation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Program marketing completed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- IRB application completed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Classroom was secured.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Phase 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Developed guidelines for the health education program:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- participant code of conduct, review and evaluation of the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- curriculum outline, and prioritization of topics.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Completed health education program presentation outline.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Phase 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Finalized class schedule with trainers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Orientation and pre-test completed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Class was started in November 19.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Community socio-cultural activity completed November 19.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- Post-test was completed after the last class.

<table>
<thead>
<tr>
<th>Phase 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Completed program evaluation in February 2017.</td>
</tr>
<tr>
<td>- Collated and analyzed all evaluation.</td>
</tr>
<tr>
<td>- Disseminated evaluation results and reviewed questions to participants. Summarized result shared during refugee mental health stakeholders meeting.</td>
</tr>
<tr>
<td>- Disseminate project findings and experience in conferences. Plan for journal publication.</td>
</tr>
</tbody>
</table>
Appendix K

Sample Health Education Handout

BE PREPARED IN AN EMERGENCY:
LEARN HANDS-ONLY™ CPR AND HOW TO SPOT A STROKE F.A.S.T.

SPOT A STROKE F.A.S.T.
It could save a life, possibly yours.

FACE DROOPING — Does one side of the face droop or is it numb? Ask the person to smile. Is the person’s smile uneven?

ARM WEAKNESS — Is one arm weak or numb? Ask the person to raise both arms. Does one arm drift downward?

SPEECH DIFFICULTY — Is speech slurred? Is the person unable to speak or hard to understand? Ask the person to repeat a simple sentence, like “The sky is blue.” Is the sentence repeated correctly?

TIME TO CALL 9-1-1 — If someone shows any of these symptoms, even if the symptoms go away, call 9-1-1 and get the person to the hospital immediately. Check the time so you’ll know when the first symptoms appeared.

BEYOND F.A.S.T. — OTHER SYMPTOMS YOU SHOULD KNOW — Sudden numbness or weakness of the face, sudden confusion or trouble understanding, sudden trouble seeing in one or both eyes, sudden trouble walking, dizziness, loss of balance or loss of coordination and/or sudden severe headache with no known cause.

StrokeAssociation.org/WarningSigns
1-888-4-STROKE

American Heart Association | American Stroke Association
Together to End Stroke™

To help you remember F.A.S.T., download this free mobile application for your phone today.
Appendix L

Health Education Program Survey Result

<table>
<thead>
<tr>
<th>Variables</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Strategies</td>
<td>Phone calls to Leaders, Stakeholders meetings, Flyers distributed to stakeholders, RDC front door announcement</td>
</tr>
<tr>
<td>Total Number of Registered Participants</td>
<td>15</td>
</tr>
<tr>
<td>Total Number of Dropouts</td>
<td>2 excluded (did not meet inclusion criteria)/dropout</td>
</tr>
<tr>
<td></td>
<td>2 dropout (work conflict, community related responsibilities)</td>
</tr>
<tr>
<td>Average Attendees per Session</td>
<td>11</td>
</tr>
<tr>
<td>Total Participant who Completed</td>
<td>11</td>
</tr>
<tr>
<td>Community Health Program ad hoc Advisors/Consultation</td>
<td>Community leader attendees</td>
</tr>
<tr>
<td></td>
<td>Preceptor as needed</td>
</tr>
<tr>
<td>Number of Staff Involved</td>
<td>Preceptor and staff (1 average)</td>
</tr>
<tr>
<td>Number of Community Volunteer Trainers</td>
<td>3 refugee participant trainers</td>
</tr>
<tr>
<td></td>
<td>3 Lifespan team of trainers</td>
</tr>
<tr>
<td>Number of Community Paid Trainers</td>
<td>0</td>
</tr>
<tr>
<td>Number of Socio-Cultural Activity Completed</td>
<td>1 (Thanksgiving Dinner)</td>
</tr>
</tbody>
</table>

Qualitative Data Result: Themes

<table>
<thead>
<tr>
<th>I Like</th>
<th>Helpful, Motivational, Self care to maintain healthy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not good</td>
<td>Late start/poor time management, Need more time</td>
</tr>
</tbody>
</table>
Appendix M

University of Massachusetts Amherst Institutional Review Board

Certification of Human Subjects Approval

Date: November 9, 2016
To: Maria Theresa Pariales, Nursing
Other Investigator: Kajal Puadeli-Tande, Nursing
From: Lynette Leidy Sievert, Chair, UMass IRB

Protocol Title: Refugee Health Education: Learn To Succeed. Together We Build Our Community.
Protocol ID: 2016-3442
Review Type: EXPEDITED - NEW
Paragraph ID: 7
Approval Date: 11/09/2016
Expiration Date: 11/08/2017
OGCA #: 000035009

This study has been reviewed and approved by the University of Massachusetts Amherst IRB, Federal Wide Assurance # 000035009. Approval is granted with the understanding that investigator(s) are responsible for:

- Modifications - All changes to the study (e.g. protocol, recruitment materials, consent form, additional key personnel), must be submitted for approval in e-protocol before instituting the changes. New personnel must have completed CITI training.
- Consent forms - A copy of the approved, validated, consent form (with the IRB stamp) must be used to consent each subject. Investigators must retain copies of signed consent documents for six (6) years after close of the grant, or three (3) years if unfunded.
- Adverse Event Reporting - Adverse events occurring in the course of the protocol must be reported in e-protocol as soon as possible, but no later than five (5) working days.
- Continuing Review - Studies that received Full Board or Expedited approval must be reviewed three weeks prior to expiration, or six weeks for Full Board. Renewal Reports are submitted through e-protocol.
- Completion Reports - Notify the IRB when your study is complete by submitting a Final Report Form in e-protocol.
- Consent Form (when applicable) will be stamped and sent in a separate e-mail. Use only IRB approved copies of the consent forms, questionnaires, letters, advertisements etc. in your research.

Please contact the Human Research Protection Office if you have any further questions. Best wishes for a successful project.
Appendix N

Key Stakeholder and Student Preceptor Agreements

UNIVERSITY OF MASSACHUSETTS AMHERST Skinner Hall
651 North Pleasant Street Amherst, MA 01003-9304
January 19, 2016
To Whom It May Concern:

College of Nursing 413-545-5089

I am the Director of the DNP Program at the University of Massachusetts, Amherst, College of Nursing. I am writing this letter on behalf of Maria Theresa (Tess) P. Panizales, your student preceptor. Your student is planning to complete the pinnacle requirement for the Degree, a DNP Capstone Project, in your facility. Your student will be designing, implementing, and evaluating the impact of translating a programmatic intervention into your practice or setting. As these projects are considered performance improvement, quality improvement, or program evaluation projects and not research studies, the University does not require Institutional Review Board (IRB) permission for this student to actualize the project as outlined by the student and approved by preceptor/s within your facility. I am using this letter as a “Key Stakeholder” commitment letter for the student to use in the DNP Capstone Project Proposal. A Graduate faculty member of the College of Nursing will also be working directly with your student as Chair of the DNP Capstone Project Committee.

Thank you in advance for allowing this student to actualize the DNP Capstone Project in your facility. If you have any questions, please call me at 413-545-5089 or email

Key Stakeholder Signature: __________________________ Date: 1/19/2016

Student Signature: __________________________ Date: 1/19/2016

Sincerely,

Pamela Aselton, PhD, FNP-BC Associate Professor/Director DNP Program

The University of Massachusetts is an Affirmative Action/Equal Opportunity Institution
SIGNATURES:

Confirmation of Student-Preceptor Form for Clinical Preceptorship

STUDENT: E-Sign and Date. Then at the bottom of the document, CLICK TO SIGN. Then to go to your email, open it, and click Confirm my email address. The document will automatically go to Andrea Juno, ajuno@umass.edu at Umass, who will then send it to the Preceptor using the email you provided.

PRECEPTOR: This document will be emailed to you for E-signing after the Student signs. E-Sign and Date, then at bottom of document, CLICK TO SIGN. You will receive a final copy of the form in another email. Thank you.

STUDENT at University of Massachusetts Amherst, College of Nursing

Maria Theresa Panizales

(print name)

Maria Theresa P. Panizales

(signature)

Maria Theresa P. Panizales (Sep 13, 2016)

(date)

PRECEPTOR at

Refugee Dream Center

(name of Clinical Site)

Mr Omar Bah, MPA, MA

(print preceptor’s name)

(signature)

(date)