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Editorial

Letter from the Editor-in-Chief: Journal of Refugee & Global Health Volume 1 Issue 2

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Editor-in-Chief

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We are pleased to continue our efforts to support shared learning on issues impacting refugee health and health issues as they are relevant to our global society. Clearly, 2017 was a year where many challenges and changes occurred in how care could be provided for the newly arriving refugees resettling in the United States and around the world. Although these numbers decreased, their complexity continued and care was often provided without the resources that had become the foundation for the federal resettlement program in communities across the US. This issue of the *Journal* will highlight a variety of approaches and new discoveries of value for communities, healthcare providers, and support services as they continue to provide assistance for refugees as they resettle.

Professor Enid Trucios-Haynes, an attorney and professor in the Brandeis School of Law, provides The Brandeis Human Rights Advocacy Program: Advancing the Human Rights of the Immigrant, Noncitizen and Refugee Community in Louisville, Kentucky. Professor Trucios-Haynes is a recognized scholar and champion for refugees, immigrants, and the undocumented and the human rights struggles they face. In her work, she describes the human rights and advocacy program she and her team initiated at the Brandeis School of Law and provides it as a model for other communities as they seek to develop a community-engaged and supported program. The program review provides a complete "how to" approach for other communities while, at the same time, providing excellent background into the socioeconomic realities that exist within the refugee populations as they resettle. The article is full of live links to other documents and videos and is a testament to the importance of having a multimedia component to this Journal.

Dr. Najah Zaaeed and colleagues provided insight into Jordanian refugees and attitudes toward those with developmental disabilities. Their results provide a glimpse into the knowledge, attitudes, and perceptions that exist within the Jordanian society and how that may influence refugees arriving for resettlement into new communities. Their work will be an important resource for program concept, development and evaluation.

Duckles and her colleagues from the University of Pennsylvania sharing their findings regarding female refugees and gender-related issues that are important for those providing care. In their comprehensive guide, they address a spectrum of considerations including specific women's health issues and mental health concerns that have been identified in the literature among resettling refugees. In addition to the information, they provide a tool that may be useful in ensuring a consistent and complete evaluation as part of the initial refugee health assessment.

In their review of nutrition and diet during pregnancy among Syrian refugees, Harb, Yazbeck and Haidar described their work investigating the knowledge, attitudes and practices among newly delivered Syrian refugees. Their findings indicated a continued opportunity to provide culturally tailored and culturally targeted education and intervention addressing the many social determinants that may lead to inadequate nutrition.

In this issue, we elected to include a Letter to the Editor describing Tetanus in an unvaccinated Amish woman. Corcino describes the course of illness, the public health response, and provides some guidance for healthcare providers as they work with unvaccinated, or under-vaccinated, populations. As we continue to address immunization across all populations, this case is a reminder that vaccine-preventable diseases remain a constant threat to communities across the world. Addressing an anti-vaccination stance can be further complicated by existing cultural nuances.

Lastly, in our ongoing commitment to a multimedia approach, we provide a presentation describing a novel approach to refugee community outreach. The presentation describes use of 'Global Health Navigators' as a link between in-clinic and in-community care approaches.

We look forward to receiving submissions for the next 2018 issue as we continue to develop and nurture this community of learners.

Journal of Refugee & Global Health

Letter to the Editor

Tetanus in an Unvaccinated Amish Woman After a Breech Home Delivery in Kentucky, 2016

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Dear Editor,

In July 2016, an Amish 30-year-old woman with no previous history of vaccinations presented to a local community hospital with a 48-hour history of tingling of her jaw that progressed to trismus, eye pain, neck stiffness, dysphagia, and opisthotonos. Ten days before her hospital presentation, she underwent a breech delivery at home on a farm in rural Kentucky.

Tetanus was suspected at an outlying hospital where a partial dose of tetanus immune globulin and penicillin G were administered prior to her transfer to a tertiary care hospital. Her vital signs were normal. The patient was conscious, lying on her side with her neck arched back, jaw clenched. Because of laryngospasm and to prevent respiratory failure, the patient required intubation and mechanical ventilation. She continued to experience upper extremity contractures in response to any external stimuli; proximal greater than distal. She also experienced intermittent episodes of stiffening followed by tonic-clonic motion of her extremities. Initial laboratory values were within normal limits except for an elevated creatinine phosphokinase (CPK) of 2,352 IU/L (**Figure 1**).

To eliminate ongoing potential source of infection from the uterus, dilation and suction curettage was performed, with limited products of conception removed and specimens sent for Gram stain, culture, and pathology evaluation. Considering the patient's history of an absence of tetanus vaccination, muscle spasms, and increased CPK, the diagnosis was narrowed exclusively to tetanus, and broad-spectrum therapy was de-escalated to metronidazole. In addition, the remaining dose of immune globulin was administered intramuscularly to complete a total dose of 6000 IU. Active vaccination with tetanus and diphtheria vaccine was provided. The Gram stain from the uterine sample revealed no organisms, the culture was negative, and pathology reported severe acute inflammation and necrosis. One week after hospitalization, she developed diaphoresis and severe upper extremity contractures provoked with minimal external stimuli and other complications (**Figure 1**). She was eventually discharged home in stable condition after a 41-day hospitalization. A public health response was initiated by the state and local health departments to prevent additional cases through vaccination (Yaffee *et al.*, 2017).

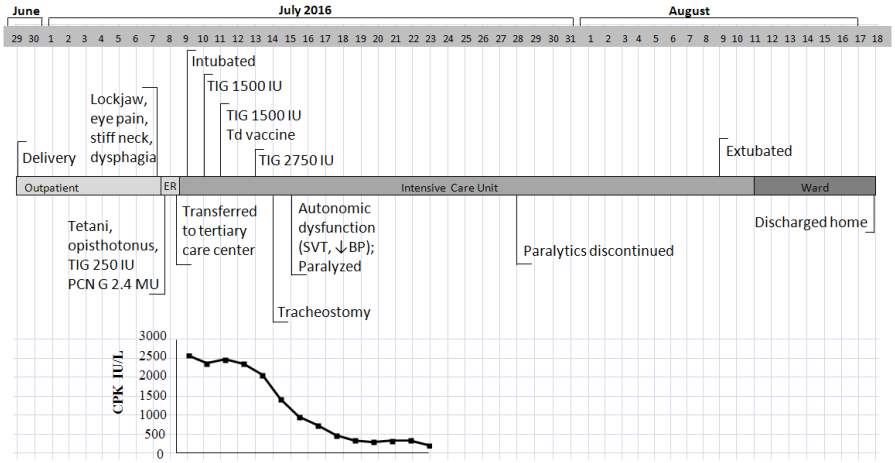

Figure 1 Sequential disease progression and increasing creatinine kinase coinciding with treatment of tetanus.
CPK = Creatine phosphokinase; PCN = penicillin; SVT = supraventricular tachycardia; TIG = tetanus immune globulin.

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Clostridium tetani, a Gram-positive ubiquitous bacillus, can survive as a spore for extended periods in soil and adverse conditions, and cause disease when spores enter the body through skin/mucosal breaks. It is difficult to culture because of sensitivity to oxygen; therefore, the diagnosis is clinical (Murray, Rosenthal, and Pfaller, 2017). Muscle rigidity and spasm (e.g., trismus and opisthotonos) are the pathognomonic hallmarks for generalized tetanus and can rapidly progress to severe muscular spasm, respiratory failure, and autonomic dysfunction.

Treatment is to remove the infection source and reduce toxin production (Roper *et al*., 2012), while administering immune globulin as soon as possible. Supportive care also plays a crucial role. Metronidazole is the first choice for antibiotic or penicillin as an alternative (Roper *et al*., 2012). Paralytics are often used to alleviate the spasms (Dutta, Das, Sethuraman, and Swaminathan, 2006). Botulinum toxin has also been used for this purpose (Hassel, 2013). Tetanus is uncommon in the US with <50 reported cases each year. Physicians should have a heightened suspicion of tetanus when dealing with unvaccinated populations who may have had labor trauma.

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Journal of Refugee & Global Health

Program Review

The Brandeis Human Rights Advocacy Program: Advancing the Human Rights of the Immigrant, Noncitizen and Refugee Community in Louisville, Kentucky

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Introduction

The Human Rights Advocacy Program (HRAP or the Program) at the Brandeis School of Law, University of Louisville, represents a unique collaboration of law faculty and students providing critical resources to the local immigrant, noncitizen and refugee community in Louisville, Kentucky, as well as local service providers to this community. The Program, established in Spring 2014, is distinctive because of its non-hierarchical internal model and the participatory action research and policy focus of its work. The Program is a distinguished from the typical law school clinical model in its focus on community engaged research, policy advocacy, and service, as well as its innovative funding and institutional support.

The Program began with a Louisville Bar Foundation grant and was transformed by institutional support in the form of admissions-based student fellowships, public service graduation requirements providing the opportunity for wider student involvement, and related public service placement opportunities for students. Currently, the Program operates with direct law school funding and law school admissions scholarships competitively granted to qualifying students. The competitive selection criteria focus on student interest, experience, and capacity for human rights advocacy work. HRAP supports law students in their development as human rights advocates, researchers, and leaders. The Program offers students the opportunity to pursue their own interests in this field, gain subject matter expertise, and become leaders on projects that have a meaningful social justice impact in the local community.

In Louisville, the Program directly advances the human rights interests of the local immigrant, noncitizen and refugee community[1] and supports the work of local service providers. The policy work of the Program addresses those areas where there is a gap in services provided to the local community and expands the capacity of local service providers to identify and meet the needs of the local community. HRAP's participatory action research projects address language access, educational access, the implications of media and other rhetoric on policy, and cultural competency. In collaboration with the local community, the Program has assessed community needs, conducted policy research, linked community and providers, created a critical community resource guide, and hosted annual community roundtables and other educational events. The Program has achieved these outcomes by leveraging law school and University resources. The result is an inclusive and collaborative partnership between local service providers, local community, and the law school focused on identifying human rights needs and potential policy and action solutions.

HRAP's work furthering the human rights of the local Louisville immigrant, noncitizen and refugee community received an exemplary distinction award from the 2017 W.K. Kellogg Foundation Community Engagement Scholarship Awards. HRAP was selected as University of Louisville's nominee for the C. Peter Magrath Community Engagement Scholarship Award. The award recognizes programs that demonstrate how colleges and universities have redesigned their learning, discovery, and engagement missions to become even more involved with their communities. HRAP was selected by the Kellogg Foundation and Magrath Award committee as an "exemplary designee" for

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[1]As a law school program, the Program strives to use accurate terminology. The term "noncitizen" is often used by immigration lawyers to avoid using the pejorative term "alien" which is the term of art of the Immigration and Nationality Act. Noncitizen is an inclusiveness term accounting for the different visa categories including temporary residents (nonimmigrants), permanent residents (immigrants), undocumented or unauthorized individuals (unlawfully present), and humanitarian entrants (refugees, battered spouses, children or parents under the immigration provisions of the Violence Against Women Act, etc.). The Program refers to the "immigrant, noncitizen, and refugee community" to adopt the common terminology. Often the term "New Americans" is used to describe all foreign born individuals which includes those who have become naturalized citizens, as well as their children who may or may not be citizens; for example, at the American Immigration Council. The term "foreign-born" is used by the U.S. Census Bureau to include individuals who are immigrants (permanent residents) and U.S. citizens who were not U.S. citizens at birth and who have completed the naturalization process. See HRAP Final Report: Identifying Opportunities 2015 (discussing appropriate terminology) https://louisville.edu/law/bhrap/our-publications.

the admissions-based fellowships, faculty and student interest, as well as a public service requirement which are used to assemble a community of activists, researchers, and leaders to generate scholarship that responds to the urgent need for legal outreach in the undocumented immigrant community.

Overview of the Brandeis Human Rights Advocacy Program

The Brandeis Human Rights Advocacy Program is a community engaged effort of law students, law faculty, and community members working together to identify persistent issues and urgent needs of the local immigrant, noncitizen and refugee community. HRAP's primary focus is conducting timely research leading to important policy solutions, offering capacity-building support to local community organizations and service providers, and engaging in community outreach and education through topical events, the research-to-action projects, and community clinics.

HRAP's community reflects the intersecting interests of faculty, students, and community members as well as key stakeholders, both within and outside of the University of Louisville whose support is essential to the Program's success. The Program provides funded fellowships for law students to gain subject matter expertise, leadership skills, and experience meaningful community engagement. The mission of the Program is to identify, support, and advocate relating to the human rights needs of the local immigrant, noncitizen and refugee community in Louisville. HRAP fulfills its mission through its participatory action research projects, annual programs, community roundtables, the development of community resources, and community outreach, education, and engagement.

The Program addresses several Louisville community audiences representing a web of interconnected stakeholders. These include: the local immigrant, noncitizen and refugee community; local nonprofit, governmental and other service providers; local lawyers who already work with the community or share this interest; and immigrant rights advocates. The internal community with which the Program engages includes: the University; the law school administration; the funded student fellows; other law student volunteers; and the broader campus community including faculty, staff, and students. The Program organizes regular events to educate, inform, and discuss the status of human rights on the local level. The events prominently feature students, law faculty, and community advocates as subject-matter experts addressing current developments in particular areas of the law. HRAP invites members of the local community, local legal and other service providers, and the general public.

HRAP was conceived by two law faculty, one with significant immigration law and policy expertise and roots in the local community, and was designed to build on an expanding student interest that aligned with University of Louisville and Brandeis School of Law goals. The University of Louisville is a Carnegie Community Engagement University recognizing its unique connection to the Louisville community. In addition, the social justice focus of HRAP's work has appealed to a diverse group of law students and is viewed by the law school administration as an important effort to attract and retain a diverse student body and address the growing student interest in public service careers.

Expanded opportunities for law students interested in immigration law and policy were created over the past two decades at the law school. Law students' opportunities include first-hand experiences with the Louisville immigrant, noncitizen and refugee community. Students interested in immigration law and related human rights issues can participate in:

- Public service placements offered by the law school's Samuel L. Greenebaum Public Service Program to all law students at local nonprofits such as Kentucky Refugee Ministries, Catholic Charities and other organizations working with the local community
- Regular "Know Your Rights" legal orientation presentations at the immigration detention center located within the Boone County Jail, Florence, KY. This legal orientation program is certified by the U.S. Department of Justice, Executive Office of Immigration Review, managed by the U.S. Department of Homeland Security, and coordinated with the National Immigrant Justice Coalition.
- An annual immigration law moot court competition at New York University Law School
- Immigration law externship placements for academic credit with local nonprofit organizations

The initial funding creating HRAP came from a Spring 2014 Louisville Bar Association grant to establish funded student fellowships and from the Assistant Dean of Professional Development at the law school. The Assistant Dean viewed HRAP as a professional development opportunity for the growing number of students interested in human rights, immigration law, and public service careers. One major challenge of this one-year grant was the need for sustained funding. In Spring 2015, the faculty co-directors proposed to the law school administration the creation of admissions scholarships for incoming law students tied to human rights with a focus on immigrant, noncitizen and refugee issues. Targeted admissions fellowships have been successful at other law schools and represented an opportunity to institutionalize the HRAP Program. HRAP has identified a signature partner, La Casita Center, and works with this and other local community organizations and government agencies to offer HRAP fellows a unique opportunity at the law school. In Spring 2015, the dean committed to a three-year pilot funding proposal. In Spring 2018, this funding was continued by the dean.

The Brandeis Human Rights Advocacy Program was founded and co-directed by Professor Enid Trucios-Haynes and Professor Jamie Abrams from Spring 2014 to Spring 2017. The current co-directors include Professor Enid Trucios-Haynes and Professor JoAnne Sweeney. There are twelve student fellows in the Program including the most recent cohort of four student fellows who began in August 2017.

Identifying and Responding to the Needs of the Louisville Immigrant, Noncitizen and Refugee Community

HRAP's initial work involved a comprehensive needs assessment

of the immigrant, refugee, and noncitizen community in Louisville.[2] The needs assessment surveyed local community organizations and service providers about their services and understanding of human rights needs, and outlined how the Program could leverage the University's resources to support the local community. In order to further the participatory action research goals, the preliminary findings were shared with the local community and service providers in Spring 2015 to prioritize HRAP's work and identify next steps.

HRAP's initial research identified some important opportunities to support the local community. First, we realized there was a lack of comprehensive understanding about the very diverse local immigrant, noncitizen and refugee community in Louisville.[2] Second, we needed to identify best practices for our participatory action research projects in our local community. Third, we explicitly sought to distinguish the interests of HRAP's different stakeholders including both community members and local service providers, as well as the internal University stakeholders. Finally, we wanted to provide needed legal services to the local community through one-day clinics and to provide legal services opportunities for the HRAP student fellows.

The iterative action-research cycle stemming from the initial needs assessment led to several HRAP research and policy initiatives. These participatory action research projects and policy initiatives include the:

- Community Resource Guide[3]: a regularly updated, reliable source identifying local community/education organizations, legal organizations, and medical organizations
- Educational Access Project
- Language Access Project
- Rhetoric & Policy Project
- Community Engaged Service Project
- Human Trafficking Research Project (added in Fall 2017 by Co-director Professor JoAnne Sweeny)

Identifying the diversity of the immigrant, noncitizen and refugee community in Louisville

Numbers tell one story about the immigrant, noncitizen and refugee community in Kentucky. It is easy to get lost in the data, however it also is important to sift through the myriad reports and charts to understand the characters and plot of the immigration story in Kentucky.[4]

The data about Louisville Metropolitan Statistical Area (MSA) is derived from the U.S. Census Bureau. The Louisville MSA includes seven Kentucky counties (Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer and Trimble) and five counties in Southern Indiana (Clark, Floyd, Harrison, Scott and Washington). The U.S. Census Bureau also gathers data about Metro Louisville, referred to as Louisville-Jefferson County.

Louisville is a refugee resettlement city; there is a significant foreign-born population and more than half of the population arrived in last 20 years.[5] Foreign-born here means the Census Bureau definition which includes both all noncitizens, both permanent and temporary residents, and naturalized U.S. citizens. Most foreign-born individuals live in Metro Louisville (Louisville-Jefferson County), and the second largest group lives in Shelby County.[6]

Foreign-born individuals in the Louisville MSA are less likely to be naturalized citizens than the national average indicating a significant need for legal and related services.[7] Nearly half of the Louisville MSA foreign-born population is from Latin America (45%) which is lower than the national average (55%). Ten percent of the Louisville MSA foreign-born population is from Africa.[8] The number of foreign-born from Africa living in Louisville MSA is more than double the national average and includes refugee populations from Somalia and Sudan. In addition, there are sizeable foreign-born populations from India, Vietnam, China, and Bosnia-Herzegovina.

Foreign-born residents of Metro Louisville have significantly lower median earnings than native-born individuals in full-time, year-round positions with just over $10,000 difference among males and over a $9,000 difference among female workers in 2013.[9] Among all foreign-born residents in Louisville-Jefferson County, just less than half owned their own homes (46.2%). The primary occupations and industry differ among the foreign-born and native-born populations in Metro Louisville. The foreign-born population (both citizen and noncitizen) is overrepresented in natural resources, construction, maintenance, manufacturing and transportation compared to the native-born. The U.S. born population is overrepresented in sales & office management, and business occupations.

Language access also is an issue in Metro Louisville. Just over thirty percent of foreign-born households have no one over the age of 14 who speaks English only or English very well. Among foreign-born noncitizens, nearly 40% live in households where no one over the age of 14 who speaks English only or English very well.[10]

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[2]HRAP Final Report: Identifying Opportunities 2015 at https://louisville.edu/law/bhrap/our-publications.

[3]The Community Resource Guide, most recently updated in January 2018, is available on HRAP's website at http://louisville.edu/law/bhrap/for-service-providers/community-resource-guide.

[4]The numbers also tell another story about how difficult it is to compare apples-to-apples because of the different terminology and datasets used in various reports. Some reports rely on U.S. Census data for the Louisville Metropolitan Statistical Area (MSA). The Louisville MSA covers many counties: seven Kentucky counties (Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer and Trimble); and five counties in Southern Indiana (Clark, Floyd, Harrison, Scott and Washington). Other reports use U.S. Census data on Metro Louisville which is Louisville-Jefferson County. We rely on demographic data of the state, Louisville MSA and Louisville-Jefferson County (Metro Louisville).

[5]Ruther, Louisville: Immigration Rebirth (2015). U.S. Census Bureau data indicates the total Louisville MSA foreign-born population is 61,776 in 2012, and 56.7% arrived in the past 20 years.

[6]Id. 78% of the foreign-born live in Louisville MSA and 5% live in Shelby County. To compare, Louisville MSA contains only 60% of total Louisville MSA population and Shelby County only 3%.

[7]Id.

[8]45% of the foreign-born in Louisville MSA are from Latin America; nationally 55% of the foreign-born are from Latin America. 10% of foreign-born in Louisville MSA is from Africa and total US FB from Africa is 4%.

[9]American Community Survey Reports, United States Census Bureau, KENTUCKY FOREIGN & NATIVE-BORN POPULATIONS (2009-2013). The median earnings for native-born full-time, year-round workers in Louisville/Jefferson County was $44,993 for males and $36,280 for females compared to foreign-born median earnings for males of $33,392 and for females $27,353.

[10]Background Memo prepared by Matt Ruther, Department of Urban and Public Affairs, University of Louisville for Louisville Roundtable Meeting on Economic Competitiveness and Immigration: Strategies for a Globally Competitive Louisville (Private Roundtable Discussion) organized by Americas Society/Council of the Americas in collaboration with GLI and Metro Louisville (hereinafter Ruther, Louisville: Immigration Rebirth (2015).

The poverty rate among foreign-born is 23%, which is significant and higher than the national average poverty rate which is 18.7%.[11] In Louisville MSA, the median household income of foreign-born-headed households is approximately 84% of median household income of native-born. This median income for foreign-born individuals is lower than the national average.[12] Finally, the Louisville MSA foreign-born population also is more likely than the native-born population to live below the federal poverty line.[13]

Citizenship status matters in the Louisville area among foreign-born individuals. The noncitizen population living at the poverty line is more than double the rate for foreign-born U.S. citizens. In 2012, nearly 60% of noncitizens lived in low income households, with just over 30% living at the poverty line. To compare, only 15% of foreign-born U.S. citizens live at the poverty line.[14]

Louisville MSA is home to over half of the immigrants (permanent residents) residing in Kentucky who are eligible to apply for citizenship. Most applicants for citizenship reside in either Louisville MSA or Lexington-Fayette County, indicating a need for legal and other services related to applying for citizenship.[15] The need for legal services and public education about the benefits of citizenship are some of the barriers to citizenship in Louisville for the nearly 13,000 immigrants in Metro Louisville eligible to apply for citizenship.[16] Additional barriers include the cost of the naturalization application and related fees and limited English language proficiency.

The Jefferson County Public School (JCPS) District in Metro Louisville is the largest school system in the state of Kentucky with 123 languages spoken by students.[17] The percentage of students participating in the JCPS English as a Second Language Program, at 5%, is similar to the percentage of foreign-born in Metro Louisville.[18] In 2011 the percentage of students in the ESL program was 3.3%, indicating an increased need for the ESL program. This increased demand is reflected throughout the state. ESL enrollment dramatically increased from 2000-2001 to 2010-2011 by 306% from 4,030 students to 16,351 students.[19] During this decade, Kentucky had the second-fastest growing ESL population nationwide.[20] JCPS has opened more ESL units, now more than 60, although mostly in elementary schools. Pre-enrollment surveys are used to identify students with ESL needs and the districts actively watch enrollment trends to identify the growing need for ESL units across the county.

HRAP has identified a particular need in the local Latino community for these human rights services. It comprises 45% of the local foreign-born population. Many in the local Latino community are fearful of interacting with local law enforcement, regardless of whether they are lawfully present in the U.S., and do not seek protection or report crimes because of the concern that LMPD officers work hand-in-hand with federal immigration officials.[21] This fear can result in exploitation by local employers, local landlords, and others who threaten to report individuals to immigration officials. Latinos who are perceived to be undocumented often become targets for criminal activity.[22] Many Latinos live in mixed status families in which some family members are U.S. citizens or lawfully present and others in the family are undocumented. This impacts the quality of life as well as access to social services and other resources for the U.S. citizen children in these families. Families often are reluctant to seek social services to which they may be entitled because of a fear of interactions with any government officials.

Latinos in Louisville, as the largest immigrant group, represent just over 5% of the population in Metro Louisville, and 3.4% of the total state population, which more than doubled from 2000 to 2010. Nearly 1 in 20 people in Louisville are Latinos. Latinos live in poverty in the same percentages of the African American community according to the U.S. Census Bureau. The average salaries for Latinos in Kentucky are significantly lower compared to both African Americans and whites, and the Latino childhood poverty rate is comparable to the African American community in Kentucky. Latino students are largest group receiving ESL services within JCPS (52.7% Spanish speaking). There are other indications of lower achievement for Latinos students: the percentage of Latinos high school students achieving proficiency or distinguished levels in English is only 42.5%; in Math the percentage of proficiency or distinguished levels is 36%.

Many Latinos live in mixed status families in which some members are either citizens or lawfully present, and other family members are undocumented. U.S. citizen children with at least one parent who is undocumented make up 81% of all children of unauthorized immigrants enrolled in grades K-12 in 2014. (Well under 1% of children of unauthorized immigrants were lawful immigrants in 2014.) Nationally, it is estimated that over two-thirds of the 5 million children who live with unauthorized parents are U.S citizens. Latinos represent 95% of the children living in mixed status families, based on the estimated number of Latinos within the undocumented population in the United States. According to a Pew Hispanic Center survey, over half of all Latino adults worry that they, a family member, or a close relative could be deported.

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[11]Ruther, Louisville: Immigration Rebirth (2015).
[12]Id. at 4. The foreign-born median household income in Louisville MSA is $42,027 and the native-born median household income of $50,093.
[13]Ruther, Louisville: Immigration Rebirth (2015).
[14]American Community Survey Reports, United States Census Bureau, KENTUCKY FOREIGN & NATIVE-BORN POPULATIONS (2009-2013).
[15]From 2008-2013, approximately 5,200 individuals became permanent residents annually in Kentucky and approximately 65% of these individuals live in Louisville MSA or Lexington. 66.5% of individuals obtaining LPR status in Kentucky in 2012 resided in one or other of the state's two largest cities. United States Department of Homeland Security, Yearbook of Immigration Statistics: 2012 Naturalizations (2015) http://www.dhs.gov/yearbook-immigration-statistics-2012-naturalizations. Supplemental table 3. 68.3% of those who naturalized statewide, both refugees and other immigrants, in 2012 resided in Louisville (1,295) and Lexington (541) represents.
[16]Louisville Metro Government, Citizenship and Naturalization White Paper (draft). See also, Interactive Map: Eligible-to-Naturalize Populations in the U.S., Center for the Study of Immigrant Integration, University of Southern California (2016) http://dornsife.usc.edu/csii/eligible-to-naturalize-map/.
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[21]Howard, K. *"Louisville Police Don't Enforce Immigration – But Help The Feds Do It,"* Kentucky Center for Investigative Reporting, September 7, 2017 at http://kycir.org/2017/09/07/louisville-police-dont-enforce-immigration-but-they-help-ice-do-it/
[22] HRAP uses the term undocumented or unauthorized person to refer to those who are present in the United States either by overstaying on a visa or entering without inspection by an immigration officer. More about terminology and the diversity of the local immigrant, noncitizen, and refugee community can be found in HRAP's Final Report: Identifying Opportunities (2015) at http://louisville.edu/law/bhrap/our-publications.

A significant number of Latino undocumented noncitizens live in Kentucky, currently estimated at 35,000. Nationally, 77% of the total undocumented population is Latino, primarily from Mexico. At least 20% of the Latino population in Kentucky is undocumented, but many think that number is perhaps 2 to 3 times higher. Undocumented individuals represent 2.6 percent of Kentucky's workforce, according to the Migration Policy Institute. According to the Migration Policy Institute and Pew Hispanic Research Center, the estimated number of undocumented people in Kentucky in 2014 was 50,000 and was as high as 80,000 in 2010.

One HRAP challenge is making sense of the varying terms used in reports, media, and other publications. The different terminology affects public perceptions and has policy implications. In addition, as a legal education program, HRAP strives to be precise in our description and understanding of the varied terms. One outcome of the Rhetoric and Policy Project is a pending Terminology Guide to inform the broader public and the media about these issues and to promote greater cultural competency. The Rhetoric and Policy Project Report is published on HRAP's website and the Terminology Guide will be available on the HRAP website in Fall 2018.

Adopting a Participatory Action Research Methodology

The participatory action research (PAR) methodology informs HRAP's policy projects on Educational Access, Language Access, and Rhetoric and Policy. PAR requires equal participation of community to shape the research process and identify the next steps in any research project (Walter, 2009). The Program uses several methods to ensure full community participation and direction for these projects including annual community roundtables to update on the status of the research projects, ongoing meetings with our signature partner, La Casita Center, and timely consultations with local service providers.

Action research involves a process, working collaboratively with community members, to address social issues. Kurt Lewin (1946) promoted this type of research after World War II believing that the best solutions to social problems involved people engaged in democratic inquiry about the issues they faced in their own lives. The goal of participatory action research (PAR) is to create a collaboration of researchers and stakeholders engaged in critical reflection about social problems (Baldwin, 2012). In addition, participatory action research involves an iterative cycle of planning, acting, observing, and reflection which leads to a new inquiry cycle.

Participatory action research is distinguished from more traditional research methodologies in which the principal goal is to investigate. The PAR methodology has two objectives: "to produce knowledge and action directly useful to a group of people through research, adult education and sociopolitical action [;] ... [and] to empower people at a second a deeper level through the process of constructing and using their own knowledge," (Reason, 2008, p. 71). As a result, community engaged scholarship adopting the PAR methodology inevitably involves long-term projects.

HRAP is focused on community engaged participatory action research, also distinct in legal education from the clinical educational model of providing direct client services. In law schools, students generally have the opportunity to engage in direct client services within faculty-supervised clinics. HRAP's focus on community engaged scholarship, a form of participatory action research, involves a collaboration of students, faculty, and community partners to identify solutions to social issues and to build academic scholarship (Gelmon, 2013). Community engaged scholarship is distinct from the clinical education model by its emphasis on working with communities to identify solutions to modern day problems (Jones & Jones, 2011). It is best understood as "a cluster of applied research methods, namely, participatory research, collaborative inquiry, action learning, and community-based research," (Jones & Jones, 2011, p. 383).

Other Challenges

The Program has chosen an expansive definition of community due to our non-traditional goal of providing leadership opportunities for HRAP student fellows, as well as community engaged scholarship and service. Other universities and law schools have created their own versions of immigration fellowships and clinics primarily focused on live-client counselling opportunities for students. This traditional clinic model usually involves third year law students, with limited practice licenses, representing clients under the close supervision of a professor.[23] Most clinics represent noncitizens seeking U.S. citizenship or another lawful status, and students typically "engage in client counseling and interviews, fact investigation, legal research, preparation of affidavits, writing legal arguments, and submitting applications for immigration benefits" for their clients.[24]

One challenge is meeting the expectations of diverse constituencies. HRAP's community includes an "interconnected web of stakeholders" whose participation is integral to the Program's success and which necessarily includes members of the local immigrant, noncitizen, and refugee community, local legal and other service providers, local advocacy organizations, community organizations, and advocacy groups.[25] This web also includes key stakeholders within the University of Louisville, e.g., the law school administration, both the dean and admissions committee; the funded student fellows; other law student volunteers; and student, staff, and faculty collaborations across the University.

Another challenge has been providing needed services to the local community and offering HRAP fellows some exposure to live-client and other legal services opportunities. Individual HRAP fellows have participated in law school opportunities noted above including the legal orientation program at the ICE detention center within Boone County Jail. HRAP also organizes unique opportunities for the fellows. For example,

[23]University of Miami School of Law. (2016). Prospective student requirements: Immigration clinic. Retrieved from http://www.law.miami.edu/academics/clinics/prospective-student-requirements-immigration-clinic.
[24]University of Tennessee College of Law. (2016). Immigration clinic. Retrieved from http://law.utk.edu/clinics/immigration/ University of Texas at Austin. (2016). Immigration clinic. Retrieved from https://law.utexas.edu/clinics/immigration/
[25]This web of community partners advancing the human rights of the immigrant, noncitizen, refugee community includes the Louisville Bar Association, Kentucky Refugee Ministries, the ACLU, Mayor's Office of Globalization, Russell Immigration Law Firm, Ellie Kerstetter, Esq., Doctor's & Lawyers for Kids, Presbyterian Church Hispanic/Latino Outreach Ministry, Mijente Network, Alerta Roja Immigrant Advocates Group, Adelante Hispanic Achievers, Americana Community Center, National Immigrant Justice Center, and other local immigrant, noncitizen and refugee service providers and community groups.

HRAP fellows participated as a group in the legal orientation program, as well as cultural competency training with our signature partner, La Casita Center. HRAP fellows also have participated in wage theft and labor trafficking training.

In 2017, as a result of Trump administration immigration policies, the need for outreach, education and direct client counselling in the local community became critical. HRAP has refocused its efforts to expand its footprint in the local community and within the University by organizing one-day immigration law clinics for the campus community, actively participating in local efforts to support the community, organizing public education campaigns, and seeking grant funding to host regular Latino Community Clinics. Each of these efforts is described in greater detail below.

HRAP Projects: Meeting the Needs of the Louisville Immigrant, Noncitizen, and Refugee Community

The Program's action research projects were developed after preliminary findings from the 2015 needs assessment report were shared with the local immigrant, noncitizen and refugee community and service providers in Spring 2015. The report revealed several key findings and led to the creation of the Community Resource Guide, a resource that did not exist in our community. The collaborative inquiry process for sharing the preliminary findings with community members confirmed a need for focused research relating to language and educational access.

HRAP is currently focused on three participatory action research projects, and a fourth community engaged service project. The Language Access Project evaluates compliance by local agencies and entities receiving federal funds with Civil Rights Act, Title VI, requirements to provide language access to Limited English Proficient individuals seeking their services. The Educational Access Project examines state-wide public-school compliance with legal requirements of K-12 access to noncitizen children regardless of immigration status.

The Rhetoric and Policy Project assesses rhetoric used by media and its influence over local public policy and public perceptions relating to the immigrant, noncitizen and refugee community. A Terminology Guide designed as a community resource to enhance cultural competency will be released in 2018. Reports from each project are currently available on HRAP's website. The fourth HRAP project is the Community Engagement Project which includes one-day *pro bono* legal services clinics, community outreach and education events, and regularly scheduled collaborative lawyering events for which additional grant funding is sought. This additional funding is sought to create a structure for regular Know Your Rights Presentations in the local community focused on undocumented noncitizens and other marginalized immigrant groups; a community discussion board to report issues and concerns relating to employers, local law enforcement officers, and federal immigration officials; and to establish the Program as a liaison for the local community with local immigration enforcement officials.

The Program received a Louisville Bar Foundation grant in 2017 to create training videos based on the three action research projects. These videos will be produced in 2018 and made widely available to the local community and service providers. HRAP received a second grant in 2017 to enhance community outreach in the local undocumented community, as well as identify best practices and local services gaps in collaboration the University of Louisville Kent School of Social Work and HRAP's signature partner, La Casita Center.

All of these projects and outcomes are discussed below.

HRAP's Final Report: Assessing Needs & Identifying Opportunities (2015)

The 2015 needs assessment provided student fellows the opportunity to engage local and regional organizations to identify human rights issues, and to work with the local immigrant, noncitizen, and refugee community. The key goal was to understand the range of available services and to begin identifying potential gaps in information and services available to the local community. The scope of the report was expanded beyond legal services as it became apparent that the need for multiple services is often interrelated and this requires a holistic assessment.

The report, titled Final Report: Identifying Opportunities 2015, identifies nonprofit organizations and service providers in Kentucky and the neighboring region addressing the human rights needs of the immigrant, noncitizen and refugee community. One immediate observation was that this basic information was not easily accessible to the local community or to the service-providers. This led to the creation of the Community Resource Guide discussed below.

The Report was created from interviews, in-person and telephonic, conducted by the HRAP fellows about the services provided, as well as other relevant matters such as language services, outreach, publications, advertisement of services, and criteria for eligibility for services. The interviews included broader questions regarding perceptions of the human rights needs, providing an important insider view of the some of the key challenges. These interviews were used to craft the preliminary findings shared with the local community at HRAP's first annual community roundtable forum held in April 2015.

The preliminary findings included:

1. Service providers with limited human and economic resources face challenges conducting consistent outreach to the immigrant, noncitizen, and refugee community;
2. The language access limitations of service providers are widespread, largely due to budget cuts and resource constraints;
3. There a need for more collaboration and communication among service providers and in their outreach to the local community;
4. The local immigrant, noncitizen, and refugee population identifies its needs holistically for services in the medical, legal, and educational domains and it lacks readily available information about these services indicating a critical need for more comprehensive outreach; and
5. There is a need for shared information to develop a comprehensive understanding of the diversity and needs

of the local immigrant, noncitizen and refugee community, including a critical need for expanded cultural competency information and training.

Outreach to the local immigrant, noncitizen and refugee was a consistent challenge identified by service providers. Most organizations were inconsistent in their outreach efforts, and advertising did not occur due to limited time and resources. Organizations relied upon word-of-mouth, sporadic Internet announcements, and social media. More than half of the organizations in the survey relied in whole or in part on word-of-mouth "advertisement" or client referrals. One key concern about this limited outreach is that many noncitizen groups may lack access to critical resources given the diverse, changing and growing immigrant, noncitizen, and refugee community in the Louisville region. As a major refugee resettlement city, Louisville is more diverse than most as noted above. For service providers, client referrals maintain a steady client flow, but there may be inaccessible groups that lack a referral source. This may be especially true for newer members of the immigrant, noncitizen, and refugee community, particularly refugees and limited or non-English speakers.

Interpretation services to communicate with some clients is another major challenge facing organizations and confirmed by the local community. Many organizations have at least some staff members who speak languages other than English, most often Spanish. Only three organizations surveyed could to support language services in several languages. Language access is provided by most organizations through a wide variety of mechanisms, from using professional interpreters to having clients bring family members to provide informal interpretation services.

Language access challenges, including this lack of interpretation services, extended to government agencies, medical service providers, and other organizations including domestic violence intake centers, complaint windows at the courthouse, and other areas. Those service providers handling these needs rely on the Language Line, or other telephonic interpretation services. This lack of consistent access to interpretation services and the lack of interpreter and cultural competency training were key concerns expressed by community members and service providers.

Other needs and challenges were identified in the 2015 Final Report including: (1) a need for more collaboration and communication among service providers to develop informal referral agreements and other low-cost outreach mechanisms; (2) a lack of educational resources provided for immigrant, noncitizen, and refugee adults; (3) a need for regularly available medical services for the entire immigrant, noncitizen, and refugee community because existing services rely almost entirely on volunteer services leading to long wait times and limited capacities; and (4) a lack of reliable sources of information about immigration-related issues in Kentucky to counter misinformation and to provide comprehensive information beyond the sporadic, limited circulation materials produced by local organizations, such as newsletters, or annual reports; and (5) a critical need for cultural competency information and training.

Community Resource Guide

The needs assessment project led to the creation of a much-needed comprehensive Community Resource Guide after an initial determination that many in the local community were often misinformed about available services and resources in Louisville. The Community Resource Guide was developed to address this need and to provide a tangible resource for the local immigrant, noncitizen, and refugee community. It lists all local service and support organizations including the names, contact information, and a description of services provided by local legal, medical, social, and educational service providers.

The Community Resource Guide empowers the immigrant, noncitizen, and refugee community by providing ready access to critical information. The Guide is updated annually, posted on HRAP's website, and regularly distributed to local groups, most recently in January 2018. The goal is to regularly distribute it to school systems, churches, medical offices, and community centers throughout the state. The Guide was distributed by direct mail to local organizations, including Jefferson County Public Schools, service providers, and community groups in Fall 2015. It was distributed at Louisville's "Worldfest", a three-day celebration of cultures over the Labor Day weekend holiday in September 2016.

Action Research Projects

Participatory action research projects led by the HRAP fellows and faculty co-directors have assessed key human rights issues in the local immigrant, noncitizen, and refugee community. Community guidance for these projects was achieved primarily through annual community roundtables of both service providers and members of the local immigrant, noncitizen and refugee community; each having a key part of HRAP's action research cycle. At each event, HRAP fellows shared updated findings about the Program's projects. At the initial community roundtable, held in April 2015, small group discussions identified two issues that have been longstanding concerns: language access and compliance with Civil Rights Act, Title VI federal requirements; and educational access barriers to K-12 education including compliance with U.S. Department of Education requirements. The Rhetoric and Policy Project, and related cultural competency issues, also was created from feedback at the initial community roundtable event. These HRAP Projects have involved extensive research in 2016 and 2017 to develop a solid and informed understanding of the scope of these issues.

a. The Language Access Project

The critical need for adequate language access in the Louisville region was confirmed by the community participants at the 2015 annual roundtable. Title VI of the Civil Rights Act (42 U.S.C. 2000d et seq.) requires recipients of federal financial assistance to provide language access mechanisms to avoid discrimination on the basis of race, color, or national origin, including limited English proficiency. Federally-funded and federally-conducted activities must be accessible to all persons who, as a result of national origin, are not proficient or are limited in their ability to communicate in the English language. "Limited English Proficient" (LEP) individuals may be eligible for mandatory language assistance with respect to a particular service, benefit,

or encounter. LEP includes those who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English.

The Language Access Project surveyed dozens of local federal-funds recipients to assess their compliance with these federal civil rights requirements. This research revealed that many entities are out of compliance and existing compliance has occurred by happenstance, rather than from an informed understanding of legal requirements. The preliminary findings of the Language Access Project from the survey of local service providers - medical, law enforcement, and others - revealed only 6% had a language access plan in 2016. These preliminary findings were assessed and analyzed at the 2016 annual community roundtable. Updated findings from this ongoing action research project are published on HRAP's website.

b. The Educational Access Project

The Educational Access Project responds to *Plyler v. Doe* (1982), a U.S. Supreme Court case holding there is a constitutional right of access to K-12 public education for all noncitizen children regardless of immigration status.[26] The Program investigated the barriers to educational access and compliance with U.S. Department of Education access regulations in public schools throughout Kentucky. This requires schools to deploy enrollment procedures that do not create a chilling environment for noncitizens, particularly undocumented students. The Educational Access Project surveyed hundreds of public schools state-wide to understand enrollment procedures and identified regional differences in compliance and related concerns about cultural competency. Some schools had compliance issues, and others were in compliance but whom treated our surveyors (whom they believed to be non-citizens) in concerning ways that requires further inquiry. This research follows a model used by the American Civil Liberties Union (ACLU) of New Jersey to identify barriers that undocumented children and their families may experience when enrolling in public schools.

c. The Rhetoric and Policy Project

The Rhetoric and Policy Project studied how the mainstream media has depicted immigrants, noncitizens, and refugees from 2012 to present in Kentucky, Tennessee, Indiana, and Ohio. The Rhetoric and Policy Project conducted a media survey spanning four years of media coverage to identify specific areas for concern in media depictions of immigrants, noncitizens, and refugees. One key issue identified in this project was the consistent focus on "insiders" who assist the immigrant, noncitizen, and refugee community rather than on community members themselves. We believe this media coverage contributes to the barriers to individuals accessing legal and other services. The project identified shifting narratives and reactions to the local community, and has sought to identify if, when, and why media coverage has become more negative and alarmist surrounding the community. An important outcome from this project is the creation of a Terminology Guide with a glossary of immigration-related terms and guidance on usage to be published on HRAP's website in 2018.

d. The Community Engagement Project

In 2017, to respond to dramatic changes in immigration policy under the Trump administration, HRAP managed, directed or participated in several one-day immigration clinics for the local community, including the University of Louisville campus community. These community engagements bring together local immigration attorneys, law school faculty experts, and community partners. The education and outreach collaborative lawyering one-day clinics are the model for ongoing and expanded community engaged service. HRAP has sought several grants for this ongoing outreach and received a one-year grant in 2017 to begin creating regular one-day clinics serving undocumented populations in Louisville.

Community Engaged Events & Programming

HRAP's annual community roundtable forums have been the key vehicle to ensure community input and direction for the participatory action research projects. In addition, HRAP has hosted numerous outreach and education programs for the campus and local community including "hot topics" events. These events also have helped gather additional information from community members about HRAP's action research projects. HRAP participated in the "Day of Dignity" organized by the University of Louisville Muhammad Ali Institute for Peace and Justice, Kentucky Refugee Ministries, Catholic Charities, and the Muhammad Ali Center in February 2015. HRAP fellows surveyed members of the community regarding their experiences accessing medical, legal, and social services, distributed copies of the Community Resource Guide, and gave a presentation about HRAP's work and the preliminary findings of the needs assessment.

HRAP community and outreach events connect the campus community to local human rights organizations and immigrant rights advocates. For example, the Program organized two events about humanitarian and migration issues examining the connection between United States and global migration challenges. The first in October 2014, *"Women and Children at the Border: The Humanitarian Crisis"* focused on the large number of woman and children fleeing violence and poverty in Guatemala, Honduras and El Salvador, the legal protections available in the United States, and the barriers to humanitarian protection in the United States. Panelists included U.S. Congressman John Yarmuth, local attorneys and medical service providers, and HRAP fellows. In January 2016, a second HRAP program, *"Fleeing Conflict: Refugees & Migrants of Syria and Central America,"* compared the media coverage and rhetoric about refugees and migrants and examined the local impact of the increasingly negative public perception at the time, connecting the challenges faced by migrants from Central America to those fleeing conflict in the Middle East. The program also included a presentation about the failure of international law to address the Syrian humanitarian and refugee crisis by Co-director, Professor Trucios-Haynes. All of these events feature HRAP fellows as subject-matter experts and

[26]Plyler v. Doe, 457 U.S. 202 (1982).

are organized by the fellows, providing value and organizational management experience.

In February 2017, HRAP hosted a community-campus education and outreach event, *"Trump on Immigration,"* addressing the Executive Orders issued by President Trump relating to the changes in the refugee program, as well as interior and border immigration enforcement efforts. HRAP's Community Engagement Project also hosted a campus community *pro-bono* one-day legal clinic offering the opportunity to consult with local immigration lawyers, and information about the impact of the Executive Orders in our community and nationwide. Throughout 2017, HRAP participated in ongoing local immigrant rights advocacy in partnership with other local organizations. HRAP's Co-directors, Professors Trucios-Haynes and Abrams, also collaborated with local groups and organizations on campus and in the local community in public education and outreach events.[27]

Training and Educational Outreach Videos

HRAP's ongoing support of the local immigrant, noncitizen, and refugee community includes the creation of videos and related training materials to promote legal compliance and to support organizations engaged with the community in 2018. HRAP received a grant to produce professional-quality videos to be distributed widely throughout Louisville on: (1) cultural competencies in working with the immigrant, noncitizen, and refugee community; (2) civil rights laws requiring language access compliance for Limited English Proficiency speakers; and (3) U.S. constitutional educational access rights governing K-12 public school enrollment.

The three videos, related to HRAP's action research projects, will provide essential training on cultural competency, language access, and educational access. The Program will disseminate these videos widely with appropriate legal compliance materials. This effort will provide critical training tools to public entities that are resource-strained and in which turnover is high to be sure that every school, agency, and entity is equipped with the knowledge it needs to address the human rights needs of the immigrant, noncitizen and refugee community.

One-Day Clinics and Other Legal Services Outreach

The Community Engagement Project is designed to provide a structure for regularly scheduled collaborative pro bono legal clinics and Know Your Rights Presentations in the local community and related events. HRAP links local attorney resources with its own education and outreach resources to host events providing the opportunity for one-on-one attorney consultations. HRAP has used this successful model for community outreach and education, as well as collaborative legal services providing pro bono legal consultations, to seek external funding. This collaborative lawyering model was successfully implemented in 2012 by a partnership of local immigration lawyers and immigrant rights advocates, including Co-director Professor Trucios-Haynes, for Deferred Action for Childhood Arrivals (DACA) applicants. In 2012, one-day pro bono clinics were hosted by the Brandeis School of Law, University of Louisville and Bluegrass Community and Technical College in Lexington, Kentucky.

In 2017, HRAP received a grant from the University of Louisville Cooperative Consortium for Transdisciplinary Social Justice Research to work with Dr. Adrian Archuleta of the Kent School of Social Work and provide regular one-day clinics, assess gaps in legal, health and other social services, as well as identify best practices for outreach. This grant has a particular focus on undocumented noncitizens, primarily in the Latino community which represents 45% of the foreign-born population in the Louisville region. The grant provides funding to host several Know Your Rights presentations and one-day clinics in local neighborhoods and, at La Casita Center, HRAP's signature partner. The key research outcome of this project is to identify best practices for outreach to the local undocumented community, as well as any gaps in local services for this community. In addition, the research will include the identification of culturally competent outreach and education methods to be published, shared with local agencies including the Louisville Metro Police Department and the Metro Louisville Office of Globalization, and presented at national conferences such as the annual Coalition of Urban Metropolitan Universities (COMU) Conference where HRAP has previously presented its work in 2016.

Future HRAP Opportunities

HRAP seeks to broaden its reach and enhance our collaboration with other nonprofit organizations dedicated to advancing the human rights interests of our community. Our work to date has focused on the local immigrant, noncitizen and refugee community. In Fall 2017, HRAP expanded its human rights focus to include human trafficking issues and concerns working with the Kent School of Social Work's Human Trafficking Research Institute.

Ongoing Work with the Immigrant, Noncitizen & Refugee Community

In 2018, relying on existing grant funding, HRAP's community engagement will focus on undocumented immigrants. The grant funding for this work ends in 2018 and there are opportunities to continue this work and expand to other marginalized immigrant groups within the local immigrant, noncitizen and refugee community. HRAP's 2015 Report determined there was a need for up-to-date Know Your Rights materials and community outreach and education about these issues. Although some local organizations had some materials, most were outdated.

One proposed expansion to serve the entire immigrant, noncitizen and refugee community would include a community

[27]HRAP participation in developing of "Safety Plan" legal documents addressing family law issues for detained, undocumented noncitizens with a local immigrant rights community group (March 2017) (Co-director, Professor Abrams); Presentation, Immigration Issues in Kentucky in collaboration with the Americana Community Center at the Adun Jesuruth Temple (March 2017) (Co- director, Professor Trucios-Haynes); Immigration- Know Your Rights in collaboration with Adelante Hispanic Achievers, Beuchel Baptist Church (March 2017) (Co- director, Professor Trucios-Haynes); Louisville Bar Association Pro-Bono Network for Immigration Representation (February 2017) (Co- director, Professor Trucios-Haynes) Teach-In: Current and Historical Reality of U.S. Immigration Policy (April 2017) organized by University of Louisville's Americas Research Group & Undocumented Students Resource Group (Co-director, Professor Trucios-Haynes); Rauch Planetarium Social Justice Series, Empowerment: Making and Shaping History - The 360 Journey into Latinx Resistance" on Latino immigration to the U.S. (April 2017) (Co-director, Professor Trucios-Haynes); Presentation, Latino Civil Rights and Immigration Issues, University of Louisville Cultural Center, Hispanic-Latino Initiatives Program (January 2017) (Co--director, Professor Trucios-Haynes)

discussion board to report issues and concerns relating to employers, local law enforcement officers, and federal immigration officials. HRAP has pursued grant funding for this initiative with the goal of becoming a key community resource on these issues as well as a trusted liaison with local immigration and law enforcement officials in order to raise the concerns of the local immigrant, noncitizen and refugee community.

Another goal is to translate HRAP's videos on education access, language access, and cultural competency into Spanish as a permanent resource housed on our website. These videos could also be used to host one-day pro bono legal clinics relating to language and educational access rights. HRAP recognizes a need for a local Spanish-speaking community engagement fellow on a part-time basis to: develop a trusted relationship and engage in outreach within local Latino communities; organize one-day clinics, and maintain communication among the partner organizations.

Human Trafficking Concerns

In Fall 2017, HRAP has expanded its outreach to include human trafficking issues. As part of this initiative, HRAP fellows have been working with U of L's Human Trafficking Research Institute in the Kent School of Social Work and local non-profits such as Dare2Hope and the Kristy Love Foundation. HRAP fellows have also worked on research projects such as gathering data from legal cases brought under human trafficking statutes to better understand the demographics of both victims and perpetrators. HRAP fellows are also focusing their research efforts on the problem of child marriage and the law's deficiencies in preventing these often predatory marriages.

In Spring 2018, HRAP fellows have also planned several events such as a screening of *I Am Jane Doe*, a documentary about human trafficking in the U.S., which also included a Q & A with local human trafficking activists. Another event in March 2018 focuses on human trafficking and the Kentucky Derby and brings local experts from the community to the law school. These projects and events are all student-led and organized.

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Original Research

Examining Jordanians' Attitudes Towards Five Types of Developmental Disabilities

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Abstract

Background: The diagnosis and reported rates of persons with developmental disabilities (PWDDs) in Jordan is steadily increasing. Although initiatives have been implemented to improve the lives of PWDDs, attitudes towards PWDDs hinder successful inclusion in the Jordanian society.
Objectives: To examine the relationship between Jordanians socio-economic status and attitudes towards persons with developmental disabilities: autism, blindness, cerebral palsy, Down syndrome and muscular dystrophy.
Methods: Jordanians (N=259), ages 18-65 were recruited for this convergent parallel, mixed-methods study. Participants completed the modified 40-item Community Living Attitude Scale-developmental disability (CLAS-DD) and the modified Intellectual Disability Literacy Scale consisting of five vignettes, representing each developmental disability. Of the 259 participants, 32 were randomly selected for the qualitative phase of this study
Results: A one-way ANOVA was used to analyze CLAS-DD, results revealed consistent significance between all subscales and income levels. For instance, sheltering scores revealed significance between income levels >800 (Mdn= 4.0) and <180 (Mdn = 4.57) (p= 0.006). Further, using A Welch test, IDLS findings showed differences of relationship between social distance and income level. The qualitative study confirmed the quantitative analysis; however, attitude vary depending by type of contact with persons with developmental disabilities.
Conclusions: Few empirical studies related to PWDDs exist in Jordan. This foundation work can be utilized by the social, educational and public health sectors to understand determinants influencing attitudes towards persons with disabilities, prior to designing initiatives. Based on the findings, there is potential for inclusion of PWDDs in Jordan, with strategically designed disability awareness initiatives.

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Introduction

It is estimated that 14,800 Jordanian residents have a developmental disability (DD).[Al-Majali SA and Faddoul, K.J., 2008] In fact, estimates can be higher, as there may be an underreporting of persons diagnosed with developmental disabilities (DDs), as well as a lack of current publishable data regarding statistics about Jordanians with disabilities. [Waldman HB and Perlman SP, 2014] Although laws have been enacted in Jordan to protect the rights of persons with disabilities (PWDs) and promote inclusion, attitudes towards PWDs hinder persons with developmental disabilities (PWDDs) from being active members of their society, [Amr M et al. 2012] increasing the probability of negative quality of life outcomes. [Hamed R, Tariah HA, and Hawamdeh ZM, 2012] While scholarly research regarding persons with disabilities is steadily increasing in Jordan, to our knowledge, no study has attempted to examine the relationship between attitudes towards PWDDs and socio-economic status.

Quality of interaction with PWDDs may have greater significance on attitudes towards PWDDs.[McManus JL, Feyes KJ and Saucier DA, 2011] Further, multifaceted factors such as socio-economic status, residence, culture and interaction with PWDDs, shape one's attitude towards PWDDs, daily. [Patka M, Keys CB, Henry DB, and McDonald KE, 2013; Hampton Zhu, 2011; Sheridan J, Scior K, 2013] For example, negative attitudes towards PWDDs, on specific issues, may be dependent on gender. Such is the case in Canada; compared to women, men were more likely to report discomfort towards persons with intellectual disability (PWID), whereas women were more likely to hold negative attitudes towards PWID in the areas of legal rights. [Morin D et al., 2013] Not in line with findings in Canada, a comparative study regarding pre-service teacher's perceptions and attitudes towards inclusion of students with disabilities in the UAE and Jordan reveals no correlation between participants gender and response. However, in Jordanian, pre-service teachers had a more positive outlook on inclusion and attainment of resources, which may be due to the government's continuous work to improve education opportunities for students with disabilities and special educational training for educators. [Al Zyoudi M, Al Sartwai A, and Dodin H, 2011]

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Negative attitudes may contribute to environmental, social and health barriers for PWDDs. [AlHeresh R, Bryant W, and Holm M, 2013] For instance, parking spaces and walkways accommodations for PWDs may be occupied by individuals without a disability, [Ghasemi B et al., 2011] which hinders a PWDDs ability to integrate into the environment. At the social level, PWDDs may face negative attitudes and stigma from society, which has diverse cultural and ethnic backgrounds. For example, contemplations regarding socialization, misconceptions and negative labeling are associated with awareness and attitude among ethnic minorities towards PWDDs.[Scior K et al., 2013] As for the impact on PDWDDs health, negative attitudes can result in negative outlook on health. For example, the probability of depression increased in Arab women with disabilities in the Middle-east and North African (MENA) region who experienced negative attitudes. [Kronfol NM, 2012] Overall, the negative attitudes can affect all aspects of PWDDs lives.

In Jordan, the positive and increased knowledge towards PWDDs is actively pursued. According to Amr [2011] Jordanian educators attending an inclusive education training, reported positive attitudes towards readiness to increase knowledge of inclusive education, as they could share experiences. Though there is a positive shift towards increasing knowledge of special needs students' disability, the information acquired knowledge may be general and teachers continue to lack a full understanding of the characteristic manifestations associated with a DD or how to address PWDDs health complications or behavioral concerns when presented in the classroom.[Alkhamra et al., 2012]

Purpose of Study

Our mixed-methods study provides a foundation to address a complex issue. Utilizing multiple instruments, we aim to assess the relationship between Jordanians socio-economic status and attitudes towards persons with DD specifically autism, blindness, cerebral palsy (CP), Down syndrome (DS) and muscular dystrophy (MD). Due to the lack of published literature regarding disability studies in Jordan, we hope that the findings of our study will serve as a foundation and contribution to disability-related research and initiatives in Jordan and the overall middle-east and North-African (MENA) region.

Methods

Recruitment

This study was approved by Loma Linda University Institutional Review Board (IRB). Recruitment and data collection took place between December 2015 and June, 2016. Participants had been residents of Jordan for a minimum of three years and residing in either Amman, Irbid, Madaba or Zarqa, and between 18-65 years of age. Persons having a disability or working for a disability advocacy organization were excluded from this study. Participants were recruited online and face-to-face. All participants were provided informed consent prior to joining in the study. Participants were offered an incentive, raffle of two phone/ internet cards (in each province) valued at 10 Jordanian dinars (JD) each, if they completed the entire study.

Two hundred fifty-nine Jordanian residents were recruited to participate in this study. Background data was collected on participant's socio-economic and demographic background, ethnic/cultural background, their method of obtaining information, owning mobile phone and access to the internet, as well as their level of religiosity. Additional questions sought to identify if participants knew someone with a DD, the type and relationship.

Design

This convergent parallel mixed-method study entails a two-phase process, to better substantiate our findings.

Demographics

Although Jordan is a developing country, income levels across the nation is broad. Thus, monthly household income was categorized into 8 levels of Jordanian Dinars, ranging from <$180(JD) to >2,000JD poor to wealthy. Due to the low response rates of persons with income levels over $801JD, income categories were collapsed into five categories: <180, 181-300JD, 301-500JD, 501-800JD and >800JD.

Quantitative Phase

Participants completed the modified version of the Community Living Assessment Scale-Mental Retardation (CLAS-MR), [Henry et al., 1996] which consisted of 40 statements, measuring general attitudes towards PWDDs, on a 6-point Likert-scale. (1=strongly disagree to 6=strongly agree). For this study, we replaced the word mental health with developmental disability. The CLAS-MR is categorized into four subscales: empowerment, exclusion, sheltering and similarity. The empowerment subscale examines the respondent's attitudes regarding PWDDs ability to self-advocate and make decisions on issues and policies that pertain to the person with the disability. Whereas exclusion subscale examines respondents desire to isolate persons with DDs from the community. The sheltering subscale delves into the respondent's belief that PWDDS need daily supervision and protection. The similarity subscale examines the level to which respondents view PWDDs as being equal.

As for the Intellectual Disability Literacy Scale (IDLS), English [Scior K and Furnham A, 2011] and Arabic [Scior K et al., 2013] versions were modified to reflect DD as the topic of interest. Five unlabeled vignettes were presented to participants; each representing an unlabeled description of one of the DDs examined in this study. Upon reading the vignettes, participants completed two qualitative questions for symptom recognition and how to help the individual. Following, were 9 statements 7-point scale ranging from strongly disagree (1) to strongly agree (7), to identify respondent's moods towards the individuals described in each vignette. Respondents were asked about casual and intervention beliefs, 26 items each, on a 7-point scale ranging from 1 strongly disagree to 7 strongly agree. The 6-item social distance statements were also ranged on a 7-point scale. The social distance statements examined respondent's willingness for acceptance, inclusion and socialization of persons with developmental disabilities. Lastly, respondents completed a 3-item statement on similarity beliefs. A multiple-choice question asking respondents to identify types of DD was added to the scale.

Table 1 Comparison of CLAS attitude scores among different income levels

		Empower		Exclusion		Sheltering		Similarity	
Income Levels (in JD)		Paired Differences Median	P-value (2-tailed)	Paired Differences Median	P-value (2-tailed)	Paired Differences Median	P-value (2-tailed)	Paired Differences Median	P-value (2-tailed)
Pair 1	<180 – 180-300	-0.2308	0.124	0.3333	1.000	0.2857	1.000	-0.0871	1.000
Pair 2	<180 – 301-500	-0.2308	1.000	0.0962	1.000	0.2857	1.000	0	1.000
Pair 3	<180 – 501-800	-0.3077	1.000	0.25	1.000	0.5714	0.102	-0.0833	1.000
Pair 4	<180 – >800	-0.5769	0.003*	1	0.000*	0.5714	0.006*	-0.5833	0.000*
Pair 5	501-800 – 180-300	0.0769	1.000	0.0833	1.000	-0.2857	0.645	-0.0038	1.000
Pair 6	501-800 – 300-500	0.0769	1.000	-0.1538	1.000	-0.2857	0.415	0.0833	1.000
Pair 7	501-800 – >800	-0.2692	0.517	0.75	1.000	0	1.000	-0.5	0.026
Pair 8	301-500 – 180-300	0	1.000	0.2371	1.000	0	1.000	-0.0871	1.000
Pair 9	301-500 – >800	-0.3461	0.472	0.9038	0.000	0.2857	0.067	-0.5833	0.002*
Pair 10	180-300 – >800	-0.3461	0.782	0.6667	0.004	0.2857	0.097	-0.4962	0.002*

Note. CLAS-MR Community Living Attitude Scale-Mental Retardation[20] (modified to address developmental disabilities). Comparison of CLAS attitude scores among different income levels. Income refers to monthly household income, in Jordanian dollars.
Kruskal-Wallis, *(p<0.005)

Qualitative Phase

Of the 259 participants, 32–who indicated initial willingness to complete the entire study-were randomly selected to participate in the qualitative phase of this study. Participants were informed about the study the method of data collection and audio recording. Those who volunteered to be in the study, were asked to sign a consent form detailing information about the study including the audio-recording.

Four focus groups, ranging from 5-8 individuals per province were conducted in a semi-structured format, giving respondents the ability to elaborate on attitudes towards persons with developmental disabilities. The foundation of the statements was designed from the CLAS [Henry D et al., 1996], IDLS [Scior K et al., 2013] and a public perceptions scale. [O'Sheaa et al., 2012] Each participant was asked to respond to questions regarding their attitudes towards empowerment, inclusion and educational opportunities for persons with developmental disabilities. Interviews were conducted in Arabic, recorded and manually transcribed. Transcriptions were reviewed twice, to ensure accuracy of the statements. Axial coding was used to assess the interviews.

Statistical Analysis

A Kruskal-Wallis H test was run to determine differences between the Community Living Attitudes Scale (CLAS-MR) subscales: empowerment, exclusion, sheltering and similarity, to income levels. To account for a multiple comparisons in post-hoc analysis of the CLAS subscales, a Bonferroni correction factor was used to create a new p-value threshold (p= 0.05/10= 0.005). Adjusted p-values are presented in **Table 1**.

Attitudes from the IDLS was extracted by tallying the six social distance statements, obtaining a mean score for each type of disability. The One-way ANOVA was performed to determine if social distance scores, from the IDLS were different for income levels of each disability. Further analysis of the IDLS, using the Kruskal-Wallis H test, was run identify differences between additional socio-economic variables; place of residence, marital status, education level, profession and attitude.

Results

Demographics of respondents in quantitative phase of study

Two-hundred fifty-nine Jordanians from four provinces, 26% were from Amman (n=68); 28% Irbid (n=72); 20% Madaba (n=53) and 26% Zarqa (n=66), completed this study; less than ten percent (9%, n=24,) completed the quantitative study online. The participants' mean age was 33.57 (SD 11.46), 68% were female (n=176); 32% were male (n=83).

About a third of the respondents (36% n=93) reported being employed, (15%, n=39) indicated being unemployed, (15%, n=39) were college or university students, about a quarter (26%, n=67) were stay at home parents and less than five percent (n=14) were retired. About three percent (n=7) did not report employment status. Among the 259 respondents, less than a quarter specified being in the following professions: (10%, n=26) childcare, (5%, n=13) work as pre-kindergarten–secondary/vocational level educators and (2.3%, n=6) higher education sectors. More than half of the respondents reported (59%, n=153) knowing someone diagnosed with a developmental disability.

Income influences attitudes towards PWDDs

A Kruskal-Wallis H test (KW) was used to assess the subscales of the Community Living Attitude Scale (CLAS): empowerment, exclusion, sheltering and similarity, in accordance to income levels. The KW test revealed statistical differences between income levels and the empowerment subscale x_2 (4)=14.580, p=0.006. More specifically, in comparison to low-income level (<180JD Mdn = 3.62), high-income level (>800JD Mdn = 4.19) respondents were more likely to express positive attitudes towards PWDDs ability to self-advocate (p = 0.003) (Table 1). Respondents with income categories in between the low-and-high categories indicated positive attitudes towards empowerment of PWDDs.

In terms of the exclusion subscale, there were significant differences between the two extreme income categories >800JD (Mdn = 1.63) and <180JD (Mdn = 2.63) (p<0.001). In other words, lower income respondents expressed negative attitudes towards inclusion compared to higher income. Overall, as income increases the likelihood of positive attitude increased (**Table 1**).

Unlike the exclusion subscale, respondents in two extreme income levels somewhat agree that PWDDs need sheltering

>800JD (Mdn= 4.00) and <180JD (Mdn = 4.57) (p= 0.006) (**Table 1**). Meaning, PWDDs require daily assistance and supervision in their daily lives. Similar attitudes is seen among the other income levels **(Table 1**).

In terms of similarity, both income levels expressed agreement that PWDDs were similar to them, however, respondents from the higher income level indicated more positive attitudes towards PWDDs (>800 (Mdn = 4.58) and <180 (Mdn = 4.00) (p<0.001)) (**Table 1**). For example, respondents agree that PWDDs can have relationships with others and are willing to secure employment.

Attitudes towards inclusion is influenced by income

Next, we investigated income levels and its influence on attitudes towards persons with specific developmental disabilities. Unlike the CLAS scale, which examined general attitudes towards PWDDs, respondents were provided unlabeled vignettes describing the five DD examined in this study: autism, CP, DS, MD, and blindness. Regardless of the type of DD, respondents from all income levels expressed being unsure or negative attitudes regarding social distance towards persons with DD (**Table 2**).

Respondents of <180JD expressed almost same level of negative attitudes for all of the developmental disabilities. However, respondents with >800JD income also expressed negative attitudes, but more towards persons diagnosed with DS, MD, and blindness. Mean social distance score for blindness, was significantly different, for different levels of income, Welch's F(4, 62.78) = 4.181, P<0.05. Further, the Games-Howell post hoc analysis reveals an increased negative attitude in social distance score from the 501-800JD income level (M=4.0, SD = 1.9) to the >800JD income level (M = 2.4, SD= 0.62, 95% CI [0.05, 3.1]), a mean decrease of 1.6, SE = 0.50, which was statistically significant (p =0.042) (**Table 2**).

Table 2 Comparison of IDLS social distance for DD among different income levels using one-way ANOVA

		Income Levels						
		<180JD	180-300JD	301-500JD	501-800JD	>800JD	F	P
Autism	N	66	68	33	15	23	1.54	0.19
	x̄	3.32	3.39	3.96	3.77	3.43		
	SD	1.4	1.3	1.4	1.6	0.8		
Blindness	N	62	67	35	15	20	2.49	0.04
	x̄	3.01	2.96	3.06	3.98	2.40		
	SD	1.5	1.5	1.5	1.9	0.6		
Muscular Dystrophy	N	59	65	32	10	12	2.29	0.06
	x̄	3.17	3.32	3.79	4.37	2.80		
	SD	1.6	1.5	1.8	1.7	0.2		
Cerebral Palsy	N	58	64	31	14	17	1.69	0.15
	x̄	3.18	4.15	3.29	4.15	3.21		
	SD	1.6	1.4	1.4	1.6	0.8		
Down Syndrome	N	58	64	32	13	12	0.77	0.55
	x̄	3.26	3.37	3.51	3.93	2.97		
	SD	1.6	1.5	1.6	1.8	1.1		

Intellectual Disability Literacy Scale (IDLS)[22], modified to address: autism, blindness, cerebral palsy, Down Syndrome and muscular dystrophy. Income levels reflect monthly household income. One-way ANOVA, p<0.05

Similar observations were found in attitudes towards persons diagnosed muscular dystrophy (p=.06). Social distance for MD was normally distributed for the 301-500JD and 501-800JD income levels, as assessed by the Shapiro-Wilk's test (p>0.05). Social distance for MD scores increased from <180 (n=59, M= 3.2, SD = 1.6), to 180-300 (n= 65, M= 3.3, SD= 1.5), to 301-500 (N= 32, M= 3.8, SD= 1.8), to 501-800 (n= 10, M= 4.4, SD= 1.7), to a decrease in the >800 (n= 12, M= 2.8, SD=0.2) income level groups, in this order. Based on the assessment of Levene's test for equality of variances, the homogeneity of variances was violated (p= 0.034); thus, the Welch test was used to determine statistical significance between social distance for MD and income level F(4, 41.04) = 2.88, p<0.005. Although the distribution of profession varied, there was statistical significance between profession and attitude $\alpha_2(13) = 23.060$, p=0.041). Taking all different DDs, unlike CLAS test, the IDLS shows there is no dramatic difference in attitudes towards PWDDs, once respondents are exposed to vignettes.

Confirming influence of income on attitudes by qualitative study

Of the 259 participants, thirty-one participated in the qualitative phase of the study. The mean age for participants was 39.13 (range 19-65), less than half were male (42%, n=13), the remaining were female (58%, n=18). As shown in **Table 3**, 31 respondents, nearly one-third of respondents (29%, n=9) reported being employed as K-12 teachers; four from Madaba and five from Irbid. About thirteen percent (n=4) of respondents, were homemakers. While educator's monthly household income varied, one reported >800 Jordanian Dinar (JD) income, nearly half (45%, n=17) reported income of 180-300JD; eight of which were teachers. Less than a quarter of respondents (19%, n=6) reported an income of <180JD.

Table 3 Characteristics of focus group participants

Province	Characteristic	# of Participants	Mean age (range)	No. M/F
Amman	Homemaker	2	44.5 (44-45)	0/2
	Unemployed	1	46	0/1
	Construction	1	22	1/0
	Sales/ Retail	1	53	1/0
Irbid	University/ College Student	1	21	0/1
	Homemaker	2	37.5(32-43)	0/2
	Property Manager	1	50	1/0
	Physician	1	34	1/0
	Teacher (K-12)	5	32.4(28-44)	1/4
	Unemployed	1	40	1/0
Madaba	Childcare	2	48(42-54)	0/2
	Construction	1	36	1/0
	Teachers (K-12)	4	31.75(28-37)	4/0
	Unemployed	1	65	1/0
Zarqa	College/ University Student	1	19	0/1
	Cosmetologist	1	52	0/1
	Social Service	4	38.75(25-48)	0/4
	Religious/ Community Leader	1	56	1/0
Household Income (monthly)	<180JD	6		
	180-300JD	17		
	301-500JD	5		
	501-800JD	2		
	>800JD	1		

Experience with PWDDs was resonant among many respondents when discussing attitudes towards persons with developmental disabilities. Attitude was also dependent on knowledge of the developmental disabilities, regardless of income level. Overall, type of disability, severity, and gender influenced attitudes towards persons with developmental disabilities. Professional background marginally influenced attitudes. However, the combination of knowledge, age, level of religiosity, environment and professional background were identified as being related to attitudes towards persons with developmental disabilities.

When asked about the first thought that crossed their mind, when hearing "developmental disability," nearly all respondents mentioned empathy and well wishes, such as God having mercy on him or her, for persons with developmental disabilities. Terms such as "illness" were commonly used to describe developmental disability. While compassion towards PWDDs was evident, responses to specific questions regarding socialization, empowerment, sheltering, inclusion and socialization resulted in negative attitudes as noted below:

A professional stated that *the word "autism" is fairly new to us in Jordan. Up to a few years ago, people identified someone with autism as having a Jinn, needing special treatment or hormonal issues*.

The consensus among participants is that parents are primary caregivers of PWDDs, followed by specialized centers. Participants indicated that PWDDs are isolated from the public eye, in fear of being bullied, or shaming the family for having a relative with a disability. Excuses such as cultural changes, lack of community support and assistance, explained attitudes towards PWDDs:

Another professional stated, *mothers… keep their child at home, so that child doesn't feel he or she is different and so people won't realize or feel the child has a disability*.

Similarly, a respondent in a rural area indicated knowing *some people with disabilities, whose family cares for them. They don't live alone. Many families are shy to show their child with a DD, they may hide them from the company (guests or visitors)*.

Although all but one respondent indicating not having a child diagnosed with a DD, the response of potentially having a child with a DD resonated the current attitudes of fear, concern and protection. Interestingly, having a family member with a DD slightly improved attitudes towards PWDDs, post-awareness.

Another professional stated:

The father, siblings or society will they, accept or reject the child? A mother is the first to accept, in the beginning she may question "why" but in the end, she will accept because she's a mother. I lived in a home with someone with Down syndrome. My grandmother treated her son with DS as if he didn't have any feelings or sensory. She thought it was normal to bathe him in cold water during the winter. Because we grew up in this type of environment, the misconception didn't cross my mind until I grew up and was exposed to the correct information. I realized that we have the same sensory feelings. My actions with him changed.

A professional highlighted how attitudes are dependent on the type of disability:

If it was mental the concern is great, from the perspective of safety and fear, because people will be concerned about nuisance, their kids, because they can be violent such as breaking property or attacking a child.

Attitude towards PWDDs were identified as being dependent on the type of disability, as stated by a homeowner residing in an urban area:

When I gave birth, the doctor told me my daughter had a disability. I freaked out and became stressed I said…. she looks normal. I went to so many doctors. I was shocked. There is a difference between gender if something happens and the parents pass away, a boy can live but a girl may be taken advantage of.

Key themes of inclusion for PWDDs, across all provinces were combined with concerns over reality versus the ideal concept of inclusion. Parents of PWDDs were blamed for negligence when letting their unaccompanied child(ren) with DDs out in the community; this concern was due to the way PWDDs were abused by community members, particularly from adolescents. Again, type and severity of disability directed attitudes towards inclusion of PWDDs. As noted by a respondent in a northern rural area:

It varies (inclusion for PWDDs). A teacher tricked (student with DS) and told him to take a picture of them, the principal came, called the police and had him arrested. We spoke to the principal to explain that the child has DS. This cost the family $10,000 bail. He is picked on a lot.

A professional in a north-eastern area stated:

The level of developmental or mental disability will have influence. You can approach someone with a mild type of disability softly but a person with a disability who may also be aggressive or violent.

As the discussions progressed, teacher's attitudes of inclusion became negative. Educator's attitudes towards PWDDs, in Irbid, appeared to be induced by past experiences. Teachers in rural areas mentioned educational opportunities for PWDDs were limited in traditional schools, specialized centers were either too costly for parents and/ or inaccessible. This barrier left teachers of non-specialized schools for PWDDs to feel burdened, as they may not be trained to educate PWDs and/ or lack adequate resources to provide an inclusive academic environment. The following were their comments:

A respondent in a northern rural area stated:

I have a blind student, because she has no other choice. Another is a deaf student…the teacher can't turn around and focus on this specific child, abandoning other students. A (deaf) student won't be able to read the teachers lips, which means that child lost her right to an equal education. This type of service is not available in any schools, including governmental. The only time this service is available is through private schools, which focus on profit only.

A similar answer was provided by a respondent in a southern rural area stated:

People with CP don't go to school. But a child with MD or intellectual disability can go to school. If they are developmentally delayed, their parents won't educate them. How can they go to school? Most will stay home.

Another respondent in a southern rural area stated that *"teachers won't accept the student, they've literally rejected students with disabilities."*

Discussion

Studies related to disability are fairly recent in Jordan; much of which has focused on educator and student attitudes towards persons with select disabilities. [Abu-HamourB and Al-Hmouz H, 2014] To our knowledge, this is the first study to incorporate a mixed-methods design, to examine the relationship between Jordanians social economic status and attitudes towards PWDDs: specifically, autism, blindness, CP, DS and muscular dystrophy. This mixed-method study allowed for a more thorough investigation to identify barriers to improving disability awareness initiatives and attitudes towards persons with developmental disabilities.

Multifaceted factors such as socio-economic status, culture, gender, age, stigma and interaction with PWDDs shape one's attitude towards PWDDs, daily. [Patka M, Keys CB, Henry DB, and McDonald KE, 2013; Hampton NZZhu and Y, 2011; Sheridan J, Scior K, 2013] In line with this, our findings show that Jordanians socio-economic status, such as income, influences attitudes towards PWDDs. This clearly contradicts Tarawneh [2016] findings regarding no association between attitudes towards PWDs and economic status. Moreover, we observed different attitudes based on specific developmental disabilities. It is likely that our findings were significant due to using a mixed-methods study, as well as examination of attitudes towards specific DDs versus general disabilities.

Our analysis of the CLAS-MR, shows that lower-income Jordanian households persistently held negative attitudes towards PWDDs. This finding is slightly similar to Abu-Hamour, Muhaidat [2014], as they found married women from middle-income households, with higher education backgrounds, were likely to have favoring attitudes towards education of adolescents diagnosed with autism, compared to respondents from other income levels. This raises concern, as negative attitudes towards PWDDs may contribute to reducing adequate educational and employment opportunities and increase discriminatory behaviors, poor quality of health or potential abuse [Embregts PJCM, Heestermans M, van den Bogaard KJHM, 2017], of persons with DDs, even more in lower-income households.

In contrast to the CLAS-MR, the IDLS indicates Jordanians generally express negative attitudes of social distance towards PWDDs regardless of income level, more so to specific developmental disabilities, MD and blindness. This may be due to the fact that the IDLS contains vignettes that are close to reality. In fact, it has been shown that attitudes are dependent on the type of disability. [Ghasemi et al., 2011] Similarly, it was found that attitudes projected towards persons with a specific type of disability are not uncommon. [Moore D and Nettelbeck T, 2013] Overall, our findings from the IDLS indicate persons diagnosed with any of the examined DD, are more likely to be isolated from social activities and socio-economic opportunities, in their respective communities.

To confirm our quantitative findings, we compared the focus-group findings to the CLAS and IDLS results. In addition to quantitative data collection, focus groups allow us to understand respondents knowledge of DD, in addition to why respondents hold positive or negative attitudes towards PWDDs. Responses from the focus-group interviews resonated the notion that general attitude towards PWDDs is influenced by respondents' monthly income levels and type of DD. Even more, respondents did favor interaction and acceptance of persons having disabilities that required less assistance or attention from respondents. Interestingly the qualitative analysis also revealed that in combination with income, factors such as respondents educational background and type of experience with someone diagnosed with a DD may influence ones' attitudes towards persons with developmental disabilities. It is imperative for professionals to conduct an in-depth assessment of the target populations socio-economic background and biases towards specific types of DD, prior to designing DD initiatives. These findings suggest that in addition to accounting for a target population's socio-economic status, one should consider a holistic approach, which includes interaction with PWDDs, to improve attitudes towards PWDDs when designing DD awareness programs.

Worth noting, during the focus-group interview, respondents from Zarqa mentioned the term autism as fairly new to them. Many of the respondents across all provinces used the term "Mongoli,"to describe persons diagnosed with DS; this term was used around the globe until it was replaced with "Down Syndrome" in 1965. [Tenenbaum, 2011] The use of such term, in 2016, illustrates the urgent need to incorporate a holistic approach, which includes improved educational delivery methods, behavior change initiatives to improve attitudes towards PWDDs. Interactive awareness initiatives which include persons with developmental disabilities as stakeholders and educators may also improve attitudes towards PWDDs.

The academic environment can become a useful platform for disability awareness, shaping adolescents attitude and behavior towards PWDDs; however, the factors related to negative attitude must be addressed. For instance, acting on existing policies, providing special education related professional development trainings, improving academic infrastructure and resources, will likely improve educator's attitudes towards students with developmental disabilities. Fortunately, there is a positive shift towards increasing knowledge of special needs students' disability, however, the information may be general, and teachers continue to lack full understanding of DD or how to address PWDDs health complications or behavioral concerns when presented in the classroom. [Alkhamra H et al., 2012] In part, our focus on educators is due to the responses obtained from educators. Attitudes of educators openly rejecting to educate students with DDs will cause a negative domino effect, as students' will in-turn hold negative attitudes towards persons with developmental disabilities.

Our respondents were are diverse professional backgrounds, which includes professionals working in the healthcare, engineering, government and social service sectors. Although the academic environment is a foundation for knowledge, public health professionals must address attitudes towards PWDDs, at community levels. This calls for collaboration with- and educating of-community organizations and leaders, as well as healthcare and social service providers. Developmental disability awareness campaigns can have significant effects towards improving knowledge, perceptions, and attitudes towards PWDDS, at multiple levels; in-turn, this will improve the quality of life and well-being for many that are diagnosed with a developmental disability. Training healthcare [Tracy J and McDonald R, 2015] and social service providers about: disability, identifying the disabled's and caregivers needs, as well as implementing solutions, can improve the professional's attitudes towards persons with developmental disabilities. However, tailoring awareness initiatives based on a community's general socio-economic levels can further the effectiveness of disability awareness initiatives. Interactive awareness initiatives-which include persons with developmental disabilities as stakeholders and educators.

Strengths & Limitations

A mixed-methods design increased the credibility of information supplied by respondents. Multiple measures provided us

the ability to compare and contrast findings. Even more, the qualitative measure confirmed Jordanian attitudes towards persons with developmental disabilities. For instance, the modified CLAS-MR gave us a broad understanding of attitudes towards persons with developmental disabilities. However, the IDLS provided enlightenment towards understanding Jordanian attitudes towards persons with specific developmental disabilities.

This study is not without its limitations. Although 259 participants completed this study, the response rate may not be sufficient to generalize Jordanians attitude towards persons with developmental disabilities. For example, although we examined four provinces in Jordan, which gave us the ability to view the relationship between socio-economic status and attitudes towards PWDDs, of rural-vs-urban-vs-semi-rural, the findings may not be generalizable to Jordanians residing in other provinces, such as Aqaba, Wadi Rum or Bayir.

Conclusions

Currently, attitudes towards PWDDs are influenced by multiple factors, beyond income or professional background, such as environment, policies and cultural beliefs. Our mixed-methods study revealed attitudes towards PWDDs is dependent on type of developmental disability. Because disability research is limited in Jordan, we recommend public health professionals conduct an extensive disability-specific needs assessment, prior to implementing educational initiatives. Tailoring developmental disability initiatives can improve KPA towards PWDDs, as well as inclusion and quality of life for persons with developmental disabilities.

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Journal of Refugee & Global Health

Review Article

The Medical Evaluation of the Newly Resettled Female Refugee: A Narrative Review

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Abstract

The number of forcibly displaced individuals worldwide is increasing each year, reaching 65 million persons by the end of 2015, half of which were women and children. As the population of displaced persons grows, it is every physician's responsibility to understand these patients and their health needs. Refugee patients and the providers who care for them face many barriers to effective patient care, including language barriers, cultural differences, and systematic inequalities. Female refugees commonly experience gender-based violence, repetitive trauma, stigmatized mental illness, and cultural barriers to women's healthcare. This review is intended to be a comprehensive guide for the provider caring for the recently resettled female refugee patient. It addresses general considerations for working with refugee patients, initial medical evaluation guidelines, specific women's health issues, and mental health care of female refugee patients.

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Introduction

According to the U.S. Citizenship and Immigration Services, a refugee is a person who has been forced to flee his or her country due to persecution or fear of persecution based on race, religion, nationality, political opinion, or membership in a particular social group (U.S. Citizenship and Immigration Services). Due to the increasing number and duration of conflicts worldwide, the number of refugees has increased drastically; there were 65.3 million forcibly displaced persons worldwide in 2015 (UN High Commissioner for Refugees, 2015) In the United States alone, there has been a significant influx of refugees, with 69,933 refugees resettling in the U.S. in 2015 and 84,994 in 2016 (UNHCR, 2015). Approximately half of these refugees are women and children (UNHCR, 2015). As the population of displaced persons grows, it is every physician's responsibility to be able to understand these patients and their health needs (Mirza *et al.* 2014).

Several articles and guidelines have been published to inform us of how to care for resettled refugees (Centers for Disease Control and Prevention; Pottie *et al.* 2011). Infectious diseases, cultural differences, and language barriers make refugees a unique population. In addition, emerging research has highlighted the burden of chronic disease, trauma, and ongoing health disparities among refugee patients. In order to effectively address all health needs of refugees and surmount the barriers they face, a holistic approach to care is required.

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In this review, we will provide a general framework to approach the evaluation of a newly resettled female refugee patient. We combine new research and up-to-date guidelines to give physicians a thorough and culturally-sensitive guide to caring for refugee patients and addressing their unique needs. This review is intended to address a gap in the literature and serve as a definitive resource for providers caring for refugee patients.

Caring for Refugee Patients: General Considerations

The United States accepted refugees from approximately 82 countries last year, with most refugees originating in Burma, Iraq, Somalia, Democratic Republic of Congo, or Bhutan (Office of Admissions, Refugee Processing Center, 2016). While their countries of origin vary widely, refugees face many common barriers to healthcare, including language, cultural beliefs, perception of healthcare, and lack of experience with a western healthcare system.

Language is the most commonly identified barrier to refugee care, as most refugees speak little to no English. Language barriers are frustrating for both patient and provider, and can lead to adverse patient outcomes (Mirza *et al.* 2014; Flores, 2005). In general, the use of professional interpreters is recommended over the use of untrained ad hoc interpreters (such as patient family or friends), as professional interpreters provide more accurate translation and confidentiality (Flores, 2005; Flores, Abreu, Barone, Bachur & Lin, 2012; Karliner, Jacobs, Chen, Mutha, 2007). Studies have demonstrated that female patients feel more comfortable with female interpreters, especially when discussing women's health topics (Odunukan *et al.*, 2015). While using interpreters, the provider should

Table 1 Screening Tests for Communicable and Non-Communicable Diseases (CDC, 2014b)

Population	Disease or Condition	Test	Notes
All Refugees	General screen	CBC	
	General screen	Urinalysis	
	Varicella immunity	Varicella serology	If vaccine records are not available
	Pregnancy	Urine Pregnancy	For all female refugees of reproductive age
	Hyperlipidemia	Cholesterol	If indicated by ACC/AHA guidelines (CDC, 2014c)
	Diabetes	Hemoglobin A1C	If indicated by ADA guidelines (CDC, 2016)
	Hepatitis B	Hepatitis B serology	Check for active infection and immunization status; In countries with virus infection >2% (almost all refugee countries)
	Hepatitis C	anti–HCV antibody testing	Born 1945-1965, with risk factors (HIV, IVDU, blood products, chronic hemodialysis, abnormal ATL)
	HIV		No longer performed before arrival in the US; recommended for all patients
	Strongyloides	Serology or stool culture, O and P for those having symptoms	Only for those with no history of pre-departure therapy. Treat with ivermectin if positive. Do not need to re-treat patients from a country that routinely practices pre-departure therapy. List available at CDC. (Ahmed, Li, Liu, & Tsui, 2012)
	Syphilis	RPR or VDRL	
	Gonorrhea	Urine NAAT	For female refugees <25 years, those with a history of sexual assault, + leukesterase, or symptoms
	Chlamydia	Urine NAAT	For female refugees <25 years, those with a history of sexual assault, + leukesterase, or symptoms
	Tuberculosis	Quanterferon Gold, T-spot, or TST	If positive, follow up with chest x-ray; if indeterminate, repeat test
	Schistosomiasis	Serology or stool culture, O and P for those having symptoms	Only for those with no history of pre-departure therapy. Treat with praziquantel if positive. Do not need to re-treat patients from a country that routinely practices pre-departure therapy. List available at CDC. (Ahmed, Li, Liu, & Tsui, 2012)
Sub-Saharan African Refugees	Malaria	Smear	
Bhutanese	Vitamin deficiency	Vitamin B12/Folate	

continue to talk directly to the patient, using first person terms and maintaining eye contact with the patient (Juckett & Unger, 2014). These simple gestures better allow the patient and provider to connect, even when there is a third-party providing interpretation.

Refugees and other immigrant patients often have perceptions of health and illness that differ from those of Western medicine. For example, a study of Iraqi women found that health was highly valued and closely tied to religion, God, and fate (Salman & Resick, 2015). Familiarity with the patient's perspectives and cultural beliefs can help guide appropriate care plans and improve the doctor-patient relationship (Simmelink, Lighfoot, Dube, Blevins & Lum, 2013). There are several resources available, such as the Cultural Orientation Resource Center (http://www.culturalorientation.net/learning/backgrounders), to help physicians learn about cultural beliefs (Cultural Orientation Resource Center). It is also important for the physician to emphasize doctor-patient confidentiality, as many refugees come to the United States without prior contact with a medical system and may not understand their rights as patients (Murray, Mohamed & Ndunduyenge, 2013).

Another common barrier to healthcare is a lack of understanding of our insurance system by both providers and refugee patients. Newly-arrived refugees are given 8 months of health insurance through the Refugee Medical Assistance (RMA) program (Office of Refugee Resettlement). This brief coverage allows patients to see a physician for their initial evaluation and any necessary follow up. After 8 months, refugees are eligible to apply for health insurance through the Affordable Care Act (as of July 2017) or their employers (Terasaki, Ahrenholz & Haider, 2015). While RMA provides urgent and necessary coverage for recently resettled refugees, there are often significant lapses in coverage once the first 8 months have passed. Clinician awareness of this time limit ensures that all necessary tests, procedures, and preventative care are done well within the first 8 months of arrival. In addition, medical problems that usually are treated through a "wait-and-see" approach, such as inguinal hernias, should be approached with more caution and quicker intervention while insurance is guaranteed.

General Medical Evaluation of Refugee Patients

Before entering the United States, all refugees undergo a health evaluation. The purpose of this evaluation is largely to screen for communicable diseases, such as tuberculosis (TB), syphilis, intestinal parasites, and sexually transmitted diseases (Terasaki, Ahrenholz & Haider, 2015; CDC, 2014c). Physicians should review the documentation from the overseas exam, if available. Once refugees have arrived in the U.S., guidelines put forward by the CDC and other organizations direct further testing, much of which varies by country of origin. These guidelines are frequently updated based on current epidemiologic data, and can be accessed online. The most recent CDC guidelines for health screening of refugee patients newly arrived in the U.S. are summarized in **Table 1** (CDC, 2014b).

A special note must be made about tuberculosis (TB), which continues to be prevalent among refugee populations. All immigrants and refugees are thoroughly screened for active TB prior to arrival to the U.S. However, there are high rates of latent TB among refugees, as well as an elevated risk of reactivation TB within the first year of resettlement. Tuberculosis screening should be repeated once refugees are resettled, unless prior infection and treatment is documented in the patient's records. Patients with a positive TB screen should be referred for chest x-ray to rule out active TB and immediately enrolled in appropriate treatment for either latent or active disease (ORR Health Insurance; Terasaki, Ahrenholz & Haider, 2015). Immunization records should also be examined on the first domestic visit of refugee patients. If incomplete or unavailable, serologic evaluation should be done for hepatitis B and varicella before initiating the vaccine catch-up schedule. Once vaccination

status is identified, refugees can catch up on vaccines via the vaccination schedule provided by the CDC (CDC, 2016; Kim, Riley, Harriman, Hunter & Bridges 2017; Merrett, Schwartzman, Rivest & Greenaway, 2007).

Chronic Disease

While the majority of screening recommendations are targeted towards infectious diseases and nutritional deficiencies specific to immigrant and refugee populations, many refugees also have chronic diseases. In the past, it was thought that migrant populations were generally healthier than host populations, termed the "healthy migrant effect" (Norredam *et al.*, 2014). However, recent research has shown that refugee populations carry a significant burden of chronic diseases. Rates of hypertension, diabetes, and obesity, have been shown to be as high as 30%, 14%, and 64.8% respectively (Bhatta, Shakya, Assad & Zullo 2015; Kumar *et al.* 2014; Redditt, Graziano, Janakiram & Rashid 2015). There are many factors contributing to this occurrence, including acculturation, food insecurity, poverty, and varying health beliefs. Food insecurity, for example, is more prevalent among refugees than other immigrant populations and is associated with worsening of chronic health conditions, such as diabetes and heart disease (Dharod, Croom & Sady, 2013).

For primary care providers, these phenomena complicate the screening of refugee patients. In addition to focusing on refugee-specific medicine, physicians must also screen for chronic disease and understand the impact of local circumstances on their health.

Women's Health

Now that we have reviewed general guidelines for refugee care, we will present gender-specific considerations pertaining to refugee women. A template for a women's health-focused visit for a newly arrived female refugee patient is included in **Figure 1**.

Sexual Health and Contraception

Women's reproductive rights and access to family planning are improving globally, but there remain large disparities among migrant and refugee populations (Pottie *et al.*, 2011). Up to 40% of refugee and immigrant women have an unmet contraceptive need (United Nations, Department of Economic and Social Affairs, Population Division). This disparity is associated with poor health outcomes for already vulnerable migrant populations, including high rates of unintended pregnancy, increased rates of abortion, and higher rates of maternal mortality (Ahmed, Li, Liu & Robinson, 2012). For domestic providers, it is important to know that migrant populations have high pregnancy rates, especially in the first three months of resettlement (Gagnon, Merry & Robinson, 2002). While women are encouraged to make their own choices about family planning, providers should counsel women early and often about family planning.

There are many barriers to effectively providing family planning resources to refugee populations. Lack of knowledge about modern contraception is often cited as an important factor (Pottie *et al.*, 2011; Salisbury *et al.*, 2016). Religious and cultural beliefs are also considerations, although most religions do allow contraception use for proper birth spacing (Davidson, Fabiyi, Demissie, Getachew & Gilliam 2016). In some cultures, a woman's partner and family have the greatest influence on her family planning decisions; worldwide, it is estimated that 12% of married women do not use contraception because of the influence of one or more outside parties (Sedgh, Hussain, Bankole *et al.*, 2007). These other individuals can be brought into family planning conversations when appropriate.

In addition to one-on-one contraceptive counseling, group education may be helpful in educating refugees about family planning options. Since women most often get their contraceptive information from their peers, community education can be effective (Pottie *et al.*, 2011).

Female Genital Mutilation/Cutting

Female genital mutilation or cutting (FGM/C) includes any procedure that intentionally removes part or all of the external female genitalia without medical benefit (WHO, 2008). FGM is practiced worldwide, but is most commonly practiced in areas of Sub-Saharan Africa, the Middle East, and Asia. UNICEF estimates that almost 200 million women and girls have been subject to the procedure. Given the high prevalence of this practice and increasing global migration, it is increasingly important for physicians in the United States to be aware of the complications, health implications and practice of FGM/C (UN Children's Fund UNICEF, 2004).

FGM/C is a human rights violation and can have serious medical consequences. Immediate complications from FGM/C include hemorrhage, infection, urinary problems, and fractures from forceful restraint. Long term consequences include chronic pain, recurrent UTIs, scarring, infertility, and complications during pregnancy (WHO, 2008; Nour, 2004).

When caring for a patient who has a known history of FGM or comes from a country with high rates of FGM, providers should be aware of the types of FGM (**Table 2**, UN Children's Fund UNICEF, 2004) and the language used to discuss cutting. Before the pelvic exam, providers should explain the examination process to the patient. When female patients with FGM/C are considering having children, providers should counsel patients on deinfibulation, a reversal procedure, and refer to obstetrics and gynecology for appropriate prenatal or obstetric care (Nour, 2004). Beyond medical complications, FGM may also cause psychological trauma and embarrassment for women (Connor *et al.* 2016). Providers should be prepared to provide reassurance and support for patients with FGM.

Cervical Cancer Screening

Refugee women should undergo cervical cancer screening between ages 21 and 65 as per USPSTF guidelines for the general population. For women over the age of 65 who have never had a Pap test before, a one-time Pap test is recommended (U.S. Preventative Services Task Force; ACOG Cervical Cancer Screening).

Figure 1 Women's Refugee Clinic Note Template

Name: ***

Active Gynecologic Complaints: ***

Past Obstetric History:
P *** G *** A ***
Complicated Pregnancies? ***

Past Gynecologic History:
Menstruating? *** Date of last period: ***
Age at Menarche? ***
Abnormal uterine bleeding (menorrhagia, metorrhagia, dysmenorrhea)? ***
Hysterectomy or other gyn surgeries? ***
Do you know what a pap smear is? ***
Have you ever had a pap smear? ***
Prior Birth control use? ***
History of FGM or trauma to your genitals? ***

Past Breast History:
Have you ever had a mammogram (if indicated)? ***
Have you noticed any changes in your breasts in the last year (lumps, discharge, pain)? ***

Past Bone History:
Calcium/Vitamin d intake: ***
History of fractures: ***
H/o steroids: ***
Last DEXA results (if indicated): ***

Relevant PMH/PSH: ***

Relevant Family History:
(Breast cancer, ovarian cancer, STIs, fractures, osteoporosis, bleeding disorders, non-contributory, etc.) ***

Allergy List: ***

Social History:
Tobacco Use: ***
Alcohol Use: ***
Drug Use: ***
Safe at home and at work? ***
Highest Level of Education? ***
Literacy level? ***

Mental Health Screen:
Flashbacks/nightmares: ***
Need for referral for trauma counseling: ***

Sexual History:

Number of Partners: ***
Gender of Partners**:** ***
How do you identify with regard to sexual orientation? ***
What kind of sexual practices (anal, vaginal, oral)? ***
Past history of STIs: ***
Have you been exposed to anyone you knew had a STI? ***
Current Birth control method: ***
Are you currently trying to conceive? ***
Currently interested in birth control? ***

Sexual Assault History:
Did anyone ever hurt you or threaten you to have sex or to commit sexual acts? ***
Did you ever feel that something bad would happen to you if you did not have sex with someone? ***

ROS (OB/GYN): ***

Physical Exam: ***

Assessment:

Plan:
Routine refugee women's health screening
-- GC/Chlamydia (if not previously ordered)
-- Urine Pregnancy
-- HIV and RPR (if not previously ordered)
-- Pap smear

Preventive refugee women's health screening
-- Mammogram
-- DEXA
-- Immunizations given: ***

Contraception and family planning
--Patient (is/is not) pregnant today
--Counseled regarding pregnancy test results
--Counseled about Contraception and family planning (contraindications to contraception)
--Contraception provided to patient: ***
--Pre-natal vitamins ordered if patient refuses contraception or is trying to conceive: ***

Mental Health screen: ***

Referrals: ***

Table 2 Types of Female Genital Mutilation or Cutting, WHO

Type I	Total or partial removal of the clitoris, often referred to as a clitoridectomy
Type II	Partial or total removal of the clitoris with total or partial excision of the labia minora
Type III	Infibulation; narrowing of the vaginal opening with or without removal of the clitoris
Type IV	All other harmful procedures to the female genitalia for non-medical purposes, including pricking, piercing, incising, scraping, or burning

Most refugee women come from countries where the rate of cervical cancer screening is low and, consequently, the incidence of cervical cancer is high (Ferlay *et al.*, 2012). Screening services are often unavailable or inaccessible in refugees' home countries due to cost, travel, and limited medical resources. Even after resettlement, refugee patients continue to have lower screening rates than the general population and other immigrant populations (Anaman, Correa-Velez & King, 2016). A study of Bhutanese refugee women reported that only 22.2% had heard of a pap smear and only 13.9% had reported ever having one (Haworth, Margalit, Ross, Nepal & Soliman, 2014). This disparity is due to lack of understanding, language barriers, cultural beliefs, embarrassment, and negative past experiences (Abdullah, Copping, Kessel, Luck & Bonel, 2009; Fang & Baker, 2013). Because of these barriers, refugee women are at risk for delayed diagnosis of cervical cancer and higher morbidity and mortality (Anaman, Correa-Velez & King, 2016).

There are several actions that providers can take in order to make cervical cancer screening more accessible and acceptable to refugee women. Education in the patient's native language about the purpose of screening and a step-by-step description of the procedure helps provide knowledge and reassurance (Anaman, Correa-Velez & King, 2016; Abdullahi, Copping, Kessel, Luck & Bonell, 2013; Zhang *et al.*, 2016). In addition, having female-only providers and interpreters and deferring the Pap smear until the second clinic visit can also make the procedure more acceptable to the patient.

In our clinic, we try to apply these methods to increase patient comfort and compliance. We use culturally sensitive teaching about pap smears and ensure proper education through visual aids and teach-back methodology. We also conduct all cervical cancer screening during a designated women's-only clinic day, subsequent to the initial clinic visit. This model allows us to ensure that patients have met the clinic staff before and are only seeing female providers and interpreters for their women's health exams.

Breast Cancer Screening

Similar to cervical cancer screening, breast cancer screening rates are also lower in refugee populations and associated with later diagnoses and elevated morbidity. A study in Ontario, Canada demonstrated screening rates as low as 48.5% among certain refugee populations (Vahabi, Lofters, Kumar & Glazier, 2016). Many similar barriers have been shown to affect breast cancer screening, such as knowledge, language barriers, cultural practices, embarrassment, and fear (Saadi, Bond & Percac-Lima, 2012; 2015). Culturally sensitive and language-concordant educational programs are effective in increasing breast cancer screening rates. Patient navigation services have also been shown to increase screening rates, though these services are unavailable in most healthcare settings. In addition, encouraging preventative health visits and increased contact with the healthcare system has been correlated with increased cancer screenings (Gondek *et al.*, 2015; Brown, Consedine & Magai 2006; Percac-Lima,Ashburner, Bond, Oo & Atlas, 2013).

Mental Health

Refugee patients are at high risk for mental health disease including post-traumatic stress disorder (PTSD) and depression (Taylor *et al.*, 2014; Berthold *et al.*, 2014). It is estimated that refugees experience PTSD at 2-10 times higher rates than the general Western population (Mollica *et al.*, 2004; Fazel, Wheeler & Danesh, 2005). The consequences extend beyond mental health; PTSD is associated with increased cardiovascular disease, poor health behaviors, and higher morbidity and mortality, further increasing health disparities in an already disadvantaged population (Zen, Whooley, Zhao & Cohen, 2012). Compounding this problem, refugees have much lower rates of engagement in care for mental health disorders (Johnson-Agbakwu, Allen, Nizigiyimana, Ramirez & Hollifield, 2014). Some barriers, such as language, transportation, and health insurance, are similar to those barriers preventing refugees from accessing general health services (Berthold *et al.*, 2014). However, there are more significant burdens in relation to mental health due to religious and cultural beliefs, stigmatization, and low mental health literacy among refugee population (Colucci, Minas, Szware, Guerra & Paxton, 2015; Piwowarczyk, Bishop, Yusuf, Mudymba & Raj, 2014). These factors often lead to a lack of understanding of the role of mental health professionals and resistance to engagement in therapy.

Mental Health Screening

Because refugees have limited contact with the healthcare system, efficient and effective screening measures are required to identify refugees who have or are at risk of developing mental health conditions. Mental health screening should take place at the initial refugee health visit and all subsequent visits (Shannon, 2014; CDC, 2014a) Due to stigma and trauma, it may take several visits before refugees are able or willing to disclose any mental health problems. For example, although only 1% of Congolese refugees were identified to have mental health disorders in their pre-departure health screening from 2010 to 2012, a population-based study performed around the same time found rates as high as 41% and 50% of depression and PTSD, respectively (U.S. HHS, CDC Congolese Refugee Health Profile, 2016). Thus, it is important to screen at each encounter, even if the initial screen is negative.

Several screening tools exist for providers. In our clinic, we use Refugee Health Screener-15 (RHS-15), which consists of 15 questions and takes between 4 and 12 minutes to administer (Hollifield *et al.*, 2013). Unlike other screening tools, the RHS-15 screens for a variety of psychological disorders and is available in 12 languages (Hollifield *et al.*, 2016). When doing mental health screenings, physicians must plan for patient safety if any acute suicidal or homicidal ideation is expressed, and they should be aware of mental health services for refugees in their area and be able to make referrals if needed (CDC, 2014a). Professional interpreters should also be utilized in all mental health discussions (Shannon, 2014; Crosby, 2013).

PTSD, Gender-based Violence, and Somatization

PTSD and depression are exacerbated by recurrent exposure to trauma, social stressors, poverty, malnutrition, illness, and loss of social networks (Terasaki, Ahrenholz & Haider, 2015; Fazel, Reed, Panter-Brick & Stein, 2012). The PTSD experienced by refugees is often compared to that of war veterans or sexual

assault survivors, however there are several crucial differences. Traumatized refugees often experience repeat severe traumas, such as torture, sexual assault, imprisonment, witnessed killing or abuse, and life endangerment (Buhmann, 2014). The severity and repetitiveness of trauma make refugees a unique population in discussing PTSD.

For female refugees, the impact of trauma may be amplified through gender-specific violence. Sexual and domestic violence increase during periods of instability and displacement (Asgary, Emery & Wong, 2013). The consequences of gender-based violence are broad, leading not only to psychological distress, but also physical, medical, and social problems for female refugees.

In addition to higher rates of PTSD and depression, refugees also experience more somatization than the general population, with one study demonstrating the prevalence to be as high as 63% (Rohlof, Knipscheer & Kleber, 2014). There are several well-defined culturally-specific somatization syndromes, such as "sore-neck syndrome" among Khmer refugees or gastrointestinal focused panic attacks among Cambodian refugees (Hinton, Um & Ba, 2001; Hinton, Chhean, Fama, Pollack & McNally, 2007). Torture survivors may complain of pain in an area they were traumatized, even without physical evidence of existing pathology (Rohlof, Knipscheer & Kleber, 2014). Providers should recognize the commonality of somatic complaints and realize that it can be difficult to differentiate somatic complaints from true medical conditions. Somatic complaints should not be addressed with opioids or other medical therapies, but with referral to appropriate mental health services.

Since the trauma experienced by refugees is unique, the treatment for the resulting mental health disorders must be appropriately adjusted. In general, a combination of medication and trauma-focused cognitive behavioral therapy are recommended for PTSD (Crumlish & O'Rourke, 2010). However, this treatment model may be unfitting for refugee populations due to resource scarcity, cultural differences, long history of trauma, and stigma. Refugee patients in need of psychiatric care should be referred to providers who are knowledgeable about refugee patients and may use different therapies, such as narrative exposure therapy (NET), that have been proven effective in treating traumatized refugee patients (Hijazi *et al.*, 2014).

Conclusion

Caring for refugee patients is both extremely challenging and rewarding. Newly resettled refugees face many barriers to medical care, including language, transportation, knowledge, and cultural and religious beliefs. Like many other vulnerable patient groups in our country, they also struggle with food insecurity, chronic illness, and poverty in numbers previously unrecognized. Despite these hardships, this is a population that is characterized by resiliency and that has much to gain from our medical institution. Physicians should be aware of the ever-changing guidelines and evolving needs of this population. This review summarizes the existing clinical guidelines and recommendations for culturally competent and empathic care for female refugee individuals. We hope that this review will help providers feel more prepared to provide effective care for this unique population.

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Original Research

Knowledge, Attitude and Practices Toward Nutrition and Diet During Pregnancy Among Recently Delivered Women of Syrian Refugees

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Abstract

The aim of this study is to assess the nutrition situation in terms of knowledge, attitude and practices (KAP) among recently delivered Syrian refugee women and to identify nutrition related KAP problems of this vulnerable population. An analytical descriptive cross-sectional study was conducted on a non-randomized sample of one hundred recently delivered Syrian women from refugee background aged 18 years old and above who were admitted for delivery to the obstetric unit of a governmental hospital located in Beirut, Lebanon. The study reveals that fifty-six percent of the studied population was not knowledgeable about maternal nutrition during pregnancy, twenty-five percent had a negative attitude toward antenatal care (ANC) services and nutrition during pregnancy and forty-seven percent of the participants were having bad dietary practices during pregnancy. Knowledge, attitude and practices toward nutrition and diet during pregnancy are still lacking among this sensitive population.

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Introduction

Pregnancy is a crucial period in women's lives where they tend to experience many changes in their bodies. Pregnant women are exposed to physical, physiological and mental changes all along the pregnancy period (Perlen et al., 2013).

Increased needs for energy, macronutrients and micronutrients are required throughout the pregnancy period to provide the needed nutrients to the growing fetus and to ensure health and wellbeing of the mother. Women in developing countries are at risk of malnutrition and nutritional deficits during pregnancy resulting in negative pregnancy outcomes such as delay in fetal growth and development, pre-term delivery, low birth weight and maternal anemia (Conde-Agudelo et al., 2012).

Since the initiation of the Syrian war in 2011, Lebanon has been estimated to be hosting the largest number of Syrian refugees (Benage et al., 2015). According to the United Nations High Commissioner for Refugees (UNHCR), over 1 million Syrian refugees are distributed in different Lebanese areas (South Lebanon, North Lebanon, Bekaa and Beirut), Bekaa being the area of high density refugee settlement. Most Syrian refugees are living in crowded places (Masterson et al., 2014) with restricted resources. Several families can be living in the same rental apartments (Masterson et al., 2014), whereas some others are in tents on the street, deserted buildings, or sites with unfinished construction (Benage et al., 2015). This displaced population encounters many different challenges and obstacles preventing them from being in good health condition (Sami et al., 2014), such as poor hygiene, poverty and food insecurity (Masterson et al., 2014). Food insecurity has been common among recently delivered women of Syrian Refugees in Lebanon which is often caused by their displacement; they eat whatever is available irrespective of their food preferences and daily dietary requirements which may lead to inadequate nutrition (Masterson et al., 2014).

Furthermore, the forced displacement disrupts reproductive health and antenatal care (Hogan et al., 2010). This fact jeopardizes reproductive women and newborns' health. The Lebanese Ministry of Public Health (MOPH) in collaboration with United Nations (UN) agencies such as UNHCR and UN Population Fund (UNFPA) started to offer health care services for Syrian pregnant women in different Lebanese areas. According to the Syrian Refugee and Affected Host Population Health Access survey conducted in Lebanon in 2015, 86% of women who had given birth the past year delivered in Lebanon: 39.9% in public hospitals, 47.8% in private hospitals and 7.8% at home. As for antenatal care (ANC), 87% of Syrian pregnant women received it during their last pregnancy with an average of 6.1 visits. ANC was received in Primary Health centers (55%) and in private clinics (41%).

Despite all the health services provided to the vulnerable population, few Syrian women meet dietary requirements during pregnancy (Benage et al., 2015). In fact, limited data showed inadequate nutrition irrespective of ANC access among pregnant Syrian refugees. Consequently, there is a need for data on the food and nutrients intakes as well as on Syrian refugee women's knowledge and attitude toward nutrition and diet during pregnancy.

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The objective of this study is to assess the nutrition situation in terms of knowledge, attitude and practices (KAP) among recently delivered Syrian refugee women and to identify nutrition related KAP problems of the studied population.

Several hypotheses were identified as follows:

1. Nutritional knowledge is associated with maternal educational level, access to ANC services and newborn birth weight among Syrian refugees.
2. Women's attitude toward nutrition is related to maternal educational level, access to ANC services and newborn birth weight among Syrian refugees.
3. Dietary practice is associated with maternal educational level, access to ANC services and newborn birth weight among Syrian refugees.

Materials and Methods

An analytical descriptive cross-sectional study was conducted on 100 recently delivered Syrian women from a refugee background aged 18 years old and above to assess their knowledge, attitude and practices toward nutrition during pregnancy. Institutional Review Board (IRB) approval has been issued from the hospital to access the medical records of each Syrian pregnant woman admitted for delivery to the obstetric unit of Rafik Hariri University Hospital (RHUH), the largest governmental hospital located in Beirut, Lebanon. All women who were included in the study were interviewed after delivery and given a consent form to confirm their participation in the study; accordingly, a face to face questionnaire was filled. Data were collected for 2 months starting August 2016.

Questionnaire Design

The used questionnaire in this study was an adapted version of previously validated questionnaire (Marías et al., 2014), it tackled data on socio-demographic and medical characteristics, the context of pregnancy and prenatal care (Ibanez et al., 2015), pre-pregnancy weight, women's perception to nutrition importance and supplementation, women's attitude toward ANC and maternal and infant nutrition and mother's dietary practices. The questionnaire and the consent form were translated to Arabic language by an expert translator and verified by a gynecologist.

A quantitative approach was used to assess KAP toward nutrition and diet during pregnancy of the studied population. Knowledge questions consisted of 10 open ended questions requiring short answers from the participants. Attitude questions consisted of 6 questions which had three answer options showing one for positive attitude, one for uncertainty and the third for negative attitude. Practice questions consisted of 10 "yes-no" questions in addition to short food intake checklist. Indicators to quantify knowledge, attitude and practice were reported in terms of percentages and scores (Onyeneho & Subramanian, 2016; Liu et al., 2015; Sani & Siow, 2014; Popa et al., 2013; Khun et al., 2012).

Variables

Dependent variables: Knowledge, Attitudes and Practices of the studied population toward nutrition during pregnancy. Independent variables: Educational level, ANC visits, Newborn birth weight.

KAP Scores

Participants' answers to knowledge questions were given a score. One point was assigned for correct answers for all questions of nutritional knowledge, then the sum of correct answers was obtained (the sum of total scores for these questions ranged from zero to ten points maximum score) (Daba et al., 2013).

Participants' answers to attitude questions were given a score. One point was assigned for positive attitude for all attitude questions and zero point was assigned to both uncertain and negative attitude, then the sum was obtained (the sum of total scores for these questions ranged from zero to six points maximum score) (Daba et al., 2013).

Participants' answers to practice questions were given a score. One point was assigned for correct answers for all dietary practices questions KAP Scores, then the sum of correct answers was obtained (the sum of total scores for these questions ranged from zero to thirteen points maximum score) (Daba et al., 2013).

Statistical Analysis

The data entry and analyses were performed using the Statistical Package for the Social Sciences (SPSS) version 23.0. Means with standard deviation and percentages were used to describe continuous and categorical variables, respectively. Statistical bivariate analysis was performed. The Pearson chi-square ($\chi 2$) and Fisher exact tests were used to determine the associations. A p-value $< .05$ was considered statistically significant. A multivariate analysis using logistic regression was carried out with the practice score as the dependent variable. Independent variables were maternal education and attendance of ANC services. Adjusted odds ratios (OR) and their 95% confidence intervals (CI) were reported. The final logistic regression model was reached after ensuring the adequacy of the data using the Hosmer and Lemeshow test.

Results and Discussion

All 100 participants who fit the inclusion criteria agreed to participate in the study without any withdrawal (0% rejection rate). Almost all the participants originated from rural Syrian areas and had low educational level. Participants reported that they were living in a rental apartment (99%), were unemployed during their pregnancy (98%) and did not seek a job during that period, except for the 2% who had a full-time job to help with family income due to the fact that their husbands were unemployed. Full-time jobs of the pregnant women such as sewing of clothes were provided by Non-Governmental Organizations as stated by the participants. Most of the husbands were working a full-time job (85%); their salaries would cover the rental fee of the place they are living in. Their low socioeconomic status barely allowed them to meet basic living needs and contributed to the selection of non-nutritive food during pregnancy.

Nevertheless, 75.68% of the participants did not gain gestational weight as per recommendations where 55.41% gained less than the required and 20.27% gained more than the required. This result shows that more than half of the participants were not

aware of the appropriate weight gain during pregnancy (**Table 1,2**); this finding is in agreement with several other studies (Shulman & Kottke, 2016; Brown & Avery, 2012; McDonald et al., 2011).

Table 1 Participants' Characteristics

	Frequency (%)
Mother age (n=100)	
< 25 years old	25%
25- 34 years old	60%
35- 44 years old	15%
Accommodation ownership (n=100)	
Rental	99%
Personal	1%
Maternal employment during pregnancy (n=100)	
Unemployed	98%
Full time job	2%
Husband employment (n=100)	
Unemployed	4%
Part time job	11%
Full time job	85%
Maternal education (n=100)	
Illiterate	21%
Primary School	68%
Secondary School	8%
Higher	3%
Number of births (n= 100)	
Secundiparous	30%
Tertiparous	13%
Multiparous (≥ 4)	57%
Inter-pregnancy interval (with previous pregnancy) (n=100)	
< 6 months	8%
6-12 months	10%
> 1 year	82%
BMI Categories (n=74)	
Underweight (<18.5 Kg/m2)	5.40%
Normal weight (18.5- 25 Kg/m2)	55.40%
Overweight (25-30 Kg/m2)	20.30%
Obese (≥30 Kg/m2)	18.90%
Classification of total gestational weight gain based on recommendations (n=74)	
Not within recommended range based on pre-pregnancy BMI	75.68% (56/74)
Within recommended range based on pre-pregnancy BMI	24.32% (18/74)
Gained more than the required	20.27% (15/74)
Gained less than the required	55.41% (41/74)
CUTOFF Newborn birth weight (n=100)	
Less than 2500 gram	6%
≥ 2500 gram	94%
CUTOFF Hemoglobin level (n=100)	
Less than 11 g/dl	27%
≥ 11 g/dl	73%

Table 2 Obstetric History

	Mean± SD
Gestational age in weeks (n= 100)	38.71 ± 1.665
Newborn Birth weight in grams (n= 100)	3196.6± 513.489
Hemoglobin at the day of delivery in g/dl (n= 100)	11.8 ± 1.269

Table 3 ANC services

	Frequency(%)
Registration with UNHCR (n=100)	
Yes	99%
No	1%
Attendance of ANC (n=100)	
Yes	91%
No	9%
Number of prenatal care visits (n=83) Mean(SD)=4.90±2.052, MIN=1 MAX=9	
Less than 4 times	26.50%
≥ 4 times	73.50%
Iron supplement prescribed (n=98)	
Yes	99%
No	1%
Trimester of iron tablets prescription (n=97)	
First trimester	39.20%
Second trimester	42.30%
Third trimester	18.60%
Breastfeeding session provided in ANC (n= 98)	
Yes	49%
No	51%
Anemia self-reported (n=80)	
Anemic	57.50%
Not anemic	42.50%
When suffered from anemia? (n=46)	
Before getting pregnant	45.70%
First trimester	19.60%
Second trimester	13%
Third trimester	10.90%
Don't know	10.90%

With regard to ANC services (**Table 3**), 99% of the studied population was registered with UNHCR which allowed them to have free access to ANC clinics located in different Lebanese areas irrespective of their socioeconomic status. 91% of the participants had attended ANC clinics throughout their pregnancy with a minimum of one visit and a maximum of 9 visits. 73.5% visited the ANC clinics at least 4 times which is in line with United Nations Children's Fund (UNICEF) Sustainable Development Goals (2016-2030); those women fully benefited from services including renewal of iron supplements, laboratory tests, hygiene session, etc. The high rate of access to ANC clinics is related to many factors including participants UNHCR registration, ANC visits coverage, regional location of respondents and availability of health care providers in each region.

The mean Knowledge score (n=99) was 5.42 with a standard deviation (SD) of 2.28. 44% of the studied population was knowledgeable about maternal nutrition during pregnancy whereas the other 56% were not knowledgeable (**Table 4**). This implies that more than half of the participants had little knowledge about nutrition during pregnancy; in contrary to the finding of another study which was conducted on pregnant women in Ethiopia (Daba et al., 2013). This finding may be explained by the lack of exposure to nutrition-related topics during pregnancy and to the ignorance of the studied population toward the importance of diet during this phase.

Table 4 Participants' Nutritional Knowledge

	Frequency (%)
Causes of undernutrition (n=100)	
Not getting enough food	22%
Food does not contain enough nutrients	6%
Others (sickness, etc.)	7%
Don't know	65%
Important supplements to be used during pregnancy (n=100)	
Iron supplement	47%
Others (multi-vitamins, Calcium supplement)	7%
Don't know	46%
Identification of Anemia by participants (n= 99)	
Dizziness	41.40%
Low energy/weakness	20.20%
Paleness	17.20%
Others	7.10%
Don't know	14.10%
Identification of health risks when infants' diet lacks iron (n=100)	
Delay of mental and physical development	17%
Malnutrition	2%
Anemia	1%
Don't know	80%
Identification of health risks when pregnant women's diet lacks iron (n=100)	
Anemia	28%
General weakness	8%
Difficult delivery	2%
LBW	1%
Don't know	61%
Knowledge of participants about anemia preventive measures (n=100)	
Eat iron-rich foods	31%
Take iron supplements	8%
Others (disease/infection, avoid tea consumption)	12%
Don't know	49%
Knowledge about iron rich food (n=100)	
Heme iron food	15%
Non heme iron food	29%
Heme iron food & non heme iron food	20%
Don't know	36%
Knowledge about food enhancing iron absorption when taken with meals (n=100)	
Vitamin-C-rich foods, such as fresh citrus fruits (orange, lemons, etc.)	4%
Don't know	96%
Knowledge about beverages inhibiting iron absorption when taken with meals (n=100)	
Coffee, tea, Nescafé, carbonated beverages	53%
Don't know	47%
Knowledge score (n=99), Mean (SD)= 5.42 ± 2.28	
Less than mean Knowledge score	56%
≥ mean Knowledge score	44%
Source of nutritional information (n=100)	
ANC/ Doctors clinic	50%
TV/ Radio	10%
Neighbors/Family/ Friends	25%
School	8%
Others	1%
None	6%

The mean Attitude score (n=95) was 4.85 with a standard deviation of 0.99. 75% of the studied population had a positive attitude toward ANC services, maternal and infant nutrition whereas 25% had a negative attitude (**Table 5**). This finding can be promising for the future, especially that almost all participants (90%) found it crucial to seek ANC. Improving services in ANC, including nutrition counseling, may increase nutritional knowledge among this vulnerable population.

Table 5 Participants' Attitude

	Frequency (%)
Importance of seeking ANC during pregnancy (n=100)	
Positive attitude	90%
Uncertain attitude	1%
Negative attitude	9%
Skipping a main meal every day will not affect the pregnant woman's health (n=100)	
Positive attitude	68%
Uncertain attitude	5%
Negative attitude	27%
Preparing meals with iron-rich foods such as beef, chicken or fish (n=100)	
Positive attitude	74%
Uncertain attitude	12%
Negative attitude	14%
Use of iron supplement on daily basis during pregnancy (n=100)	
Positive attitude	62%
Uncertain attitude	1%
Negative attitude	37%
Confidence toward breastfeeding the newborn (n=100)	
Positive attitude	92%
Uncertain attitude	6%
Negative attitude	2%
Attitude score (n=95)	
Positive attitude	75%
Negative attitude	25%

Table 6 Participants' Practices

	Frequency (%)
Alcohol Consumption during pregnancy (n=100)	
Yes	0%
No	100%
Smoking during pregnancy (n=100)	
Yes	5%
No	95%
Daily use of iron supplementation (n=100)	
Yes	95%
No	5%
Consumption of animal products one day before admission (n=100)	
Yes	58%
No	42%
Consumption of dark green leafy vegetables one day before admission (n=100)	
Yes	13%
No	87%
More food consumed during pregnancy as compared to before getting pregnant (n=100)	
Yes	53%
No	47%
Daily Breakfast consumption(n=100)	
Yes	79%
No	21%
Daily Lunch consumption (n=100)	
Yes	80%
No	20%
Daily Dinner consumption (n=100)	
Yes	77%
No	23%
Add of citrus fruits to dark green leafy vegetables (n=100)	
Yes	79%
No	21%
Reason of adding citrus fruits to dark green leafy vegetables (n=80)	
Healthy	1.20%
Others (Like, better taste, culturally known)	98.80%
Coffee/tea consumption during pregnancy (n=100)	
Yes	81%
No	19%
Timing of Coffee/tea consumption during pregnancy (n=81)	
Two hours before or after a meal	21%
One hour before or after a meal	24.70%
During the meal	53.10%
Others	1.20%
Practice Score (n=81)	
Good dietary practices	53%
Bad dietary practices	47%

The mean Practice score (n=81) was 8.5 ± 1.07. 53% of the participants were identified as having good dietary practices and the other 47% were having bad dietary habits during pregnancy (**Table 6**).

Around half of the participants were not getting enough nutrients during pregnancy and were not following a diet specific to this phase; similar findings were noticed in the study of Ajantha et al. (2015). Some had actually inadequate energy, protein and iron intakes from food. This was mainly related to the lack of education, unavailability of all food sources at all times and to financial restriction which did not allow pregnant women to buy or prepare nutritive food.

There was no significant association between newborn weight (p= 0.8), attendance of ANC (p= 0.5), maternal education (p= 0.3) and the Knowledge score. Similar findings were observed in the literature regarding no association between nutritional knowledge and maternal educational level (Xu et al., 2016). The

observed non-significance can be related to social and cultural factors of the studied population.

There was no significant association between newborn weight (p= 0.3), attendance of ANC (p= 0.11), maternal education (p= 0.3) and the Attitude score. This shows that other predicting factors must be studied to have a better understanding of the factors that can influence women's attitude. Attitude may be related to women's intention irrespective of age, education and attendance of ANC.

A significant association was found between attendance of ANC (p= 0.01), maternal education (p= 0.04) and the Practice score. There was no significant association between newborn weight (p= 0.9) and the Practice score.
The Practice score was associated with maternal education (p= 0.03, OR 3.8 with 95% CI (1.2-12.5) and attendance of ANC services (p= 0.02, OR 12.25 with 95% CI (1.4 105.7).

Significant association between dietary practices and maternal education was also seen in the study of Saldiva et al. (2014). Regarding ANC, a healthcare professional can play an important role in influencing women's practices including compliance to diet and supplementation; similar findings have been noted in several other studies (Benage et al., 2015; Vosnacos & Pinchon, 2015; Popa et al., 2013).

Conclusion

Knowledge, attitude and practices toward nutrition and diet during pregnancy is still lacking among this sensitive population of Syrian Refugees' women.

Strategies targeting females can be initiated in schools; this will increase their knowledge toward good dietary practices as they grow to become women of childbearing age. As well, implementing effective nutritional programs and policies at ANC targeting pre-conception and conception period is essential and the need to standardize medical and nutritional practices among healthcare professionals in all available ANC is important to tackle in order to provide consistency of care as it was shown that the attendance of ANC services had an influence on dietary practices of pregnant women.

This study targeted a vulnerable population, specifically the pregnant women of Syrian Refugees in Lebanon. It identified the knowledge, attitude and practices toward nutrition of this particular high-risk population which is among few other published articles that has tackled attitude of high risk women.
However, this study had some limitations. It was a cross-sectional study with a small sample size covering one hospital setting located in the Beirut area, thus the results cannot be generalized. Women were interviewed after delivery; they were not followed up throughout the three trimesters. The retrieved 24-hour recall was not analyzed in terms of calories and dietary iron intake to know about the exact intakes, and it was taken for one day which does not represent the intakes over the whole pregnancy period. Information about pre-pregnancy weight was self-reported by participants which can increase bias.

Future highlights on multi-level qualitative and quantitative research may be helpful in understanding the determinants of nutritional knowledge, attitudes and dietary practices during pregnancy. The Syrian food culture has to be well studied in order to implement nutritional programs designed to this population. Nutrition counseling at ANC clinics has to suit Syrian dietary habits in order to improve their practices (Lindsay et al., 2014) as cultures differ from one country to another.

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Multimedia

Global Health Navigators: A New Component in a Refugee-Centered Medical Home Model of Care

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Abstract

In this video, Dr. Ruth Carrico, Director of the Global Health Center Travel Clinic and Refugee Health Programs:

- Describes the University of Louisville refugee-centered medical home care model
- Introduces a novel element, the Global Health Navigator, and their roles and responsibilities in the care of the refugee population
- Reviews the competencies and training components important for this new role
- Uses case scenarios to demonstrate the value of Global Health Navigators in refugee care

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