Public health crisis in the refugee community: little change in social determinants of health preserve health disparities

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Abstract

Structural inequities and lack of resources put vulnerable refugee communities at great risk. Refugees flee their country of origin to escape persecution and flee from war, famine and torture. Resettled refugee communities become particularly vulnerable during times of crisis due to limited English proficiency and poor social determinants of health (SDOH), which create barriers to attaining and sustaining health and wellbeing for themselves and their families. The purpose of this case study was to evaluate SDOH among a refugee community in the Southeastern United States. We surveyed the community twice during a 1-year period to assess various elements of SDOH. Among a primarily African and Southeast Asian refugee community, 76% reported difficulty paying for food, housing and healthcare during the first round of surveys. During the second round of surveys at the beginning of the Coronavirus pandemic, 70% reported lost income; 58% indicated concern about paying bills. There was little change during the 12-month study period, showing that SDOH are an enduring measure of poor health and wellbeing for this vulnerable refugee community.

Introduction

Refugee and immigrant communities are vulnerable to adverse health conditions often caused by poor social determinants of health (SDOH). This population generally consists of larger families living in dense quarters, low-paid front line workers in a variety of industries, limited English skills, poor access to and use of healthcare services, high degrees of financial and food insecurity, low rates of health insurance and high degrees of stress. A problem particular to these predominantly limited English proficient (LEP) populations is providing information that both comes from a trusted source and is culturally and linguistically appropriate. Without meaningful access to information, LEP populations have little chance to improve their health and wellbeing. In particular, lack of accessible and meaningful health education and promotion exacerbates the poor SDOH that are experienced by residents in the community.

The purpose of this study is to share insights on the SDOH in a population of multi-ethnic refugees in the southeast United States both during a 1-year period that includes the beginning of the Coronavirus pandemic. We contend that this refugee community has significant poor SDOH and that those barriers to health and well-being have only continued or gotten worse at the beginning of the pandemic. We examined barriers to health and wellbeing, particularly limited English proficiency, financial insecurity.
and knowledge of resources. Reducing these barriers could ameliorate many of the disparities for improving SDOH for this vulnerable refugee community.

**Background**

Approximately 3 million refugees have been resettled in the United States since the passage of the Refugee Act of 1980, which provides refugees with legal, financial and social support to assist them through the U.S. Resettlement Program [1]. Refugees leave their country of origin, often fleeing from war, famine and torture or due to a well-founded fear of persecution for reasons of race, religion, nationality and affiliation to a particular social or political group. The U.S. resettlement system is funded with federal funds funneled from the Office of Refugee Resettlement to a network of NGOs, social service agencies and faith-based organizations and is designed to expedite self-sufficiency of new arrivals within a 6-month timeframe [2]. The focus on rapid integration often leaves refugees without the long-term support frequently resulting in financial instability, lack of health insurance and lack of basic needs for children among some populations of refugees [3]. Low birth weight, poor educational outcomes, high rates of mental and physical illness and behavioral risks plague the refugee community and are compounded by the perceived stigma of immigration status in the United States [4–7]. Despite the economic research indicating that refugees contribute more than they receive in benefits and social services [7], policy has not supported the expansion of longer-term integration resources that could alleviate many of the disparities persisting in refugee communities. Many refugees serve as frontline workers, families tend to be large and housed in small quarters, language and literacy issues are common and most live below the poverty line [8–11]. All of these factors contribute to the persistent health disparities experienced by refugees [3].

There is currently a dearth of evidence about the unique social and health-related needs of refugees in the United States. Broadly speaking, most current epidemiologic research focuses on health outcomes of immigrants (individuals that come into a new country, region or environment with the purpose of settling in that area with or without persecution) not refugees [12]. Some data about refugees explore perceptions of health providers or single ethnic community needs, yet little is known about the barriers and facilitators to health care for refugees in general, particularly those living in diverse communities [12].

Healthy People 2020 defines social determinants of health (SDOH) as falling into five categories: economic stability, education, social and community context, health and health care, neighborhood and built environment [13]. SDOH focus on community-level economic and social conditions rather than on individual needs, and are structural in nature. Social determinants are directly related to poor health status; individuals who live in communities with limited access to health facilities, educational opportunities and low-quality housing experience greater health disparities [3]. Individual needs interact with SDOH in both simple and complex ways. For example, lack of available transportation is a community-level circumstance; on the individual level, the specific SDOH problem may be limited access to bus stop locations. Not being able to get to transportation, or perhaps not even knowing where transportation is, creates a social condition that affects both individual- and community-level health.

**Methods**

**Setting**

Clarkston, a city in DeKalb County, Georgia, is a ‘superdiverse’ community where more than 17 000 refugees who speak 60 different languages have settled since 2004. A superdiverse community is one where there has been significant demographic change that includes many different nationalities and cultures [14]. The CDC-funded Prevention Research Center (PRC) at Georgia State University is headquartered in Clarkston and works with community organizations, state and local government,
community partners and residents to develop, implement and evaluate culturally and linguistically appropriate interventions to address the determinants of health for refugees and to disseminate this work at the community, state and national levels.

Study sample
To evaluate SDOH in the community during a 1-year period, we collaborated with several partner health clinics and refugee resettlement agencies to recruit study participants. Some participants were called by researchers to assess interest and consent. Other participants responded by using a web-based link, and others were recruited and consented at the health clinics or refugee agencies. Our community partners were interested in understanding barriers and facilitators to healthcare access including SDOH; these data had never been collected in the Clarkston community. Data were collected in Spring 2019 (n = 136 participants) and Spring 2020 (n = 128 participants). Interpreters were available to assist with informed consent and survey administration with primary language needs being Swahili, Arabic and Burmese. The University Institutional Review Board approved this study. There was no crossover between the study participants, that is, each study sample was composed of unique individuals ages 18 and older who resided in the Clarkston area and who self-reported as refugees or asylees.

Measures
When working with communities to mobilize around health and wellbeing, community engagement is an essential public health practice [15]. Community engagement includes partnerships between academic institutions, community-based organizations, health agencies and community members that provide a network for thoughtful communication and discussions. Community engagement serves as an invaluable and integral tool through which relevant needs assessment data and information can be gathered through input from key stakeholders and members in the community. Data and information gathered are used to understand community health assets, challenges and areas that can be improved. Needs assessment data can be used to carefully map out a strategy to improve health and make positive and sustainable changes that community leaders and members can implement. Surveys were created using community engagement guidelines.

At both time points, we took into account methodological considerations to ensure the surveys were adapted appropriately for research with refugees [16]. We were unable to use a straightforward probability technique (stratified, random, cluster), instead using convenience sampling guided by service providers (health clinics, refugee agencies). Refugee service providers have built-in trust and social relations with refugee adults in the community, and thus removed potential reluctance of refugees to participate in the study. Based on our prior experiences in the community and on prior studies, we knew that we were most likely to have more participation with a gatekeeper (health clinic, refugee agency) who would provide our researchers access [16–18].

Two cross-sectional surveys were created and allow us to conduct a case study of community needs at two-time points. In both cases, we were concerned with gathering information from both English speaking and limited English proficient respondents, therefore, we used interpreters to reach our subjects for both consent and data gathering [16]. The latter survey was also offered online in English or over the telephone in a variety of languages due to COVID-19 restrictions on face to face human subjects research.

The first survey was informed by findings of a multi-disciplinary community-wide summit held in November 2018 which focused on refugee health and wellness. One significant gap identified was the lack of data on residents in the community. Development of the second instrument was informed by a request from community health clinic partners for specific issues, and utilized a community-engaged approach by closely working with and responding to community partner organizations and health clinics. In both surveys, we focused on English proficiency, stress and SDOH. English proficiency was measured by both self-
report of ability to read, write and speak English and the need for interpreter services to complete the survey. Stress was measured through self-report of feeling scared, anxious or unable to sleep. SDOH was measured by assessing financial security and household size. Other data were collected in both surveys but are not relevant to this particular report. See Table I for measures collected in both studies.

### Data collection and analysis

Data were collected either orally face to face, through a web-link or through a telephone-based survey. Web-based respondents were consented on the first page of the electronic survey. Telephone interviews were ~20 min long, and participants consented verbally prior to the interview beginning. Face to face surveys were ~30 min long, and participants signed informed consent forms. Multilingual study assistants were used, as needed, to provide interpretation for participants who took part either face to face or by phone and requested to speak in their native language. Question responses were either factual (e.g. age), multiple choice (e.g. where do you get health care services with a list of choices) or ordinal using a Likert-style scale (e.g. how would you describe your health with four answers ranging from poor to very good). Univariate and bivariate descriptive analyses were conducted using SPSS V25 including means, frequency and Pearson correlations.

### Results

With regard to English proficiency, 78% of our participants preferred a language other than English to complete the survey \((n=247)\). Additional results from Spring 2019 show that over half \((57.4\%)\) of participants self-reported marginal reading, writing and speaking skills in English \((n=128)\). With regard to levels of stress, 66% of all participants over the two surveys indicated having high levels of daily stress. SDOH results for all participants indicate high levels of financial insecurity \((82\%)\), 31% living in high-density households \((6 \text{ or more people})\) and almost 70% of the population did not know where to get benefits like unemployment or financial assistance (See Table II).

In Spring 2019, results show significant relationships between high levels of stress and poor health status \((r=0.371, \ P<0.05)\) and between high levels of stress and financial insecurity \((r=0.444, \ P<0.05; \text{ Table III})\). A significant relationship between high levels of stress and more detailed financial insecurity were revealed during the Spring 2020 data collection with food insecurity (this week, \(r=-0.252, \ P<0.05\) and next week, \(r=-0.239, \ P<0.05\)) and between high levels of stress and financial insecurity (inability to pay bills this month, \(r=-0.304, \ P<0.05\) and next month, \(r=-0.354, \ P<0.05\); Table III).
Among a community composed of primarily African and South Asian refugees, our findings from community assessments on SDOH highlight the vulnerability refugees face on a daily basis. One clear concern is the inability to navigate resources for benefits assistance in the Clarkston refugee community which is validated in other studies conducted among migrant populations [19, 20], demonstrating significant and persistent barriers to meeting individual needs. Not meeting individual needs is a social risk that exacerbates other existing poor SDOH in a vulnerable community affected by health inequities.

There is little research specific to multi-ethnic refugee communities; hence, we wanted to provide some basic documentation of the conditions which likely contribute to disparities in health and social determinants in this population. Participants had limited English proficiency, lived in high-density housing, had significant levels of daily stress and did not know how to access needed resources—all important predictors of poor health status and low quality of life [3, 21–24]. Although the community is home to a wide range of service providers including safety-net clinics, social service agencies and faith-based organizations, the services provided can be hard to access, poorly funded, not available all the time and confusing to refugees—our first study shows that a large percentage of refugees do not know where to get help with food assistance, money problems, legal assistance or housing, combined with a large percentage of the second sample not knowing where to go to get benefits like unemployment assistance. Language is another key barrier to

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**Table II**  Social determinants of health—data collected Spring 2019 and Spring 2020 (n = 247)

| Variable                                                                 | n (%)     |
|-------------------------------------------------------------------------|-----------|
| Limited English Proficiency                                             |           |
| Interpreter needed                                                      | 112 (37.0%)|
| Marginal reading, writing and speaking English skills\(^a\)             | 73 (57.4\%)\(^a\) |
| High levels of stress                                                   | 200 (66%) |
| High levels of financial insecurity                                    | 249 (82%) |
| Live in high-density households (>6 people)                             | 94 (31%)  |
| Do not know where to get or access community benefits                   | 212 (70%) |

\(^a\)From Spring 2019 survey only, n = 128.

**Table III**  Correlations among stress and financial insecurity—data collected Spring 2019 and Spring 2020

|                                      | Stress          | Financial Insecurity |
|--------------------------------------|-----------------|----------------------|
| Data collected Spring 2019          |                 |                      |
| Stress                               | —               | 0.444**              |
| Financial insecurity                 | 0.444**         | —                    |
|                                      |                 |                      |
| Data collected Spring 2020          |                 |                      |
| Stress                               | —               | —                    |
| Financial insecurity this month      | —               | −0.304\(^a\)        |
| Financial insecurity next month      | −0.354\(^a\)   | −0.315\(^a\)        |

\(^a\)Significant at the \(P < 0.05\) level.
improving SDOH; English proficiency is a key facilitator to improving access to health, healthcare, understanding rights regarding housing and unemployment, accessing community resources and helping children navigate through school and beyond.

Our planned Spring 2020 data collection pivoted to both continue to understand SDOH and to understand how this community was uniquely impacted by the Coronavirus pandemic. Community partners wanted to understand where the pandemic would have the most serious impact. We established and validated the fragility of the population in terms of English proficiency, access to benefits, and stress. These are essential needs; disparities documented in Spring 2019 were just as severe with participants having financial insecurity, high levels of stress and poor knowledge of how to access benefits and help; all important predictors of health problems and low quality of life [3, 21–26].

In fact, our studies show the depth of structural inequities, unemployment, ability to maintain daily sustenance and lack of knowledge on or ability to access resources which exacerbate existing health disparities within this population. Structural inequities in the healthcare system such as a lack of insurance or access to technology for poor families have a direct impact on health outcomes [19]. The refugee community has also been disproportionately impacted by the pandemic living in multigenerational and dense housing where social distancing is not an option, working in frontline jobs with limited access to health information and PPEs, significant loss of income and food security, no reliable access to technology and a general lack of knowledge about how and where to access benefits.

There is limited research on individual-level social, economic and environmental factors affecting this vulnerable population. These data are critical to developing sustainable interventions to improve individual- and community-level health. Funding and support services for refugee resettlement is largely devoted to the first 6 months post-arrival including immediate housing and employment needs [2, 7]. There is little that supports ongoing integration such as adult education, language classes or skills training to enhance employment opportunities. The majority of refugees remain in low-wage jobs without health insurance, with limited English proficiency, lacking the social mobility necessary to escape the cycle of poverty in the community. The intersection between individuals at high risk and poor community-level SDOH resources reinforces the challenges refugees face in improving their health and well-being [4, 6, 10, 11].

Recommendations

Based on our findings and other similar published research on SDOH in migrant populations [10, 11, 27, 28], several critical recommendations are suggested to achieve equitable improvement in refugee health and well-being. Recommendations must begin by focusing on reducing barriers to community health services and other resources, and improving SDOH for the 3 million refugees already living in communities throughout the US. First, there must be an expansion of and improvement in the quality and number of language and literacy services for refugees immediately upon arrival. Limited English skills keep refugees locked in a socioeconomic stratum that prevents them from accessing healthcare, education and the jobs they need to improve their lives. Refugees are also less able to maximize social service benefits (nutrition services, health insurance, childcare, mental health services, substance abuse program, etc.) due to limitations in language skills. Second, to ensure successful resettlement transitions for refugees, host communities should be provided adequate resources. US health indicators lag behind many other countries because of the underinvestment in ongoing social services. This pandemic has highlighted an even greater need for behavioral health services, food access, technology access and financial security among others. Third, education and training for health professionals should include intercultural competence skills for patient-centered care and provide culturally and linguistically appropriate health education and promotion materials to refugee patients [29]. Training and supports are needed for community health workers (CHW) from
within each ethnic community. CHW are integral to refugee health and wellbeing [28]. These individuals can assist with navigation by providing maps of their communities with locations and descriptions of support services such as health care, transportation options, after-school care, childcare, job training, language classes, legal assistance and others. Additionally, training for CHW can also assist clinicians with patient navigation for specialty care referrals, benefit applications and prescription education to improve patient compliance and access to health services. Finally, there is a need to establish a national coordinated data collection effort to understand the diversity, needs and approaches to resettling and integrating refugees throughout the United States. Data collection and surveillance of health and SDOH in the refugee population will strengthen the infrastructure and capacity to more fully understand needs of the population and respond to new concerns.

Action is needed on many fronts to eliminate the existing systemic disparities for all vulnerable populations in the United States. [23–26, 30–32]. The Coronavirus pandemic has proven to be especially virulent in communities like Clarkston, and it will require a significant change not just in the healthcare system but in the local, state and federal policy approaches to democratize health, education, social services and all of the determinants of health and well-being to mitigate its impact. Culturally and linguistically appropriate approaches to collaboration and delivery of care are needed for clinicians. Community organizations need more resources and better infrastructure for collaboration. Meaningful connection to technology for lower resourced communities must become a standard for the delivery of health information, education, access to benefits and employment opportunities. In the wake of a pandemic, public and individual health systems have been exposed to the vulnerabilities of communities most at risk because of structural inequities, refugees being one of those groups. The lessons learned from our studies are significant to all communities where social determinants of health contribute to poor health outcomes.

Strengths and limitations

Limitations in our surveys include self-report responses which could indicate response bias as well as the use of available rather than trained language interpreters. We were not able to study the same group of respondents in both surveys nor did we ask all of the same questions in which eliminates an ability to compare all pre-responses and post-responses; this manuscript focuses on reporting measures that were collected at both time points. We used a non-probability method of sampling, which resulted in data limitations and inability to generalize. However, these findings have important strengths and are valuable to understanding the needs of this refugee community. These data have never been collected in this community, and findings both corroborate and challenge years of anecdotal evidence; one critical finding from the first study, for example, is that despite numerous refugee agencies and community organizations created to assist refugees, a large number of respondents did not know where to get help with a host of issues including legal, housing, financial, food insecurity and job training. Based on these findings, we created a geocoded map of these types of resources in Clarkston which is hosted by the Atlanta Regional Commission and used throughout the community today. Results from the second survey indicated, for example, that despite a high level of food insecurity, few refugees used a food pantry to supplement their groceries. Questions arise as to whether that is due to the type of foods available at a food pantry which may not be familiar to refugee or suitable for refugee diets, or whether refugees do not know how to access a food pantry. Our studies are critically important in informing data-driven interventions to improve the health and well-being of this refugee community.

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Conflict of interest statement

None declared.

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