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Initial Refugee Health Assessment Educational Session

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Initial Refugee Health Assessment Educational Session

by

Yolondra Cochran

A project submitted to the faculty of
Gardner-Webb University Hunt School of Nursing
in partial fulfillment of the requirements for the degree of
Doctor of Nursing Practice

2024

Boiling Springs, NC

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7/23/2024

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7/23/2024

Date

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Abstract

The initial refugee health assessment presents an excellent opportunity to identify communicable diseases in newly arriving refugees. As the number of refugee arrivals increases, so will the need for nurses who possess the skills necessary to conduct the initial refugee health assessment. Prior to the pandemic, the United States was facing a nursing shortage. The impact of the pandemic devastated the nursing community, leaving them exhausted and burnt out, which led many nurses to retire and leave the field of nursing (National Council of State Boards of Nursing [NCSBN], 2023). Skilled nurses are needed to prevent the spread of communicable diseases. An educational session for the initial refugee health assessment has been proven to increase the knowledge of refugee health nurses. Two educational sessions were conducted at two local health departments in North Carolina. A total of 10 nurses completed all portions of the educational session. This project utilized a paired t-test to compare the pre-test results to the post-test results. There was a statistically significant difference between pre-survey scores ($M = 42.03$, $SD = 13.79$) and post-survey scores ($M = 68.38$, $SD = 15.95$); $t(9) = -5.10$, $p < .000$. The test had an average pre-education score of 42.03 and an average post-education score of 68.38. This resulted in a 63% increase in knowledge of initial refugee health assessment after the educational intervention.

Keywords: initial refugee health assessment, immigrant health, refugee health, educational session, domestic health exam

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Problem Recognition

According to the United States Department of State (2022), in fiscal year 23, the United States (US) has proposed to resettle 125,000 refugees. During the pandemic and prior administration, the number of proposed arrivals was much lower. The domestic health examination is crucial to the successful resettlement of refugees. The domestic health exam is an opportunity to identify communicable diseases, administer vaccinations, and connect the new arrivals to a primary care home (Centers for Disease Control and Prevention, 2021a).

Identified Need

As the number of expected refugee arrivals rises, the demand for nurses who can conduct initial health assessments during domestic health exams will also increase. North Carolina has 100 counties and approximately 86 local health departments, with only 12 health departments that have an Agreement Addendum with nurses involved in refugee health to work directly with the State Refugee Health Program (J. Morillo, personal communication, July 23, 2023). Even prior to the pandemic, there was already a growing need for such nurses, and the current workforce is now experiencing burnout (Gaines, 2022). The impact of the pandemic on nursing has been devastating, causing nurses to feel emotionally drained, exhausted, and depleted. According to the 2022 National Nursing Workforce Study, about 100,000 registered nurses (RNs) and 34,000 licensed practical nurses/licensed vocational nurses (LPN/LVNs) left the profession due to the pandemic (Smiley et al., 2023). A survey conducted in 2022 by the National Council of State Boards of Nursing (NCSBN) in partnership with the National Forum of State Nursing Workforce Center predicted that around 800,000 RNs and 184,000 LPN/LVNs plan to leave nursing by 2027 (2023). These numbers represent roughly 20% of the licensed RN and LPN/LVN workforce in the US.

For refugees, healthcare costs can be prohibitive, and Medicaid coverage typically lasts only 8 months after arrival. Therefore, initial health assessments are critical for identifying and addressing medical issues, while also introducing new arrivals to primary care. While emergency room visits can cost over \$2,000, the cost of a visit to a primary care physician ranges from \$150 to \$450 out of pocket or the amount of a copay, which may cost \$20 (Williams, 2023).

Problem Statement

According to the Refugee Processing Center (RPC) (2023), North Carolina ranked 7th in the US to welcome new arrivals and has consistently resettled a high number of refugees. However, without skilled and knowledgeable refugee health nurses, North Carolina could face the risk of communicable diseases spreading and increased emergency room costs due to an ineffective referral process to primary care homes.

Literature Review

The purpose of this literature review was to collect evidence-based information on refugee health assessment and effective educational interventions. A thorough search was conducted using CINAHL Complete and ProQuest Education Database with keywords such as “refugee health”, “assessment”, “newly arrived refugees”, “immigrant health”, “new arrivals”, and “educational interventions for nurses”. This search resulted in 15 articles that were included in the literature review. The articles are comprised of two quasi-experimental studies, four qualitative studies, one educational intervention study, one mixed qualitative-quantitative study, one retrospective cohort evaluation, two research studies, three cross-sectional retrospective analyses, and one meta-analysis. The studies were conducted in different parts of the world, including 12 from the United States, and one each from Turkey, Theran, and Canada.

Refugee Health Assessment

A study conducted by Pezzi et al. (2020) analyzed the impact of domestic medical exams on screening reporting among refugees and eligible persons. They reviewed data from 105,541 individuals who had undergone the exam between January 2014 to December 2016 in seven states, one county, and one academic medical center. The study revealed that the domestic examination effectively screened most refugees and eligible persons for various health conditions, with higher testing rates for tuberculosis, hepatitis, HIV, and lead. However, the testing rates were lower for other health conditions such as sexually transmitted infections, mental health, and parasites. It is important to note that the study relied on data collected primarily for programs and not for surveillance purposes, which limits its scope.

A study conducted by Alarcón et al. (2013) found high levels of variance in the completion of primary care referrals for refugees in New York State. The researchers aimed to investigate whether the absence of primary care availability on-site at the location of the initial health assessment affected referrals to primary care for refugees and to identify any significant barriers to referral completion. The study retrospectively evaluated a cohort of 388 refugees who received primary care referrals. The results showed that only 69% of participants completed the referral, with no statistically significant difference between completion rates of sites offering only health assessments (70%) and those offering both health assessments and primary care on-site (68%). However, the study was limited by a narrow definition of referral completion and excluded completed appointments prior to the second health assessment visit.

Recently, a retrospective analysis was conducted on newly arrived refugees in four states to examine their screening, vaccinations, and linkage to care for hepatitis B virus. The study by Mitruka et al. (2018) used logistic regression to identify a correlation between those who were tested, vaccinated, and linked to care. Out of 32,205 individuals tested, 32,107 had

valid results, with 31% receiving three serologic tests and the rest receiving one or two. The overall infection rate was 2.9%, but the study was unable to determine if those infected received care. Additionally, only 38% of susceptible individuals received the hepatitis B vaccine. However, the study had limitations as the refugees included may not be representative of the entire refugee population entering the United States, and those with a positive anti-HBc result were classified as immune without further testing.

A study conducted by Lupone et al. (2019) examined the lead exposure of newly resettled pediatric refugees through a cross-sectional retrospective chart analysis. The study included 705 refugee children primarily from Africa, the Middle East, and Southeast Asia. The findings revealed that 17% of the children had elevated blood lead levels upon arrival, 10% had BLLs during follow-up, and 8.8% had BLLs due to new exposures. These results highlight the need for continued comprehensive services and identification of additional risks for lead exposure. However, the study's limitations included the out-migration of several refugees and the fact that it may not be generalized to all pediatric refugees with different demographics, locations, and beliefs.

A study conducted by Michael et al. (2018) focused on evaluating the Forsyth Refugee Health Collaborative's effect on enhancing access to coordinated care for refugees in a timely manner, improving communication between the health department, raising awareness among providers about the refugees' status, and reducing emergency room visits. To facilitate the process of refugees establishing care in patient-centered medical homes (PCMH), the Collaborative devised an algorithm. The data analyzed through single variable logistic non-linear mixed models indicated that most of the local primary care and emergency visits occurred at the county's two primary healthcare systems. The study demonstrated that the Collaborative comprised of key stakeholders and leaders in Forsyth County, North Carolina had a favorable

impact on connecting refugees to primary care by decreasing the time taken to establish care and reducing emergency room visit rates as compared to the rate prior to implementing the algorithm.

A review of the long-term health outcomes of resettled refugee populations was conducted through a meta-analysis of 33 articles. The study subjects were from the top five United States resettlement populations. The analysis, conducted by Kumar et al. (2021), found an increased prevalence and incidence of chronic diseases among refugees. The authors recommend earlier screening and evaluation of non-communicable diseases. The most reported diseases were diabetes and hypertension. Kumar et al. (2021) stated that primary healthcare clinicians could benefit from training in refugee health. It has been observed that refugees are more likely to suffer from certain chronic diseases. Therefore, this meta-analysis suggests that screening for non-communicable diseases should be conducted earlier than recommended along with regular screenings. Further studies are required to help public health practitioners gain a better understanding of the health issues that arise after settlement.

According to a research study conducted by Bardenheier et al. (2018), Burmese refugees resettling in the US experienced an increase in the prevalence of chronic diseases such as diabetes, chronic obstructive pulmonary disease (COPD), and musculoskeletal disease over time. Between 2009-2016, 73,251 refugees from Burma resettled in the US. The refugees either lived in camps in Thailand, the urban area of Malaysia, or the camps or urban areas in Burma. Interestingly, there was no statistical significance found between those who were US-bound resettling from camps or urban areas in terms of the prevalence of cardiac conditions or COPD. The researchers analyzed the health information of the refugees from Burma, calculated the age and sex standardized prevalence of chronic conditions, and assessed their risk factors, such as BMI and smoking. Burmese refugees from Malaysia (urban) had a higher prevalence of obesity,

diabetes, and hypertension than those that had originated from Thailand (camps). Bardenheier et al. (2018) also noted that refugees who originated from Burma, regardless if they lived in a camp or an urban area had a higher prevalence of chronic diseases and related than refugees who originated from Malaysia (urban). It is crucial to note that medications prescribed for infectious diseases during the initial health assessment can potentially worsen or trigger chronic illnesses. The review of the overseas medical exam provides insight into the needs of the individual who has newly resettled further supporting their successful resettlement.

Sangalang et al. (2019) conducted a comparative analysis of refugees and immigrants to explore the effects of trauma before and after resettlement. They collected data from the National Latino and Asian American Study, interviewing 3,269 respondents. The study used logistic regression for binary outcomes and multivariable linear regression to model the effects of pre- and post-migration stressors on mental health outcomes. Several factors were taken into consideration such as where their stressors were pre-migration and post-migration, and did the individual have any anxiety or depressive disorders. The Keesler Psychological Distress scale was used to assess mental and emotional distress. The index showed a high level of consistency ($\alpha = 0.86$ for Asians; $\alpha = 0.93$ for Latinos). A nine-item Everyday Discrimination scale was used to assess the reported frequency of unfair treatment, and the higher sums reflected frequent feelings of discrimination. The results for both Asians and Latinos were $\alpha = 0.90$. There was also a seven-item scale used to assess feelings of safety and cohesiveness in their communities. The total scores ranged from 4-28 ($\alpha = 0.76$ for the Asians; $\alpha = 0.79$ for the Latinos). The research highlights the importance of considering pre- and post-migration experiences and their impact on the mental health of refugees. However, the study's limitations include relying on self-reported refugee status and retrospective measures that may be subject to recall bias.

Educational Interventions

A recent study by Menekli et al. (2021) aimed to assess the impact of an educational program on palliative care knowledge among nurses. The study utilized a one-group quasi-experimental design and a sample of 136 nurses who were conveniently selected. The educational program comprised various techniques such as PowerPoint presentations, printed materials, lectures, case studies, problem-based learning, discussions, and self-directed learning. Data was collected through face-to-face interviews and pre- and post-tests. The results showed significant improvement in the participants' scores after the intervention. Prior to the intervention, the nurses received 8.9 ± 1.1 out of 20 points and 17.5 ± 1.9 after the education. There was a significant statistical difference before and after the training ($p < 0.001$). However, it should be noted that the study's limitation stems from its focus on only one hospital and the short-term evaluation of the intervention.

Rostamnia et al. (2020) conducted a study on training nurses in evidence-based practice skills using different methods. The study involved placing 90 participants in one of three groups: a workshop group conducted over 2 days, a group that received educational content through video, or a control group that received no educational content. The data was analyzed using one-way ANOVA, chi-square, and Fisher exact. The study revealed that both methods were effective in training nurses in evidence-based practice (EBP) skills. There was no significant difference in those that had attended a research methodology training course among the three groups ($p > .05$). There were also no significant differences regarding EBP skills and implementation among the groups prior to the training course ($p > .05$). There was a significant difference between the control group and the intervention groups, however, there was no significant difference between the intervention groups. Knowledge was increased after the intervention, and the use of multimedia in training was found to be cost-effective. This could

reduce the cost of training by employing the same instructor for many students and decrease the cost of holding constant professional development courses. The study was limited by the short time period and it did not evaluate if the institution supported the implementation of EBP.

Berishaj et al. (2019) utilized a quasi-experimental pretest-posttest design to investigate the impact of an educational intervention on nurses' knowledge and beliefs concerning human trafficking. Berishaj et al. (2019) conducted the study at a conference with a convenience sample of 93 nurses. Experts in human trafficking delivered a 4-hour conference, and the course's goals prompted the creation of a 19-item survey instrument. The educational intervention yielded successful results, with a significant improvement in paired sample t-test results for 17 of the 19 survey items. The results revealed that the instruments used for both the pretest ($\alpha = .90$) and posttest ($\alpha = .81$) were highly reliable. The paired *t*-test showed a significant change ($p < .001$) in the nurses' perceived knowledge and beliefs pretest to posttest for 17 out of the 19 items on the survey. However, the study's small sample size and participants' similar demographics limited its scope. The researchers also noted that they lacked information on whether the educational intervention affected the nurses' personal beliefs and professional practices.

In a four-phase qualitative study conducted by Clisbee et al. (2019), 160 nurses participated in small-group educational workshops lasting 6 hours each. These workshops were held in groups of 10-12 over a period of 3 months. The study aimed to guide approaches toward creating digital stories that could help reduce logistical concerns and overcome implementation challenges in nurse education workshops. The goal was to assess the adaptive techniques for producing digital stories that could effectively address logistical issues, surmount implementation obstacles, and enable nurses to gain family practice expertise, encourage introspection, and foster empathy towards families and fellow nursing professionals. Digital

storytelling (DST) is a workshop-driven process that requires 3 days of work to navigate through its seven-step process. Generic digital storytelling, (GDS) has a shorter, four-step approach. GDS was used by Clisbee et al. (2019) to create first-person stories told by nurses. The stories were used to depict identified areas of concern for patients and families. Through survey and narrative responses, it was determined that digital stories empowered sympathy and compassion, as well as participants' reported benefits in the workshop. The Academic-Practice Partnership that codesigned the educational workshop demonstrated that it is possible to use GDS to create valuable stories for learning.

Adalbert and Ilyas (2022) conducted a study to assess changes in student knowledge, attitudes, and perceived competence in prescribing opioids. Likert scale variables were compared from pretest and posttest numbers. They utilized a Wilcoxon matched-pairs signed rank to analyze each question. The study invited 43 students in their final year of medical education via email. A patient-centered approach was taken in developing an opioid and pain management module. Responsive project management was used to create reiterative drafts and feedback, and educational material was presented through an interactive case-based learning system. Results showed that implementing an interactive module with clinical content was effective in improving knowledge, attitudes, and perceived competence among fourth-year medical students. There was a significant difference in the pretest and post-test responses ($p < 0.05$). However, the study had limitations, including being a single-center study, low response rate due to voluntary participation, and the potential for self-reported knowledge, attitudes, and competence to be unreliable.

A study conducted by McKennon and Arnold (2016) revealed that a targeted educational module was effective in training student pharmacists on tuberculosis screening. The module included a 90-minute web-based lecture, which was made available 2 weeks prior to the

live practicum assessment. Before the practicum, students were required to complete a post-didactic assessment, which included answering all questions. This assessment had to be completed no more than 3 days before the live practicum. The evaluation process consisted of a pre/post-didactic assessment, live practicum tuberculin testing administration and evaluation, and a post-program written assessment. The sample consisted of 79 students who completed the module pre-assessment and post-assessment, and their knowledge skills were evaluated using a paired pre/post design. McKennon and Arnold (2016) concluded that the program significantly improved students' knowledge of tuberculosis screening.

A study that reviewed the impact of an educational intervention on professional skills, attitudes, and perceived challenges regarding obesity management among frontline healthcare providers was conducted by Sanchez-Ramirez et al. (2018). Their study consisted of 76 healthcare providers who completed surveys pre- and post-event. The educational intervention consisted of a morning and an afternoon session, that included lectures, a speaker, case studies, and interactive activities. The learning outcomes were evaluated using Kirkpatrick's model and descriptive statistics were used to present the demographic information. The post-event survey revealed a significant post-event increase in perceived skills, such as the ability to assess weight ($p = 0.04$), address weight management ($p < 0.001$), and teach and motivate the patients ($p = 0.001$). Practitioners also felt competent to manage obese patients ($p < 0.001$). Pre- and post-event survey responses identified key challenges regarding discussing obesity with parents and motivational interviewing. A limitation of the study was that the survey was not formally piloted, however, the instrument was created by 12 multidiscipline professionals and two research fellows. Another limitation was that participants who completed both the pre-and post-event survey were statistically significantly younger and had been in practice for a shorter

amount of time than no post-presentation responders. The researchers believed this could have affected the outcome.

The available literature reviewed for this project indicates that there is room for improvement in the refugee health assessment process. This assessment provides crucial initial information about the health status of refugees upon their arrival. Of the 86 local health departments in North Carolina, only 12 health departments have an Agreement Addendum with the State Refugee Health Program (J. Morillo, personal communication, July 23, 2023). However, research suggests that an educational intervention focused on the guidelines for refugee health assessment can greatly enhance the knowledge and confidence of nurses responsible for conducting assessments. By improving these assessments, the successful resettlement of newly arrived refugees can be supported.

The domestic health assessment is an effective way to screen refugees for various health conditions, including communicable diseases like hepatitis, HIV, and TB (Bardenheier et al., 2018; Kumar et al., 2021; Lupone et al., 2019; Pezzi et al., 2020). However, further studies are necessary to gain a better understanding of post-resettlement health issues (Kumar et al., 2021). Studies have shown higher rates of connection to primary care compared to those who do not have onsite primary care for refugees, in facilities where the initial health assessment is completed (Alarcón et al., 2013). Furthermore, positive outcomes were achieved when the time to connect the refugee to primary care decreased, leading to a reduction in emergency room visits (Michael et al., 2018). While progress has been made, there is still room for improvement in identifying susceptible individuals with serologic testing to receive the Hep B vaccine and providing follow-up care for those with BLLs (Lupone et al., 2019; Mitruka et al., 2018). Addressing the mental health needs of refugees is also a significant concern (Sangalang et al., 2019).

Various modalities, such as PowerPoint presentations, printed materials, lectures, case studies, and digital stories, have shown positive outcomes in increasing individual knowledge (Adalbert & Ilyas, 2022; Berishaj et al., 2019; Clisbee et al., 2019; McKennon & Arnold, 2016; Menekli et al., 2021; Rostamnia et al., 2020; Sanchez-Ramirez et al., 2018). Providing education in these modes has been proven to be effective, as supported by the literature.

Needs Assessment

Studies conducted before the pandemic revealed that there was already a shortage of nurses to cater to the community's needs (Gaines, 2022). The current global crisis has further burdened the nursing workforce, resulting in early retirements and resignations (NCSBN, 2023). For the fiscal year 2023, the United States had planned to resettle 125,000 refugees, and as of January 31, 2023, 9,240 have been resettled, with 445 of them being in North Carolina (RPC, 2023). Due to the high cost of living in major cities that typically accept refugees, these individuals are now settling in smaller towns and cities where the public health department has limited experience in conducting initial refugee health assessments. Consequently, inexperienced nurses are seeking guidance from experts and consultants across the state to facilitate the initial refugee health assessment. Proper training is necessary to ensure that the refugees receive competent and comprehensive health assessments. Refugees immigrate from areas with a high incidence of communicable diseases (Centers for Disease Control and Prevention [CDC], 2023). The primary goal of the initial health assessment is to identify and treat infectious diseases. This is the first line of defense in preventing the spread of infectious diseases. In the state of North Carolina, there are currently no formal training guidelines in place to assist inexperienced nurses with the initial refugee health assessment. Additionally, nurses are not provided with an introduction to the resources available for the successful resettlement of newly arrived refugees.

Population/Community

North Carolina has been placed as the 10th highest US state in terms of the number of refugees arriving (RPC, 2023). However, the community faces a potential risk of communicable diseases from refugees if prompt measures are not taken to identify and treat them. An educational intervention to equip less experienced refugee health nurses with the knowledge and skills to identify communicable diseases within 30 days of arrival could improve their confidence in handling such cases. There are 100 counties in North Carolina. In each county health department or local health department, at least one nurse is identified to ensure that the provisions of the initial health assessment are completed. In some of the smaller counties, nurses are expected to cover the needs of more than one county.

The PICOT question for this project was: In completing the initial refugee health assessment(P), how did no educational intervention, compared to an educational intervention (I), increase the knowledge and confidence of less experienced refugee health nurses (O) during the initial resettlement process (T)?

Available Resources

There are helpful resources available for those dealing with refugee health matters, such as a state's refugee health coordinator. The state refugee health coordinator has access to important refugee arrival information that local health departments may not have and can offer guidance and assistance with policy development. Additionally, the Centers of Excellence in Newcomer Health has resources to aid in program-level refugee health, including the initial refugee health assessment (CDC, 2021b). The Minnesota Department of Health provides resources to utilize in the guidance of the initial health assessment (Minnesota Department of Health, 2023a), which includes the CareRef application (Minnesota Department of Health, 2023b). CareRef is an interactive tool that provides clinical guidance for newly arrived refugees.

To facilitate the project, the Makeeasy Binding was used to assemble the technical guidance manuals, for \$125.99, which included copier paper, ink, and professionally printed manual covers. The cost of these items was \$54.51, \$25.00, and \$85, respectively. Traveling to conduct onsite training by the project leader at the Centers of Excellence in Newcomer Health and the Minnesota Department of Health for airfare, hotel, and car rental was incurred. The cost was \$214.91, \$383.90, and \$230, respectively. Two overnight trips to the New County Health Department also incurred a cost of \$227.50 in hotel fees. In addition, free conference space was provided at each local health department. Food, drinks, and snacks for the day of educational sessions were limited to \$75 each. To assess the education level, length of employment as a public health nurse, comfort level of conducting the initial refugee health assessment, and the number of refugee health assessments conducted monthly, Qualtrics was used to distribute surveys and register for the educational session through the university's subscription at no additional cost. For the development of educational materials, administrative assistance, and nurse informaticists were available as additional resources at no additional cost.

Desired and Expected Outcomes

The educational intervention for the initial refugee health assessment successfully provided knowledge for the refugee health nurse. Descriptive statistics were utilized to evaluate the post-survey results. The desired outcome was for post-survey results to show an increase in knowledge of the initial health assessment of the refugee health nurse by more than 20%. Studies have shown that educational interventions have increased knowledge in the participants (Adalbert & Ilyas, 2022; Menekli et al., 2021; Rostamnia et al., 2020) by 20%, therefore this project was anticipated to create a similar increase in participant knowledge.

Team Selection

The DNP Project Committee included the DNP Project Leader, DNP Project Faculty, and a Practice Partner. The DNP Faculty and the Practice Partner were individuals that the DNP Project leader ensured were informed and satisfied with the development and implementation of the educational session. The committee for the DNP Project consisted of a Practice Partner who possessed knowledge and experience in refugee health and was accompanied by the faculty chairperson. Their role was to provide valuable insight, guidance, and feedback throughout the educational intervention's development process. The project was also supported by a previous Deputy Medical Director, who provided invaluable review and assistance with the development of the technical guidance manual. A nurse informaticist provided invaluable education to the DNP Project Leader in the development of a job aid to build a Microsoft form for referrals that will automatically populate a SharePoint site.

Scope of Project

This educational intervention aimed to provide nurses with the necessary knowledge and guidance to conduct the initial health assessment of refugees successfully. Through an educational intervention, nurses were provided with guidelines for the domestic examination, which enabled them to perform a successful initial refugee health assessment. Additionally, the intervention equipped nurses with a practical understanding of the available resources for future use.

The educational session did not provide a mandated state-wide education to all refugee health nurses in North Carolina. Participation was voluntary. Participants were not compensated or rewarded for their participation.

Objectives and Timeline

The goal of this project was to conduct a successful educational session for the initial health assessment of refugees, where the educational session would increase the knowledge of the identified refugee health nurses to perform the initial refugee health assessment. The educational session included a formal introduction of the recommended guidelines for the initial refugee health assessment and it provided an overview of available resources to support the initial refugee health assessment.

Objectives

- Within 4 weeks of the project initiation, 80% of the identified refugee health nurses will have participated in the educational session.
- After attending the educational session, the identified refugee health nurses will have a 20% increase in knowledge to perform the initial refugee health assessment compared to the pre-test.

Timeline

This project was developed, implemented, evaluated, and disseminated between May 2023 and July 2024.

- Problem recognition, needs assessment, and objectives: 10 weeks from May 2023 - July 2023. Over the course of 10 weeks, the problem and solution were defined, and a goal and objectives were proposed. A significant portion of this time was spent reviewing the literature, selecting a facility to implement the project, and identifying a practice partner and additional committee members to join the project. The timeline for implementation was also defined during this time frame.
- Theoretical application, work planning, and proposal: 15 weeks from August 2023 - December 2023. These 15 weeks were spent applying the theoretical application to the

project. A project management tool was identified to ensure that tasks are identified and that they remain on schedule to complete this project by July 2024.

- University QI application submission and approval: 3-4 weeks from January 2024 - mid-February 2024. This was an initial step prior to implementing the project.
- Facility QI application submission and approval: 6-8 weeks from mid-February 2024 - March 2024. The facility was approved prior to educational session implementation.
- Project implementation and intervention: 4-6 weeks from April 2024 - mid-May 2024. During this time the educational session was presented. The DNP Student traveled to the practice learning environments and provided the educational session. Two educational sessions were provided, one at each of the practice learning environments. Prior to providing the content of the educational session, each participant completed a pre-educational session survey in Qualtrics. The content of the educational session was presented. At the conclusion of the educational session, each participant completed a post-educational survey.
- Data collection, analysis, and evaluation: 4-6 weeks from mid-May 2024- June 2024. Post-educational session test was completed and analyzed against the pre-educational session test; this allowed for an evaluation of the effectiveness of the educational session.
- Dissemination of results: 2-4 weeks July 2024. The project was presented during the Scholar's Day Presentations.

Theoretical Underpinning

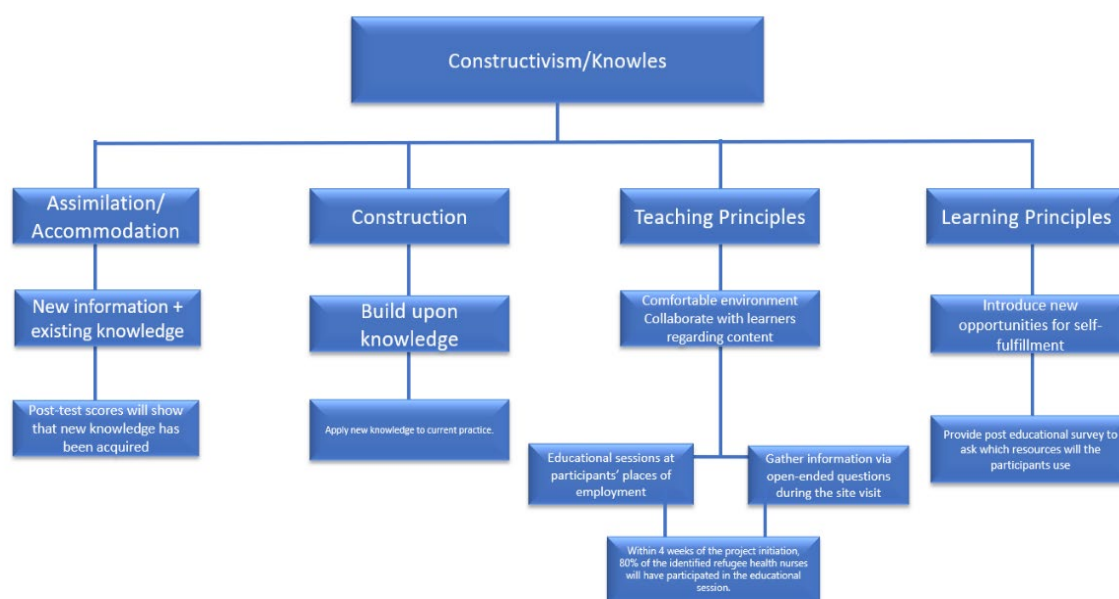
The educational session on the initial refugee health assessment is based on Constructivism, which draws on the works of Jean Piaget, Lev Vygotsky, and Malcolm Knowles' Adult Learning Theory. These theories provide a strong foundation for developing an effective

session for public health nurses. These theories apply to the project by addressing the needs of nurses who are currently working in public health.

Constructivism is a cognitive learning theory that emphasizes learning through experience (Billings & Halstead, 2012). It is an active, cumulative, and constructive process that relies on the learner's mental activities. The theory is based on assimilation, accommodation, and construction. According to Wadsworth (2004), assimilation is a process that enables a learner to incorporate new behavior patterns into their existing knowledge and perceptions. Accommodation, on the other hand, involves creating new concepts or modifying previously learned ones. Billings and Halstead (2012) also suggest that new knowledge is constructed by interpreting personal experiences and building on existing knowledge. These principles help the learner to build upon their existing knowledge to understand and apply new knowledge (Billings & Halstead, 2012). The educational session will build upon the nurses' public health knowledge of nurses by presenting them with the components of a successful initial refugee health assessment. The review of resources will further enhance their knowledge.

Malcolm Knowles's adult learning theory states that adults learn better when asked to utilize past experiences and build upon that knowledge to solve problems (Knowles, 1980). The motivation to learn is different for adults and children. Learning for adults may be task-oriented or problem-centered. When the goals of learning are useful, realistic, and essential to their personal, professional, and career needs they will make a commitment to learning (Billings & Halstead, 2012). Knowles (1980) provides examples of formats that may effectively accomplish the adult learning activity. The formats for individual learning include apprenticeship and internship, correspondence study, and counseling. Individual learning formats allow individuals to learn separately. Formats for group learning include clinics, workshops, and conferences. Group learning provides greater efficiency of operations and more resources and motivations

for learning. Community development is also used as a format for adult learning (Knowles, 1980). The educational session will help participants build upon their previous knowledge of nursing, specifically public health nursing. The teaching and learning principles will be based on the needs of adult learners. Open-ended questions will be asked of the current refugee health nurses during the initial practice site visit to plan the educational session content. By actively working with the participants prior to the educational session they will have input into the content that will be presented, while collaboratively working with their peers to achieve their personal learning objectives. The session will introduce a revised North Carolina Refugee Health Manual, resources to assist with the initial refugee health assessment, the development of a dedicated North Carolina Refugee Health website, and nursing guidance. The educational session will allow students to increase their knowledge of the initial refugee health assessment, which is important to their career needs. It will create opportunities for self-fulfillment and competence in this task. The practice site will be convenient and comfortable for participants as it is a familiar location and they will not have to travel. The date and time will be mutually agreed upon. A visual of the CTE diagram is depicted in Figure 1.

Figure 1*Conceptual-Theoretical-Empirical Diagram***Work Planning**

Effective work planning is crucial to the success of developing an educational session.

Before the project partner was officially committed, there was a candid conversation with the State Refugee Health Coordinator to confirm that the North Carolina Refugee Health Office supported this educational session. To ensure timely implementation, data review, and dissemination of findings, a project management tool will be implemented. The project management tool tracked the many sub-projects and milestones and ensured that deadlines were met, and all key parts of the project were completed.

Project Management Tool

To keep the project on track, a Gantt chart was used (Figure 2), which provided a detailed timeline for the project and its tasks. The chart also offers a visual representation of what could be done simultaneously and what needed to be completed sequentially (Zaccagnini

& Pechacek, 2021). The Gantt Chart-Project Management tool began with Week 1 which was the week of 5/15/2023, ending with Week 64 which was the week of 7/22/2024.

The management tool also included 14 tasks to be completed within a specified timeframe:

1. Task 1 consisted of the problem recognition, needs assessment, and objectives, over a 10-week period from May 15 to July 17, 2022.
2. Task 2 was the literature review and initial information gathering, over a 10-week period from May 15 to July 17, 2022.
3. Task 3 Involved identifying a practice partner and practice site, along with a documented commitment from the sites. The task covered a 9-week period from May 15 to July 10, 2022.
4. Task 4 was a site visit to Alamance County Health Department during week 14.
5. Task 5 consisted of stating the theoretical pinning and the identification and development of the project management tool, over a 15-week period, from 8/21 to 11/27/2022.
6. Task 6 was a visit to the Centers of Excellence in Newcomer Health at the Minnesota Department of Health and the Center for International Health, during week 22.
7. Task 7 included completing the procedure manual, and providing survey information to the Practice Partner for distribution, a 5-week period, from 10/11 to 11/13/2023.
8. Task 8 was to complete content for the state refugee website, this will occur during week 25.
9. Task 9 included the development of the content for the presentation to include the presentation-pre-posttest. This occurred over a 10-week period from 10/30 to 1/8/2024.

10. Task 10 involved the university QI Application. This occurred in a 4-week period from 1/15 to 2/12/2024.

11. Task 11 involved the State QI Approval. This will occur in a 4-week period from 2/19 to 3/18/2024.

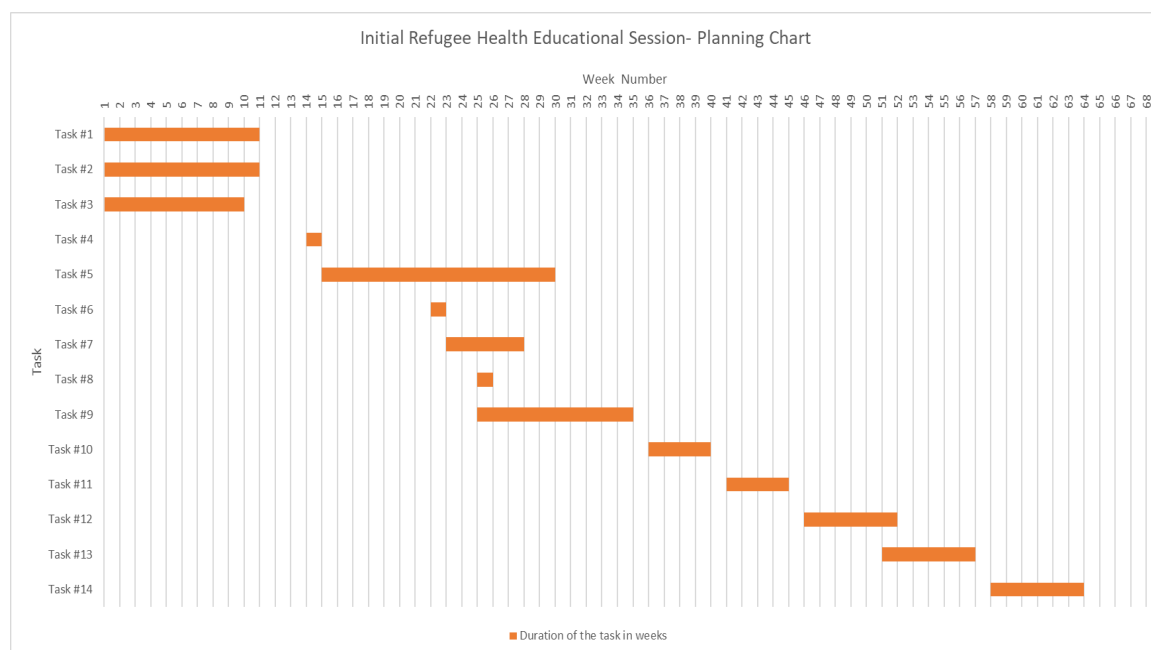
12. Task 12 was the project implementation during from week 46 to week 51.

13. Task 13 consisted of data collection and analysis. This occurred from week 51 to week 57.

14. Task 14 included the dissemination of the results of the DNP, which occurred during the last 7-week period from 6/17 to 7/22/2024.

Figure 2

Gantt Chart-Project Management Tool



Cost/Benefit Analysis

The estimated cost of the project was between \$2,665-\$3,750.72. The cost included the salaries of the participants. The local health departments bear these costs, as the educational

session required time to correspond with the DNP Project Leader via email or telephone, and site visits occurred during the nurses' workday. The estimated time per RN was around 16 hours. The 16 hours included the time spent corresponding with the DNP Project Leader, site visits to gather information, and an approximately 4-hour educational session. At each practice site, the DNP Project Leader limited contact to two primary nurses. The average salary for an RN in North Carolina was \$34.23 per hour at the time of the project (NurseJournal, 2022). In total, 14 nurses participated in the educational sessions.

As part of the project, the DNP Project Leader visited each practice site twice, at a cost of \$327.50. Additionally, there is a Center of Excellence in Newcomer Health located in Minnesota that the DNP Project Leader visited to gather first-hand information and resources regarding the initial refugee health assessment. The estimated cost of this trip was \$828.81. Canva Pro was purchased at the cost of \$120. Other costs incurred included refreshments, printed materials, copy paper, and a binding machine for the educational session, incurred at the expense of the DNP Project Leader at a cost of approximately \$314.51.

A benefit of this project is preventing tuberculosis (TB) disease through an accurate initial health assessment of refugees. This initial assessment provides an opportunity to identify individuals with TB-related diseases; therefore, it is important to promptly identify and treat individuals with latent TB infection to prevent the infection from advancing to TB disease. Treating TB can be very expensive, ranging from \$20,211 to \$801,245 per case (Centers for Disease Control and Prevention, 2022). Therefore, the cost and benefit of educational sessions to prevent TB far outweigh the cost of treating one person with the disease. A cost/benefit analysis is shown in Figure 3.

Figure 3*Cost/Benefit Analysis*

Item	Cost per Unit	Units	Time	Total
Fixed Costs				
Staff salary	\$34.23/hour (NurseJournal, 2022)	2	16 hours	\$1095.36
	\$34.23 /hour-additional nurses that participated in the educational session	12	4 hours	\$1643.04
Variable Costs				
Printed Resources	\$6	20		\$120
Canva Pro	\$120	1		\$120
Binding Machine, Copy Paper	\$100	1		\$150
Refreshments	\$22.25	2		\$44.51
Transportation/Meals/Lodging-in state	\$81.75	4		\$327.50
Travel to a Center of Excellence	\$828.81	1		\$828.81
				\$4329.22
Benefits				
Prevent TB	\$20, 331 to \$801,365 (per TB case) Centers for Disease Control and Prevention, 2022 October 21	1		\$20, 331 to \$801,365
Potential Revenue				
				+\$16,001.78 to \$797035.78

Evaluation Plan

The educational session was evaluated with the use of qualitative and quantitative tools. The selected tools allowed us to measure whether the two objectives of the educational session were met. The first objective of the educational session states that within 4 weeks of the project's implementation, 80% of the identified refugee health nurses will have participated in the educational session. Together the State Refugee Health Coordinator and the local health department nursing managers and directors identified refugee health nurses to participate in the educational sessions. Once the nurses were identified, a site visit was arranged to interview the nurses. The interview included an overview of their current practices, resources, clinic areas, and what topics the nurses would like to see presented in the educational session. The nurses

were also provided with a brief overview of the project and the purpose of the educational session. The site visit provided an opportunity to develop a trusting relationship with possible participants as they provided insight into the practices that are currently working well for them and areas that they identified as needing improvement when conducting the initial refugee health assessment.

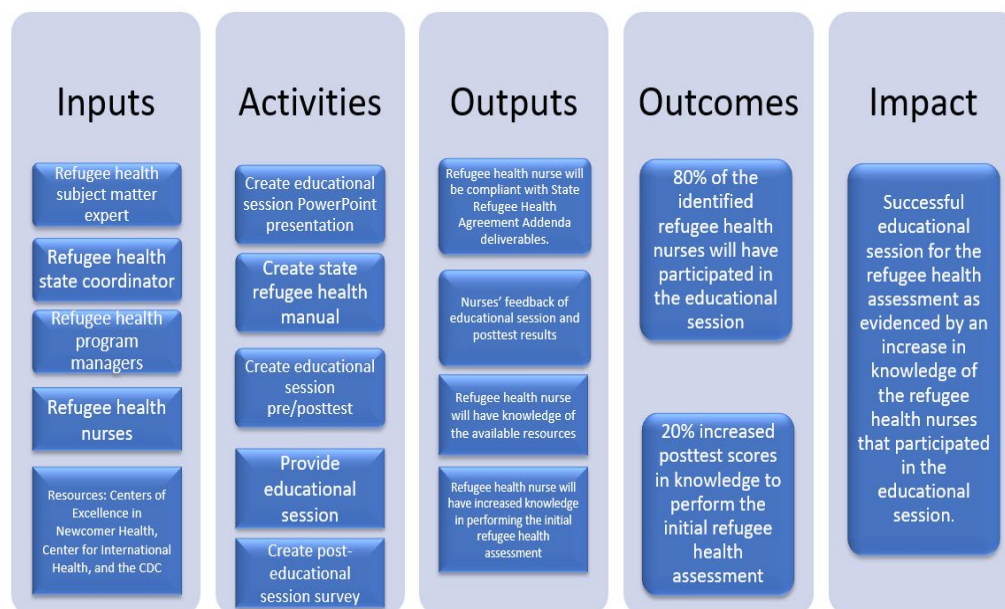
The second objective of the educational intervention was to evaluate the knowledge of the identified nurses and increase their knowledge by at least 20%. The educational session included a lecture guided by a PowerPoint presentation created in Canva, discussions, a pre-and post-test, and a post-educational survey. Throughout the lecture, there were “Tip” points. The “Tip” points allowed an opportunity to review and discuss a resource or application to assist with conducting the initial refugee health assessment and providing health education to the refugees. The lecture and presentation also included a review of the newly developed North Carolina Refugee Health Technical Guidance Manual. Canva Pro was purchased for the development of the project. Portions of the manual were created in Canva Pro and Microsoft Word. Several forms, and documents from the North Carolina Department of Health and Human Services were included as attachments in the manual. All sections of the manual were combined in one PDF for printing and online access for the State Refugee Health Program.

Participants completed a pretest and a posttest of questions (Appendix A) regarding the initial refugee health assessment. The questions for the pretest and the posttest were the same, and the scores were compared to see if there was knowledge gained after the educational session was completed. The test included questions regarding various tasks and resources needed in conducting the initial refugee health assessment. The questions included multiple choice, true and false, as well as fill-in-the-blank questions. Question content was validated by using information from the CDC’s website. The validity of each question was determined by the

DNP Project Leader and DNP project faculty chair. During the introduction of the educational session, the participants were provided with an overview of the content to be presented, along with the objectives of the educational session. Prior to the formal educational session, the pre-test was administered. After the educational content had been presented, the post-test was administered to the participants immediately following the session. The pre-and post-tests contain identical questions. The test was scored, and the results were assessed to determine if the knowledge of the participants had increased.

The post-educational survey (Appendix B) was used to determine if the objections of the educational session were met. The survey also assessed if the participants planned to use the resources presented during the educational session, along with what presented resources that they felt were most useful. The pre-test, post-test, and post-educational sessions were completed using paper-based tests and surveys during the educational session. This format eliminated the need for participants to have access to a technological device during the session.

A logic model illustrates the relationship between the activities and the evaluation (Figure 4). The inputs of the educational session included the available resources, such as a refugee health coordinator and manager, nurses, and subject matter experts, along with the resources available at the Centers of Excellence in Newcomer Health. These inputs helped develop educational content to provide an overview of the initial refugee health assessment and equip less experienced refugee health nurses in NC with useful resources to support their practice. One of the deliverables stated in the State Refugee Health Agreement Addendum is identifying communicable diseases. By identifying communicable diseases, refugee health nurses can help prevent the spread of diseases throughout the community.

Figure 4*Logic Model***Project Implementation**

The educational session for the Initial Refugee Health Assessment received Quality Improvement (QI) and Institutional Review Board (IRB) approval from the Hunt School of Nursing at Gardner-Webb University on March 7, 2024. The North Carolina Refugee Health Program did not require QI/IRB approval, but they did review the presentation and gave their approval. The State Refugee Health Coordinator oversaw the approval process.

Before the project implementation, the Project Partner and both practice sites were notified that the application for QI/IRB had been submitted. The practice sites were given a timeframe to provide options for the in-person educational session. The project implementation was task #12 and was supposed to begin on 3/25/2024. However, the project was implemented ahead of schedule on 3/7/2024.

Threats and Barriers

The implementation of the DNP faced some anticipated threats and barriers. These included obtaining approval from the current employer for educational time-off, providing educational sessions at two health departments, staffing changes, and local health department leadership challenges. Additionally, building the State Refugee Health Program Website has proven difficult.

The two practice sites experienced staffing challenges over the past year. Maintaining constant and consistent communication was vital to ensure that the participating practice sites remained engaged and did not withdraw their agreement to participate in the educational sessions. However, staff changes did create a challenge, as each new staff member needed to be educated on the project's purpose, objectives, format, and what was previously stated, as well as what the project was and was not. Moreover, there was an issue with the leadership's decision to shorten the anticipated time of the educational session at one practice site and send a meeting planner to participants. This also required educating the leader on the importance of having sufficient time, as initially stated, to present the material and the need for all participants to register through Qualtrics.

One of the hurdles that was expected to arise was the creation of the State Refugee Program Website. Collaborating with state government programs can be challenging. Often, to complete a task, you need to seek the permission of multiple individuals to implement a process. The Practice Partner had been provided with the necessary information for the items that need to be included on the webpage. In the future, the Project Leader and the Practice Partner plan to meet with the State's webmaster to discuss the development of the webpage.

Monitoring of Implementation

The implementation process was closely monitored through regular communication with the Practice Partner and Practice Site representatives. Invitations for participation were sent to the Practice Site leaders, along with instructions that included a link to the Qualtrics registration. If there were any issues with the embedded link in the educational session flyer, the registration could be completed through a provided link. The educational sessions were scheduled and completed on Friday, April 26th, 2024, from 12:30 pm to 3:30 pm in Alamance County, and on Tuesday, April 30th, 2024, from 9:00 am to 1:00 pm. One week prior to the educational session, a reminder email was sent to the Practice Site leaders.

After the completion of educational sessions, the pre-and post-tests will be reviewed to determine the effectiveness of the education provided. Task #13, which involves data collection and analysis, was originally scheduled to begin on 4/29/2024. However, due to the scheduled time for the educational sessions, this task was delayed by one day. The project was successfully carried out without encountering any additional threats or obstacles. The DNP Project Leader managed to maintain and collect the necessary information without any issues.

Interpretation of Data

Data was initially collected by having each prospective participant register through Qualtrics. Sixteen participants registered to participate in the educational sessions. Data was also collected from paper pre-and post-tests and a post-educational survey. Paper was used to eliminate the need for participants to have a technological device with them during the educational session. The information from the pre-post-test was entered into Excel, and a data analysis tool kit was used to analyze the data.

Qualtrics was used to collect demographic information on each participant. Information was gathered regarding education level, years of experience as a public health nurse, and which

health department they were currently employed at. Each participant was also asked to rate their comfort level conducting the initial refugee health assessment and how many initial refugee health assessments they typically complete monthly. Initially, 16 participants enrolled through the Qualtrics link. The Practice Partner was removed from the enrollment, as the Practice Partner enrolled in error, leaving the final total of 15 participants enrolled to participate in the educational session.

The data analysis tool kit in Excel was used to analyze the pre-and post-test and post-educational session surveys. The pre-and post-test scores were entered into Excel, and two samples for mean t-tests were run to evaluate if knowledge was gained as a result of the educational session. The post-educational survey was also evaluated in Excel. First, the initial 5 questions were placed on an Excel spreadsheet to evaluate the responses of the items of the questions with a Likert scale of 1-5. The items were scored as 1- strongly agree, 2-agree, 3-neutral, 4- disagree, and 5-strongly disagree. The percentage of the responses was calculated using Excel. Then, each of the remaining 5 questions was evaluated for themes. The themes were coded and evaluated for frequency and percentage in Excel.

Quantitative Data

Qualtrics was used to register participants for the educational session. The information collected included the highest level of school completed (Figure 5), how long the nurse has been employed as a public health nurse (Figure 6), and which public health department they were currently employed at (Figure 7). The information collected also included an assessment of their current comfort level with completing the initial refugee health assessment (Figure 8) and the number of refugee health assessments that they complete monthly (Figure 9).

The nurses' education levels ranged from a 2-year degree to graduate level. The length of employment as a public health nurse ranged from less than 12 months to more than 6 years.

There was an equal distribution of nurses of seven each who stated that they worked at Alamance and New Hanover County; however, one participant stated that they worked at another and did not specify the location.

Figure 5

Highest Level of School Completed

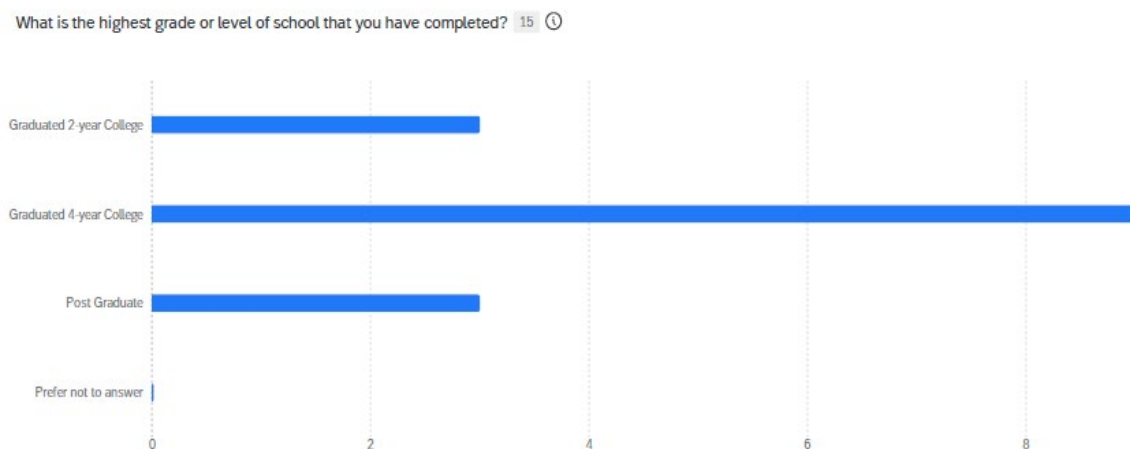


Figure 6

Length of Time Employed as a Public Health Nurse

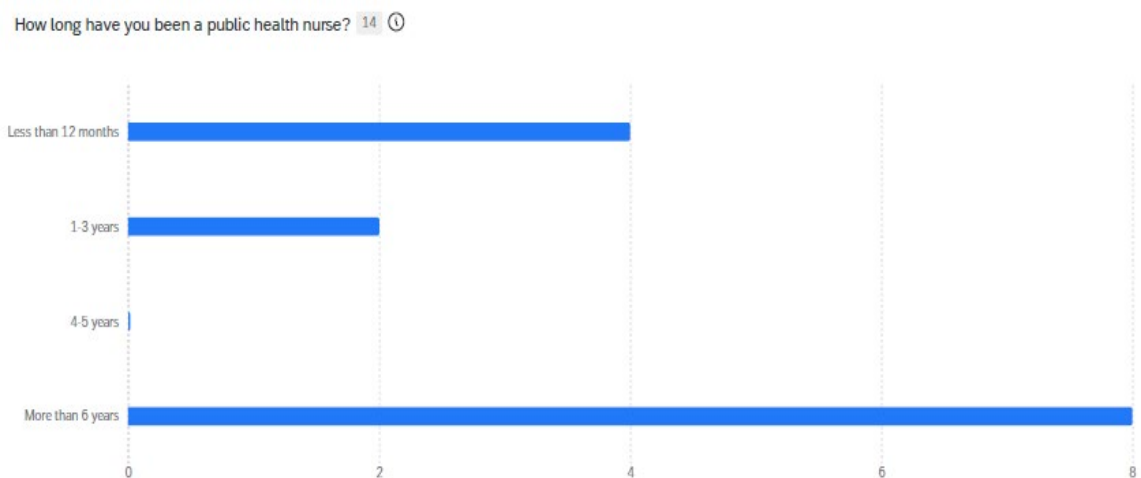


Figure 7*Current Health Department Employed*

The nurses' comfort levels and the number of initial refugee health assessments they completed varied. They rated their comfort level completing the initial refugee health assessment from not comfortable to very comfortable. The nurses stated they completed anywhere from 1-10 to 20-30 initial refugee health assessments per month.

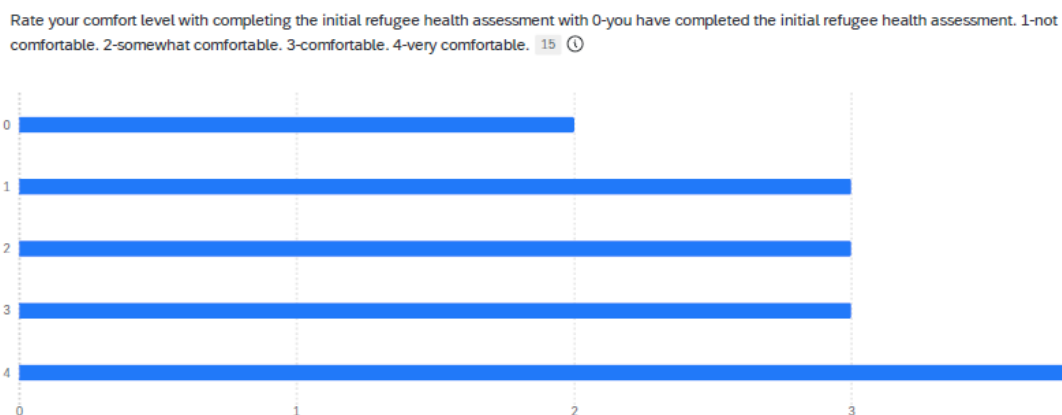
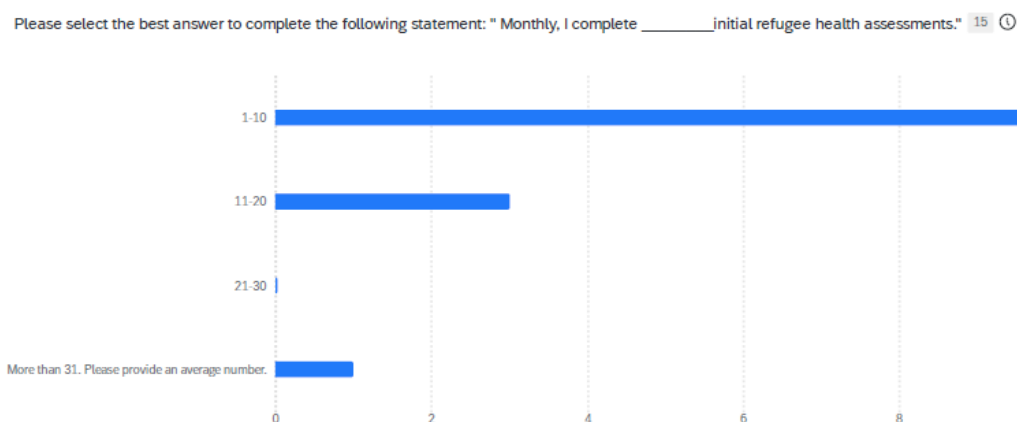
Figure 8*Comfort Level*

Figure 9*Refugee Health Assessments*

Fifteen nurses completed the enrollment survey to participate in the educational session, but only 14 did so. Attendance was not taken at the educational sessions. All participants were given a random number from 1 to 40. Pre-tests and post-tests were grouped by the assigned participant number. One nurse arrived after the session had begun and did not complete a pre-test; three nurses did not complete the entire pre-test. Ten nurses completed both the pre-test and the post-test and this paired data was utilized for the analysis.

This project utilized a paired t-test to compare the pre-test results to the post-test results. Using a paired t-test assisted in eliminating variation between the pretest and posttest scores that could be caused by anything other than an increase in knowledge. The data was reviewed, and missing data and unmatched pairs were removed from the data on a listwise basis. An alpha of 0.05 was used for the t-test calculations and one-tailed p values were calculated using Excel to determine statistical significance.

The test had an average pre-education score of 42.03 and an average post-education score of 68.38. This resulted in a 63% increase in knowledge of initial refugee health assessment after the educational intervention (Figure 10). A paired-sample t-test was conducted to compare

pre-survey and post-survey scores. There was a statistically significant difference between pre-survey scores ($M = 42.03$, $SD = 13.79$) and post-survey scores ($M = 68.38$, $SD = 15.95$); $t(9) = -5.10$, $p < .000$ (Figure 11).

Figure 10

Pre- and Post-Educational Session Average

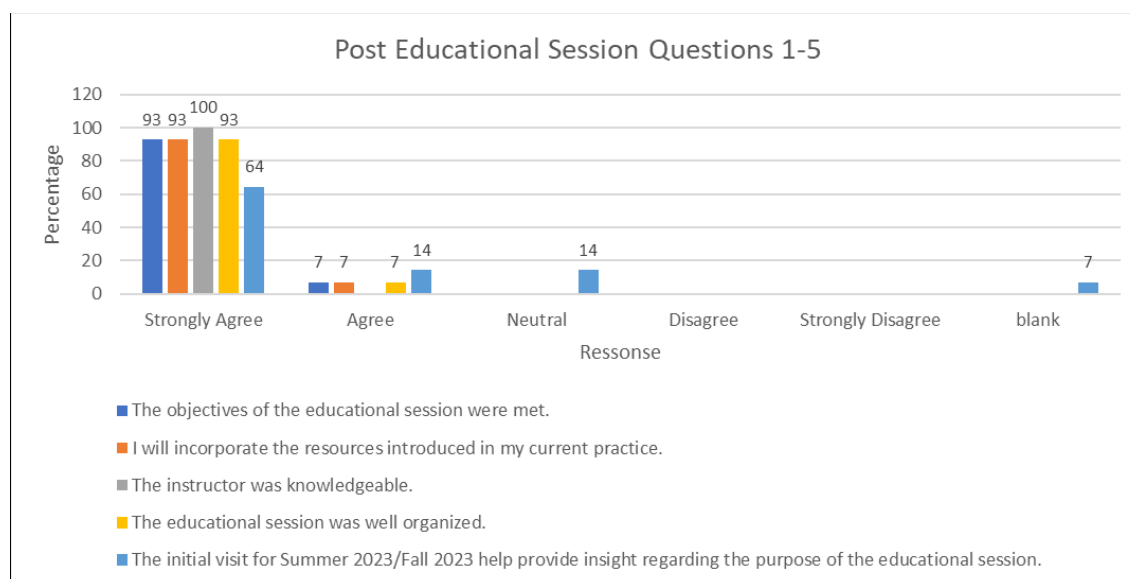
Percent Change	
Knowledge	
Pre-test average	42.03
Post-test average	68.38
Percent Change	63

Figure 11

Initial Refugee Health Assessment Knowledge

t-Test: Paired Two Sample for Means		
	<i>Pretest</i>	<i>Posttest</i>
Mean	42	68.375
SD	13.79	15.95
Pearson Correlation	0.404620501	
df	9	
t Stat	-5.10	
P(T<=t) one-tail	0.0003207420	

The participants were asked to complete a post-educational session survey. The first five questions were on a Likert scale ranging from 1-5, with one meaning strongly agree and five meaning strongly disagree. Overall, 100% of the participants felt that the instructor was knowledgeable. Of the participants, 93% strongly agreed, and 7% agreed that the objectives of the educational session were met, that they would incorporate the resources introduced into their current practice, and that the educational session was well organized. Regarding the initial visit in Summer 2023/Fall 2023 providing insight and purpose of the educational session 64% strongly agreed, 14% agreed, and 7% left this question blank (Figure 12).

Figure 12*Post Educational Session Questions 1-5***Qualitative Data**

The remaining post-educational questions were fill-in-the-blank (Figure 13-17). These questions were evaluated for themes and then analyzed in Excel for frequency and percentages of the responses.

According to the post-educational, when asked what they would do differently, 43% said they would utilize the resources, 7% said they would update their policy and procedures, and 50% said they would apply the recommendations to current practice (Figure 13). When asked what the participants liked most, 36% said they liked the technical guidance manual, 29% said the resources, 21% said they liked the collaboration, and 14% left this question blank (Figure 14). The tenth question asked for additional comments, in which 38% expressed their gratitude for the session, 15% offered a statement of praise, and the remainder of the participants left this question blank (Figure 15).

When asked what they liked least about the educational session, 57% said “Nothing, it was all good”, 14% said the length of time and sitting, another 14% left this question blank, 7%

said the content of the slides, and final 7% said that they had missed content (Figure 16). Finally, when the participants were asked which resource they felt would be most beneficial to their nursing practice, 50% said the technical guidance manual, 36% said the Tips such as Google Translate and SettleIn, 7% said the websites and the final 7% said all of them (Figure 17).

Figure 13

Post-Survey: What to do Differently?

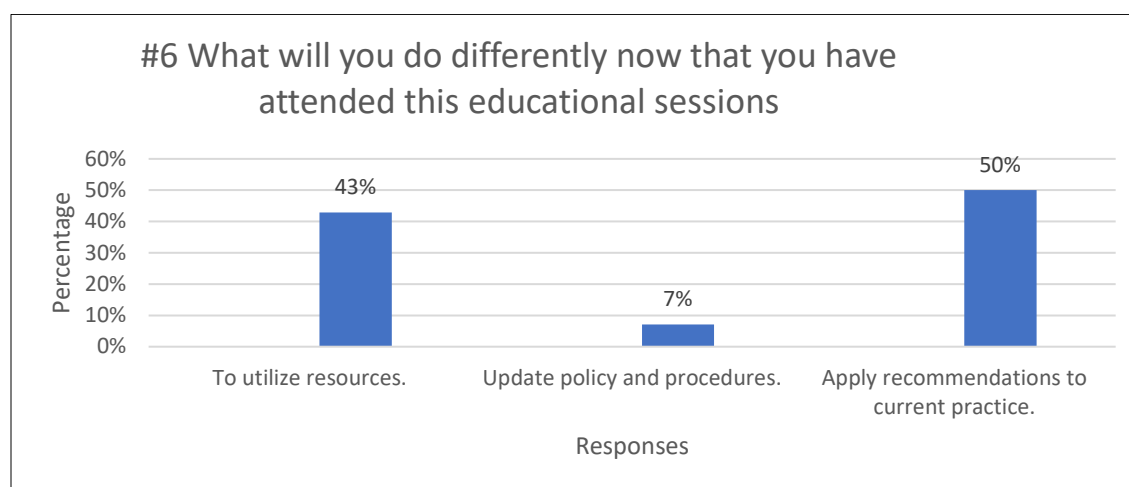


Figure 14

Post-Survey: What was Liked Most?

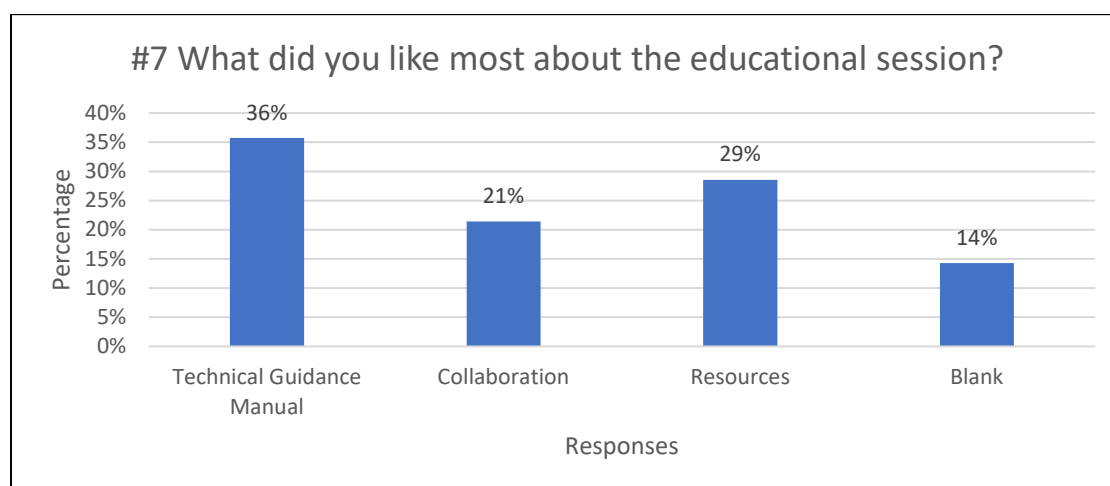


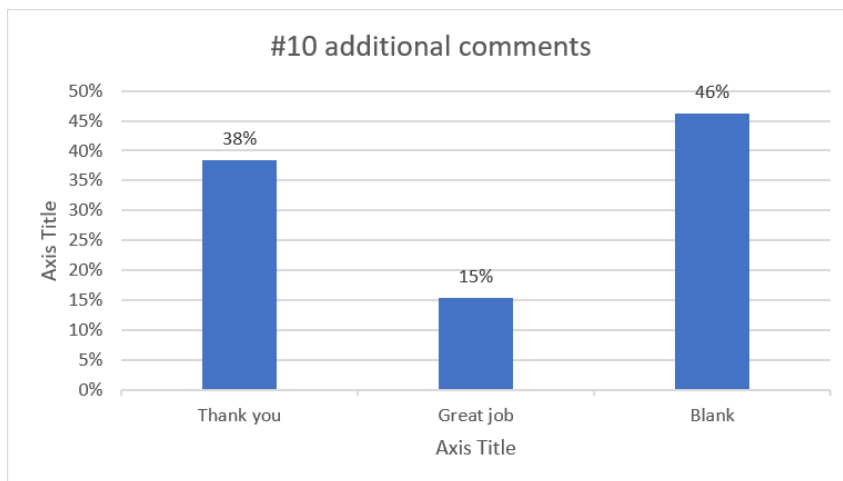
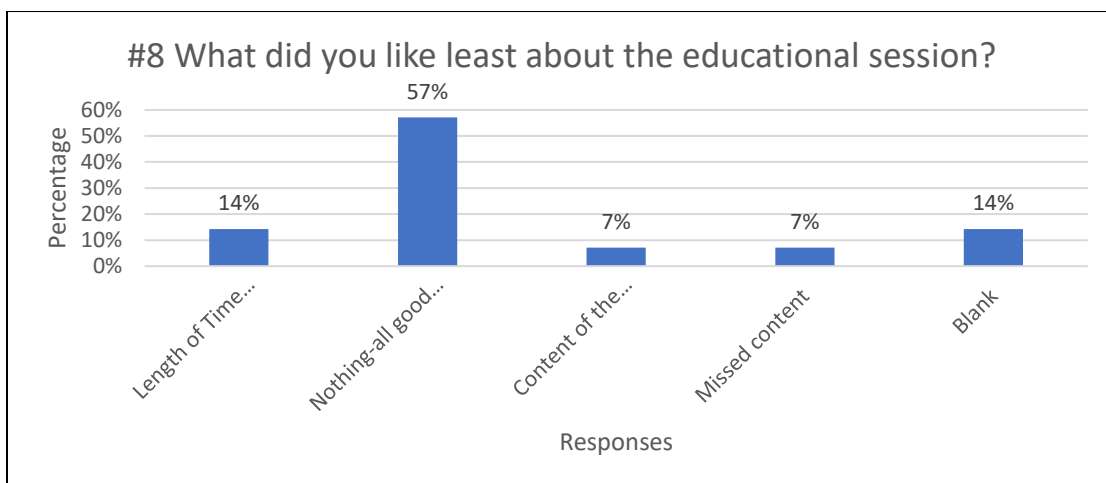
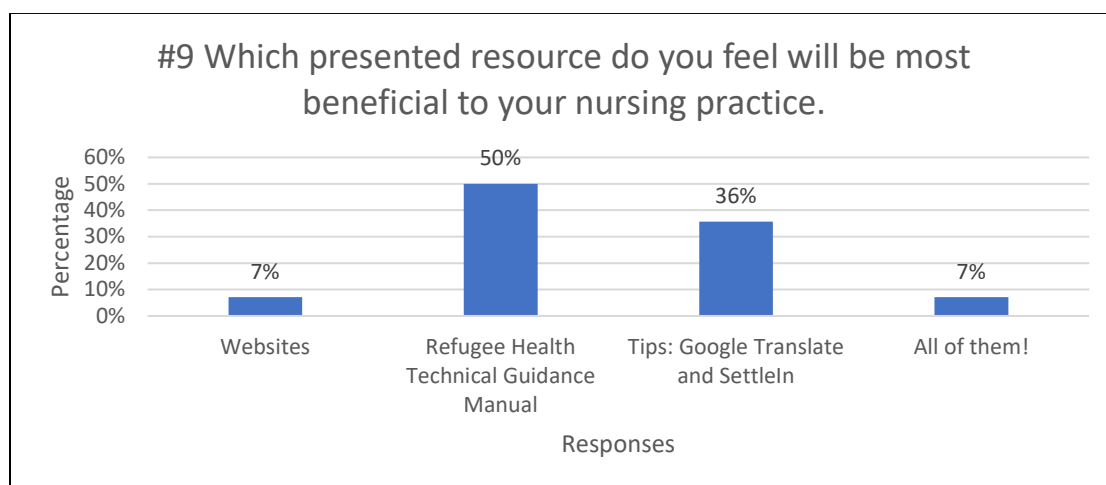
Figure 15*Post-Survey: Additional Comments***Figure 16***Post-Survey: What was Liked Least?*

Figure 17*Post-Survey: Beneficial Resources***Process Improvement Data**

The local health department's leadership and point of contact were pivotal in ensuring that the identified nurses participated in the educational session. Initially, two nurses were identified in Alamance County and one in New Hanover County. One of the original nurses at Alamance County had left employment before the educational session began. Initially, three nurses were identified to participate in the educational session. In total, 14 nurses participated in the educational session, which exceeded the project objective of 80% participation. Post-test scores for all participants and those who completed both the pre-and post-test increased by 30.3% and 26.4%, respectively. The objectives of education to increase knowledge by 20% were met. Initially, each health department identified two nurses to participate in the educational sessions. On the day of the educational session there, seven nurses participated in each session. The participants gained knowledge as evidenced by the increase in their post-test scores.

As a result of this project, there has been an increase in knowledge about completing the initial refugee health assessment and available resources for those conducting the assessment. Nurses in Alamance County and New Hanover County have been equipped with an

informative, educational tool, an introduction to the North Carolina Refugee Health Technical Guidance manual, and multiple tips and resources to enhance their work in their respective countries. The initial impact of the educational session was stated in the post-educational session survey. The nurses agreed that they were more knowledgeable after the session and had plans to utilize the tips and resources provided during the educational session.

Currently, the State Health Department reviews the test results of those who are diagnosed with communicable diseases. More research is needed to identify if there is a greater percentage of newcomers who are diagnosed with communicable diseases. However, there may be barriers to consistent data. Refugees migrate from different areas and have stayed in different living conditions. Therefore, they are at high risk for different diseases.

This project will be sustained by applying for continuing education units (CEUs) and providing educational sessions throughout North Carolina. Plans include developing a webpage for the North Carolina Refugee Health Program. This webpage will house the North Carolina Refugee Health Technical Guidance and contact information for various key individuals and resources. Given the availability of the North Carolina Technical Guidance manual, a survey of current nursing knowledge would be greater than that of nurses who participated in the education without knowledge of basic refugee education and available resources.

As the number of refugee arrivals increases and the number of nurses who retire and leave the nursing field continues to rise, knowledgeable nurses will need to conduct the initial refugee health assessment. The initial refugee health assessment is an opportunity to identify communicable diseases, in turn preventing the spread of communicable diseases. The educational session for the initial refugee health assessment provided an opportunity for the identified refugee health nurses to increase their knowledge of the process by providing a formal introduction to the guidelines and resources. The results of the successful educational

sessions revealed that there was an increase in knowledge of the nurses who participated. The nurses who participated also planned to utilize at least one of the resources presented. There is room for the revision of the educational to decrease the length of the educational session and to possibly distribute follow-up surveys 90 days after the session to evaluate which resources the nurses are utilizing and suggestions for future educational sessions.

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Appendix A

Pre and Post-Test Questions

Each question is worth 5 points for a total combined score of 90 points. Questions with multiple correct answers will receive partial credit for each correct answer.

- 1 Refugees are individuals who are not able to return to their home countries due to a well-founded fear of persecution. Please list four reasons why a refugee would have a well-founded fear of returning to their country.

- 1
- 2
- 3
- 4

Answer:

1. Race
2. Religion
3. Nationality
4. Political Opinion
5. Membership in a particular group

<https://www.cdc.gov/immigrantrefugeehealth/about-irmh.html>

- 2 All US-bound refugees undergo a required medical screening examination with a panel physician before departure. When is this examination usually conducted?

- 1 1 week
- 2 2-4 weeks
- 3 3-6 months
- 4 7-9 months

Answer:

3. 3-6 months

<https://wwwnc.cdc.gov/travel/yellowbook/2024/posttravel-evaluation/newly-arrived-immigrants-refugees-and-other-migrants#:~:text=The%20Pretravel%20Health%20Assessment>

- 3 Which term describes an individual admitted to the US or other country as a lawful permanent resident?

- 1 Immigrant
- 2 Migrant
- 3 Refugee

Answer:

- 1-immigrant

<https://www.cdc.gov/immigrantrefugeehealth/about-irmh.html>

- 4 An individual outside of the country of their nationality, is outside of the country where they last lived and is not able or willing to return for fear of persecution.

- 1 Immigrant
- 2 Migrant
- 3 Refugee

Answer:

3-refugee

<https://www.cdc.gov/immigrantrefugeehealth/about-irmh.html>

- 5 Which term describes the following: An individual who moves away from their usual residence. The move may be temporary or permanent, with a country or across an international border. This is an umbrella term.

- 1 Immigrant
- 2 Migrant
- 3 Refugee

Answer:

2-Migrant

<https://www.cdc.gov/immigrantrefugeehealth/about-irmh.html>

- 6 Most refugees resettled to the United States are referred by

- 1 USIAC
- 2 UNHCR
- 3 CDC
- 4 Local resettlement agencies

Answer:

2-UNHR- United Nations High Commissioner for Refugees

<https://www.cdc.gov/immigrantrefugeehealth/about-irmh.html>

- 7 The overseas medical screening examination is a comprehensive medical exam.

- 1 True
- 2 False

Answer:

2-false- The overseas medical exam is to identify the presence or absence of certain disorders that would result in exclusion from entry to the US

<https://www.cdc.gov/immigrantrefugeehealth/panel-physicians/medical-history-physical-exam.html>

- 8 This is a comprehensive medical exam that screens for a wide range of infectious diseases and non-communicable diseases.

- 1 Domestic Medical Screening
- 2 Overseas Medical Examination
- 3 1 and 2
- 4 Neither of the above

Answer:

1- Domestic Medical screening

<https://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/screening-guidance.html>

- 9 Provide another name for the domestic refugee health assessment.

Answer: Domestic refugee screening examination or the initial refugee health assessment

- 10 Select all that apply. The initial refugee health screening:
- 1 Can help refugees develop a sense of trust in the US healthcare system and healthcare providers.
 - 2 Is an opportunity to introduce the importance of preventative medicine and routine physical exams.
 - 3 Is an opportunity to discuss when and how to access emergency medical care.
 - 4 Is a valuable tool to identify health issues, well and well-being.
 - 5 Is an opportunity to connect new arrivals with routine and specialty health healthcare providers for continuum of care.

Answer: All are correct.

<https://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/screening-guidance.html>

- 11 Blood lead level testing should be conducted in pregnant and lactating women and adolescent girls found to be at exposure for lead exposure.

- 1 True
- 2 False

Answer: True

<https://www.cdc.gov/immigrantrefugeehealth/guidelines/lead-guidelines.html>

- 12 Excludable medical conditions for entry to the US on the overseas medical examination include. Select all that apply.

- 1 Infectious tuberculosis (TB)
- 2 Syphilis
- 3 Hansen's Disease
- 4 Pneumonia
- 5 Diabetes mellitus

Answer: All of the above. Individuals can get a medical waiver to be admitted

<https://www.cdc.gov/immigrantrefugeehealth/healthy-migration.html>

- 13 Refugees with certain communicable diseases are denied entry to the US. In addition to these diseases, they could be denied entry if they have a quarantinable communicable disease designated by Presidential Executive Order. Please name four of these diseases.

- 1
- 2
- 3
- 4

Answer: Cholera, diphtheria, infectious tuberculosis, measles, plague, smallpox, yellow fever, viral hemorrhagic fevers (such as Ebola, Lassa, Marburg), severe acute respiratory syndromes (COVID-19, SARS, Middle East respiratory syndrome), and influenza caused by novel or re-emergent influenza (pandemic flu).

https://www.cdc.gov/immigrantrefugeehealth/healthy-migration.html#communicable_diseases

- 14 For children aged 2-14 years of age, is it recommended to repeat an IGRA that was negative but performed ≥ 6 months prior to the domestic examination?

1 yes
2 no

Answer: It is recommended to repeat the IGRA of a child 2-14 years of age that had a neg test performed ≥ 6 months prior to the domestic exam.

<https://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/tuberculosis-guidelines.html>

- 15 All refugees must undergo an overseas evaluation for TB.

1 True
2 False

Answer: False.

All refugee applicants aged ≥ 2 years of age must undergo an overseas Tb evaluation.

<https://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/tuberculosis-guidelines.html>

- 16 Refugees are tested for HIV prior to arrival to the US

1 True
2 False

Answer: Refugees are longer tested for HIV-infection prior to arrival, since 1/4/2010

<https://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/screening-hiv-infection-domestic.html>

- 17 Which statement regarding hepatitis C screening is not correct?

1 Universal Hepatitis C screening should be implemented for all new arrivals.
2 It is recommended for all pregnant women.
3 It is recommended for children with risk factors.
4 Children born to HCV-positive mothers should be tested.

Answer: 1. Universal hepatitis C screening should be implemented for all new arrivals ≥ 18 years of age

<https://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/hepatitis-screening-guidelines.html>

- 18 Which statements for US-bound refugees are correct.

1 Refugees bound for the US are not required to receive vaccination prior to arrival in the US
2 At the first domestic exam all available vaccine records should be reviewed.
3 Vaccine doses administered overseas should be accepted as valid.
4 At the first domestic visit it is recommended that clinician perform any testing, and update or revaccinate, as needed.

Answer: All are correct

<https://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/immunizations-guidelines.html>

Appendix B**Post Educational Session Survey**

1-strongly agree 2-agree 3-neutral 4-disagree 5-strongly disagree

- | | | |
|-------|----|---|
| _____ | 1 | The objectives of the educational sessions were met. |
| _____ | 2 | I will incorporate the resources introduced in my current practice. |
| _____ | 3 | The instructor was knowledgeable. |
| _____ | 4 | The educational session was well organized. |
| _____ | 5 | The initial visit Summer 2023/Fall 2023 helped to provide insight regarding the purpose of the educational session. |
| _____ | 6 | What will you do differently now that you have attended this educational session? |
| | 7 | _____ |
| | 8 | _____ |
| | 9 | Which presented resource do you feel will be most beneficial to your nursing practice? |
| | 10 | Additional Comments: _____ |