

Perceived Health Issues:

A perspective from East-African immigrants

M. P-L Shipp, S. A. Francis, K. R. Fluegge & S. A. Asfaw

Volume 6, No. 1 (2014) | ISSN 2161-6590 (online)

DOI 10.5195/hcs.2014.113 | <http://hcs.pitt.edu>



New articles in this journal are licensed under a Creative Commons Attribution 3.0 United States License.



This journal is published by the [University Library System](#) of the [University of Pittsburgh](#) as part of its [D-Scribe Digital Publishing Program](#), and is cosponsored by the [University of Pittsburgh Press](#).

Abstract

This Study explores Somali and Ethiopian community leaders' perceptions about health issues in their communities and the barriers to access and utilization of primary health care services.

Fourteen in-depth interviews were conducted with community leaders and thematic analysis was used to analyze interviews.

Participants identified chronic diseases, the unhealthy behaviors associated with them, and mental health as major health issues. Infectious diseases were secondarily mentioned as important health concerns. Lack of insurance and limited understanding of the health system were viewed as barriers to utilizing health care services. Other identified needs were: better education within immigrant communities about major health issues, enhanced cultural awareness of health care providers, improved health care access, and assistance with the acculturation process.

Recommendations to improve the communities' health status included enhancing providers' cultural competence, educating immigrants about major health issues, and increasing mental health care access.

Keywords: *Perceived health issues; health perspectives; East-African immigrants*

Perceived Health Issues:

A perspective from East-African immigrants

M. P-L Shipp, S. A. Francis, K.R. Fluegge & S. A. Asfaw

I. Introduction

Findings of research examining immigrants and refugees' health status in their host country describe a better health status of newly arrived foreign-born persons compared to native populations; this is known as "the healthy immigrant effect" or HIE (Walker & Barnett, 2007; Fennelly, 2006; Beiser, 2005; McDonald & Kennedy, 2004). Although competitive theories are being evaluated and a clear understanding of factors underpinning the HIE phenomenon has yet to be reached, it is recognized that at their arrival, most immigrants and refugees are healthier overall and have a lower prevalence of chronic diseases than natives in the host country (Fennelly, 2006; Beiser, 2005; Singh & Siahpush, 2001). However, this HIE advantage does not seem to benefit all immigrant populations equally. Dunn and Dyck (1998) found that immigrants and refugees are more likely to report very good or excellent health if they: were born in Europe, the United States (U.S.) or Australia (compared to Asia, Africa or South-America); are in the highest income quintile; and have a trade school or college diploma as opposed to a high school diploma. Furthermore, the 'healthy immigrant effect' does not last for all groups, as some immigrants, healthy on arrival, lose this advantage over time and experience deteriorating health (Fennelly, 2006; Oza-Frank, Stephenson & Narayan, 2011; Chen, NG & Wilkins, 1996).

Reportedly, re-location from another country, particularly when involuntary and impelled by conflict and violence, often result in significant emotional and social turmoil, interruption in health care and negative health consequences for those displaced (Pavlish, Noor & Brandt, 2010; Palmer & Ward, 2007; Berman, Giron & Marroquin, 2009). Due to their pre-migratory exposure to violence, physical and psychological trauma, deprivation and in many cases time spent in refugee camps, the health status of refugees from conflict-prone areas of Africa can be expected to be poorer than that of other immigrants. A limited number of studies of immigrants from war-torn areas in Africa, around the world and in the U.S., also points to a potentially negative impact of resettlement on the overall health of these immigrant groups (Venters & Gany, 2011), as well as a higher risk of developing mental health disorders (Kirmayer et al, 2011; Jaranson et al, 2004; Palinkas et al, 2003). In the U.S., factors such as poverty, access to health care, environmental risk, and lifestyles changes are believed to contribute to declining health among some immigrant and refugee groups and to health disparities between immigrants and the population at large (Fennelly, 2006; Antecol & Bedar, 2006). This phenomenon needs to be explored further as many communities in the U.S. are experiencing significant growth in the number of immigrants residing in their communities.

According to the United Nations High Commissioner for Refugees (UNHCR, 2010) of the 98,800 resettled refugees during 2010 (with or without UNHCR assistance) the U.S. accepted the highest number for resettlement

(71,400). It is critical to have a better understanding of immigrant population's health experience and health care needs in order to provide culturally appropriate care that addresses their unique health needs. In light of the growing number of East-African immigrants in Ohio (both from Somalia and Ethiopia) it is relevant to focus on these communities.

Unfortunately, existing health data are not generally disaggregated by subpopulation to allow culturally sensitive interventions to be effectively directed to these populations. This qualitative investigation seeks to obtain information about major health care needs within Somali and Ethiopian communities from the point of view of their community leaders in order to give these communities a voice in the planning of interventions that could improve their health and wellness.

II. Background

Persons of East-African descent (notably from Somalia and Ethiopia) represent the second largest immigrant group (after Mexican immigrants) in Franklin County, having increased by over 90% from 2000 to 2005 (Garber, Hood, Sullivan & Poliandro, 2007). Brown et al. (2007) calculated refugee resettlement indices in Franklin County [Columbus] to be the fourth largest in 49 American cities observed for the Ethiopian population and the largest for the Somali population.

Somali and Ethiopian communities have a rich religious and cultural heritage. According to the Ethiopian Population Census Commission, two religions dominate in the Ethiopian community, with a majority Christian (Ethiopian Orthodox church, Protestant) and a minority Muslim (World Factbook, 2009) while the majority of Somalis are Sunni Muslims. In terms of educational attainment, given that many Somalis and Ethiopian had to leave their country due to internal conflict, educational pursuits were often interrupted. As a result, the illiteracy rate is high in these populations. The percent of the total population 15 years and older able to read and write has been estimated between 37.8% and 42.7% in Somalia and Ethiopia respectively (World Factbook, 2009). Therefore, oral and visual transference of knowledge is customary among Somalis and Ethiopians. This lack of literacy poses significant challenges to refugees and immigrants as they attempt to adapt to their host country.

Refugees and immigrants from both countries, especially from Somalia, who relocated in the U.S., face additional challenges after resettlement. Mental and psychosocial distress have been reported in these communities (Ohmans, 2000; Jablensky et al, 1994; Fenta et al, 2010) along with high levels of stress, homelessness and depression (Gallagher, Davis & Adem, 2010; Matheson, Jordan & Anisman, 2008). A study examining the prevalence of depression, anxiety and post-traumatic stress disorder (PTSD) in a sample of 143 Somali refugees residing in the United Kingdom found depression and anxiety to be present in 33.8% of the sample (Bhui et al, 2006). In addition, adaptation is made more difficult as refugees and immigrants often meet with overt racial, religious and cultural discrimination and find themselves marginalized in their host country (Lauderdale, Wen, Jacobs & Kandula, 2006; Hadley & Patil, 2009; Ellis, MacDonald, Lincoln & Cabral, 2008).

The burden of infectious diseases among refugees and immigrants is also significant. Acute parasitic and infectious diseases endemic to the source countries, such as: schistosomiasis, filariasis, strongyloidis (Stauffer & Rosenberger, 2007; Varkey, Jerath, Bagniewski, Lesnick, 2007; Franco-Paredes et al, 2007) chronic hepatitis B (Museru et al, 2010), tuberculosis (Cain, Benoit, Winston & MacKenzie, 2008), malaria (Stauffer et al, 2008) and HIV (Cartwright, 2006) are also significantly high among recent refugees from East Africa. On the other hand, risk factors for chronic diseases, common in the U.S. and linked to the adoption of western dietary and other health related habits, tend to develop gradually among immigrants who have lived here for longer periods (3 years or more) (DesMeules et al, 2005). Consequently, conditions such as obesity, type II diabetes, cardiovascular diseases

and cancer are increasing among African immigrants (Venters & Gany, 2009). Of note, the burden of chronic disease is also currently rising in countries of sub-Saharan Africa, soon to become an important cause of mortality (Danaei et al, 2011; Mbanya et al, 2010; Mensah, 2008; Mbweni & Mbanya, 2006). Rates of type 2 diabetes are 1.9% and 2.3% in Ethiopia and Somalia respectively, and are expected to grow quickly in the coming years (Mbanya et al, 2010; Gill, Mbanya, Ramaiya & Tesfaye, 2009). This current research study sought to obtain information from Somali and Ethiopian community leaders about major health issues and health care needs in their communities as well as their perspective on how to better address them.

III. Methods

Setting

This study used a participatory model in which members of the immigrant communities worked with the researchers to assist in the proposal writing, development of interview questions, translation and back-translation of interviews in Somali, Amharic and English, and identification of culturally appropriate methods to identify and contact potential volunteer participants. Collaboration with a non-profit multicultural community organization was instrumental in this process. Persons from Somalia and Ethiopia on the board of this organization served as the link between the researcher and the communities of interest and as a sounding board to the researcher in the development of qualitative instruments. The study's objectives and methods were discussed with this group. To become familiar with these communities and the context in which they live in Central Ohio, two members of the advisory board accompanied the researcher in a "windshield tour" of varied housing and business areas (malls, restaurants, coffee shops, homes), and facilitated introductions to individuals in the communities.

Several community leaders were identified as potential participants through word of mouth from individuals in the Somali and Ethiopian communities. For the purpose of this article, the word "immigrants" will be used to include refugees, asylees and legal immigrants from both countries who have resettled in Franklin County.¹ Community leaders were Somali and Ethiopian men and women who had lived in the Columbus for a minimum of five years, had served in a leadership role, and were knowledgeable about their community. Once leaders in each community had been identified, letters explaining the project and requesting an interview were emailed to them. A copy of the interview questions along with a short consent form (e.g. request approval to allow tape-recording of the interview) accompanied the letter.

¹ According to the U. S. Department of Homeland Security (Martin & Yankay, 2011) the US Immigration and Nationality Act (INA) defines refugees as "persons who are unable or unwilling to return to their country of nationality because of persecution or a well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group or political opinion. An applicant for refugee status is outside the U.S. Asylum seekers (asylees) - When people flee their own country and seek sanctuary in another state, they often have to apply for 'asylum' in country – the right to be recognized as bona fide refugees and receive legal protection and material assistance. An applicant for asylum is already in the U.S, or at a port of entry. Immigrants are those persons admitted to the United States as lawful, permanent residents. They may be issued immigrant visas by the Department of State overseas or adjusted to permanent resident status by the Immigration and Naturalization Service in the United States. Immigration preference is given to close family members of United States residents and to persons with needed job skills. Martin D.C. & Yankay J.E (2012). Refugees and Asylees: 2011. Annual Flow Report, May 2012. Office of Immigration Statistics, Department of Homeland Security. Accessed on April, 2013 at: http://www.dhs.gov/xlibrary/assets/statistics/publications/ois_rfa_fr_2011.pdf

Data collection and interviews

The research questions were organized around 3 major domains: 1) Perceived health issues in the communities and their causes; 2) Perceived barriers to access and utilization of health care; 3) Opinions about most urgently needed interventions and suggested strategies. In addition, participants were offered the opportunity to address subjects they felt were not discussed during the interview. Interviews were conducted by the researcher between March and July 2006. Fourteen community leaders were identified through word of mouth in the community and were approached for participation in the project. One individual declined to participate for fear of being identified and/or misquoted and stirring up controversy within his community.

Face to face interviews were conducted by the researcher in places convenient to the participants [e.g. ethnic restaurants, participants' work places and the researcher's office]. Since only three participants allowed their interview to be tape recorded, all interviews were manually recorded. All participants were fluent in English and opted to be interviewed in English. However, an interpreter was present at all interviews and assisted with explaining expressions not common in the English language. Interviews lasted from one to three hours and no incentive was offered to participants. This project was approved by the Ohio State University's Institutional Review Board.

Analysis

Interviews were transcribed and carefully revised by the researcher, noting keywords and ideas. Following a process suggested by Miles & Huberman (Miles & Huberman, 1994, pp 11), data reduction took place as the researcher removed repetitive responses, put aside irrelevant comments, abstracted meanings and insights from the words of the respondents and reorganized responses. Responses were coded and grouped into four domains based on the interview questions. A table was developed to organize responses by participant and domain and similar responses and comments were clustered. To ensure understanding and accuracy of the reported findings, a draft of the manuscript was reviewed by a community leader who did not participate in the interview process and two leaders from each community for critique and comments (Sandelwoski, 1986). Their comments about appropriate use of certain words or expressions and clarification of certain meanings were very useful in the finalization of this manuscript.

Participant characteristics

A total of 14 interviews were conducted with seven Somalis (5 men and 3 women), five Ethiopians (3 men and 2 women), and one (1) American informant, who lived in Somalia for several years and was closely associated with the Somali community and worked with a refugee organization in Central Ohio. Participants' age ranged from 34 to 72 years, while time of residence in the United States ranged from 13 to 16 years. All participants had been forced to flee their country because of civil unrest, or political persecutions and violence. Somalis participants were refugees who arrived in the U.S. from Kenya's refugee camps, while most Ethiopian participants had arrived as refugees via Sudan or were asylees or legal residents. All participants had some degree of education, obtained either before or after their displacement. For example, one participant had received medical training before coming to the U.S., another participant was an American-trained physician and two others had received business administration degrees from American colleges. Most participants were employed or owned businesses and were very involved in their communities. The following sections present the perspectives of interviewed participants related to salient health issues in their communities and their suggestions as to how to mitigate them.

In-depth interviews

Health conditions of most concern for informants in both communities were: type 2 diabetes and high blood pressure, mental health issues (particularly depression), infectious diseases (particularly hepatitis B and

tuberculosis), gastrointestinal problems, obesity and arthritic pain, and smoking. Women's health issues related to reproductive health were viewed by more than half the Somali participants as important health concerns. The following section will explore specific themes identified around the domains of inquiry.

IV. Perceived Community Health Issues

Chronic diseases and mental health.

Type 2 diabetes and high blood pressure often associated with weight gain were perceived by participants as the most frequent and alarming emerging health condition in both communities. Diabetes was viewed as a new disease; some participants referred to it as an "epidemic": "When they come here in this country they eat a lot, they gain weight and they develop type 2 diabetes. That is a concern more for women than for men." Participants were more familiar with high blood pressure since they were familiar with this condition back home, but perceived it to occur at a much higher rate in the U.S.

Mental health issues were overwhelmingly perceived by participants as a common and urgent priority for both communities exacerbated by the fact that it is a "taboo" subject not openly discussed. Both ethnic groups reported that the words "stress" and/or "depression" did not have direct translation in their language. Rather, they used expressions such as "walahow" or "buufis" in Somali or "dibirt" or "qewiss" in Ethiopia which could be translated as "full of upset, restless" or "on edge or hopeless" to express this concept in their vocabulary. According to one Somali female informant this could well be the number one problem in the Somali community. Most informants felt that possibly most adults could have mental health issues, associated frequently to PTSD and stress of living or difficulties adapting to their new environment. As one participant pointed out: "Normal people become erratic, volatile, and sometimes verbally violent towards others; or they become dormant, indifferent and emotionally estranged from their loved ones and families. This causes social problems."

They also recognized the cultural stigma attached to mental disorders which makes it difficult to get those who could benefit from care to get help. Participants noted that older people seemed more vulnerable to mental health disorders, as it is most difficult for them to adapt: "That comes from understanding that the idea they had about the USA before coming here is so different from reality. The reality clashes violently with the dream."

Participants often used humor to describe their experiences: "Have you seen the movie 'Coming to America?' That would be us. We could be in that movie!" said one participant smiling and shaking his head, trying to explain the clash of the two cultures.

However, they also expressed hopelessness and sadness when talking about the many challenges faced by their communities. According to one female participant, who cares for several elderly members in the Somali community, the elders miss the active place they held at the center of families and communities in their country and feel lonely and useless: "They cry often; they complain about everything; they get mad all the time about everything. They are always missing this or that from home. They are scared to die here and do not want to be buried here. They do not want to admit they are depressed. They saw their people killed and die in front of them. How can they not be depressed?" An Ethiopian participant reported several instances of suicides among elderly men: "It takes a lot of determination to adapt. One day, nobody knows why, they kill themselves. They must see suicide as a way out. They do not go the doctor because, first they don't know how and second, it is not socially acceptable".

Several participants felt that depression was to some degree due to the change in family dynamics and in women's independence. "Back home, the women most often tended the home and took care of the children while men brought home 'the basket'." In the U.S., women work and generate money; hence, they are more independent

and can survive without the men. Men feel they have no role: “This makes men nervous. This creates conflicts. There are more divorces here.”

Several participants felt that, “children are also emotionally and mentally affected by their displacement.” “When they come here, children are placed in school by age. A 14-year-old who has been in a refugee camp for years is placed in 9th or 10th grade. They do not do well; they become frustrated, turn depressed, skip classes, go with other bad students and get bad habits. They go wild, they use alcohol, drugs and parents don't know how to deal with this. They cannot work, they cannot succeed at school; a generation is going to be lost. Parents don't know how to help their children or where to go for help.”

Infectious and parasitic diseases

Infectious diseases are also perceived as another significant health problem among these immigrants. One Somali leader reported being told by a doctor that 60% of Somalis visiting a local hospital had hepatitis B. Tuberculosis (TB) is also mentioned and is viewed as a health concern by several participants. However, they also remarked that most individuals are reluctant to discuss the disease because of the stigma it carries in their communities. They are concerned that those who are infected, may hide it and transmit it to others .

Gastrointestinal issues

Several participants reported that a good number of people in the community suffered with abdominal pains that they attributed to stomach ulcers due to stress. They also fear that these health problems could be due to parasites, endemic in their countries, but that doctors trained in America had not much experience or were not trained to recognize, diagnose or treat such conditions.

Behavioural factors: obesity

A major health concern mentioned by participants was increasing overweight and obesity in their communities. Most participants felt that the way of life in the U.S. contributed significantly to weight gain among men and women but particularly among women. A Somali participant shared the following comment: "In Somalia 70% of people are nomadic, they raise animals and migrate throughout the year looking for pasture and for water for their livestock. They do involuntary exercise all the time, they walk everywhere. They are thin and tall; and then there is the heat." Women are even less likely to engage in physical activities mainly because of lack of a convenient environment to exercise away from the opposite gender. Arthritis was reported by several participants (including the Somali U.S. trained physician) as a growing problem related to obesity, mostly among women of their communities. They attributed the development of this condition to rapid weight gain after residing in the U.S. for a couple of years: "At home they used to walk everywhere, visit with each other in their neighborhoods, herd cattle, farm, eat fresh vegetables and drink fresh milk from their camels. Here, they fear crime, they do not like the cold during the winter, they talk on the telephone, they stay home. In a year or two they are crippled.”

Diet, smoking, drinking and oral health

Participants also discussed the role that diet has on the “weight issue.” Ethiopian participants noted that Ethiopians tend to like fat and eat huge amounts of butter, sugar and Injera bread at all meals while Somali participants pointed out that sugar was a main ingredient in the Somali culture. Other behaviors included tobacco and alcohol use. One informant (the physician) estimated that at least 60% of elder Somali men smoke cigarettes, noting that this rate could have been higher back home . He links this high rate of smoking to a couple of lung cancer cases he diagnosed at his practice in the previous year and urges for intervention. Although drinking is not perceived as a problem in the Somali community mainly because of religious restriction, some Ethiopian informants indicated that older Ethiopians were likely to drink a lot and associated this problem with depression and anxiety.

However, as indicated by several informants, both drinking and smoking are growing problems among the groups of younger men and women in both communities.

Oral health was also perceived an important issue by at least one informant. A 50-year-old man admitted that: "Culturally we do not care about oral health, this is our way. This is not an issue for most of us but we all have dental problems and we lose our teeth. Myself, I lost all my back teeth. We do not think about it as a problem that could affect our body. We should."

Women's health issues

One particular women's health concern was voiced by half the Somali participants. Several informants believed that the use of cesarean section is more frequent among Somali women even though it is often unwanted. Many Somali women feel that cesarean sections are more often imposed on them for reasons other than to protect the health of the mother and the baby. This perception sometimes creates friction between the women and their providers: "Women who are pregnant do not like to deliver by surgery. Hospitals are having problems because these women refuse surgery called c-section and sometimes the baby or the mother dies. They believe the doctor decide to do the surgery because they are circumcised. They also think it would prevent them from having more children. There is some mistrust about health care." As they explain, Somali women, as do many others from African countries, have unique health care needs because a large number of them have been affected by female genital circumcision. For these women and their families, there are concerns about how they will be cared for during childbirth.

V. Perceived Challenges to Community Health

Stress and anxiety

When asked about what they thought was at the roots of these health problems in their communities, most informants expressed beliefs that the air itself that they breathe was polluted and dangerous to their health. Other factors included the cold weather and the stress and anxiety associated not only with daily living in the U.S. but also with worry about what was happening in their native countries and the necessity to send remittances to parents and family members still living back home.

Limited health care access and utilization

The most important barriers to health care access and utilization were unanimously perceived to be: the lack of medical insurance, a general lack of knowledge and understanding about the U.S. health care system, communication barriers, and lack of transportation.

The lack of medical insurance is perceived as a huge barrier in both communities. Even when there is care available for those that are uninsured, they do not know how or where to access it. One Ethiopian informant acknowledges "I myself do not have insurance. My insurance is Almighty God." As a result, residents of both communities use hospital emergency rooms when they need urgent help. Otherwise, they turn to church or to the Quoran to go through their illness: "They drink holy water, they go through religious rituals and that helps. They get cured." Those suffering from mental health problems are even less likely to receive treatment because it is not socially accepted and they believe it will eventually get better anyway.

As a Somali informant puts it: "This community has great problems but people do not know enough about these problems to be concerned. If you do not understand or know that something is wrong, how can you seek help? The health care system does not realize how much these people need education and outreach. They treat us as any other immigrant groups but there is a big difference."

In addition, they point out that the concept of prevention is not a concept they are very familiar with in their own country, where the emphasis is most often on taking care of acute conditions. In their countries, visits to the doctor were for specific problems that could not be taken care of at home. Women have given birth many times with the help of a traditional midwife at home. Here, they are expected to go to monthly prenatal visits during pregnancy when they feel healthy. This is confusing and seems unnecessary. Several participants commented on the limited amount of time dedicated to educating newly arrived refugees about the health care system they will utilize with in this country: “When they come here, they are taught about traffic, immigration rules, domestic violence, the police, etc. But the health care system is not something they spend a lot of time talking about.”

Language remains a considerable hurdle to health care access in these communities. Most adults are from the countryside and a majority has never learned to read and write. It is extremely difficult for adults over 40 years and for elders especially to learn a new language: “They cannot ask for their benefits, they cannot fill and sign the paperwork to receive their benefits, they cannot communicate with the doctors or cannot read a prescription to know how to take their medications. They feel stupid and are embarrassed to admit that they cannot read or write English; they refuse to ask for help. Interpreters are 110% needed.” Moreover, most informants felt that the way ESL classes are delivered are not sufficiently effective, should be expanded and made more available

Transportation for women in general and for older women in particular is a real challenge. Older women have never learned to drive and it is often difficult for most to learn and earn their license since they do not speak or read English. For instance, women may need to go to the doctor but they do not want to impose on their family, friends or bother others, so they stay home.

VI. Perceived Priorities for Intervention

The final set of questions explored the leaders’ priorities in terms of interventions that could address the health issues faced by the Somali and Ethiopian communities in Franklin County.

Most needed community intervention. Both Somalis and Ethiopians participants were convinced that programs to improve community awareness and knowledge related to prevalent conditions such as diabetes, hypertension, and cancer, their risk factors (obesity, smoking), the benefits of changing risky behaviors and better education about the health care system were the most important and needed interventions.

Most urgent health condition to address

When asked about what condition or disease they viewed as most urgent to address, the majority of informants selected diabetes: “It affects the whole body. It is associated with high blood pressure and obesity and bad nutrition. So I would say diabetes.”

Group most in need of support

When asked to identify those in their communities most in need of help, nearly all informants indicated that elders and women were the most vulnerable groups. As they explain, older refugees and immigrants are the least educated, the least likely to assimilate socially and the most difficult to reach. They depend completely on their children but they feel more and more isolated and estranged from them as their children learn English and are moving on with their lives. They feel without purpose, yearning for a country they were forced to leave behind and afraid to die in this strange land. Women on the other hand, particularly younger women, are most often in charge of their family’s care and have more say about nutrition and health matters. They also note that large number of women are single or without their husbands for a variety of reasons and they have less support. In addition, women in these ethnic groups have unique needs related to gynecological and reproductive care because many have been affected by

cultural practices of female genital cutting (or female circumcision (FC) before entering the U.S., and require informed and culturally competent care. A couple of informants stressed the need to have female doctors caring for women in these communities, but another disagreed stating that cultural competence of the provider was the most important factor not necessarily the gender of the provider.

In general, women participants appeared more comfortable in their new life than most men respondents. They were more likely to be employed or to own their business and appeared more optimistic about the future. Men of both ethnic groups seemed more depressed, nostalgic and admitted that they often think and dream about returning back home: "The U.S. is a great country with good benefits, but East or West, home is the best. Most older adults long for the home country and would consider going back there if such a place still exist. They dream of going back, get their farm, build a small house and raise their children in peace."

Open-ended comments

At the end of the interview, a couple of participants offered some personal comments. They wanted to stress that although they seemed somewhat unhappy and complained about certain aspects of their lives here in the U.S., they were very grateful to have escaped political persecution and violence and to be in country such as the United States where they could live in peace. It may not be a lot or perfect, but to them "where we come from is a lot worse." There were some references to perceived discrimination either because of race or religion but participants seemed reluctant to elaborate on this topic. A younger female participant felt comfortable enough to offer this comment: "There is some discrimination. I think they do not like us. When they see us and the way we dress, especially since 9/11, they think unkind things. One day, in a store someone asked me if I was planning to explode them. That hurt."

Leaders from both communities expressed disappointment that previous research projects such as the one they were taking part in, have not been used to develop any programs or interventions that would effectively address the health concerns of their communities: "I thank you to come here and talk to me. But I must say that often they are using us for their own purpose. I don't want to be offensive but this is what I feel. There are some educated people in the Somali community who could take a bigger role and help care for their people. But they give money to organizations who know nothing about us. We have Somali organizations that can use the funds to do programs for their own community even if the funds are supervised."

One participant offered these suggestions: "Whatever you are doing, make sure something is implemented. And when it is implemented, make sure you include ethnic people so they can have a real impact on the program." The leader of a known Somali refugee community organization expressed what seemed to be a shared sentiment: "I saw so many groups come and go, take valuable information and never return. Once they obtain the information, they push us aside. I feel they are trying to work with us only for their own gain not really to benefit our community. I find that these people do not have credibility within the Somali community. If you want to have an effective and durable program, it has to be of mutual interest to you and the Somali community. We want to be part of the process; we have to work side by side."

VII. Discussion

Our results show that leaders of both ethnic subgroups are concerned mainly with a perceived increase in chronic diseases and associated risk factors (obesity, lack of physical exercise, smoking), and the perceived prevalence of infectious and parasitic diseases in their respective communities. Mental health issues such as anxiety and chronic depression, particularly among elders, were major causes of concern to participants. Questions were raised as to the quality of reproductive care received by Somali women due to cultural factors. Lack of health care utilization was believed to be due to lack of insurance coverage and an inadequate understanding of the American

health care system. Taking steps to improve individual literacy and community education in that respect would enhance understanding of these issues. Appropriately integrated community education was perceived as the most urgent and potentially effective intervention needed to move these communities towards better health and wellness. Existing data about immigrants/refugees in the U.S. or abroad, and the views expressed by our participants highlight the need for health data among and within immigrant groups in the U.S. that will provide practical information about their needs to be used for resource allocation and in policy development.

According to recent research, health behaviors related to the development of chronic diseases become more prevalent among foreign-born over time until the prevalence rates of obesity, diabetes and cardiovascular diseases reflect those of the native-born. A significant association has been established between the length of residence and changes in the body mass index of U.S. immigrants (Antecol & Bedar, 2006; Oza-Frank & Narayan, 2010; Goel, McCarthy, Philips & Wee, 2004). A review of 2000 NHANES data by Goel et al. (2004) showed that, although there were variations among the different groups of immigrants, “the age- and sex-adjusted prevalence of obesity was 8% among immigrants living in the United States for less than 1 year, but 19% among those living in the United States for at least 15 years.” A survey of 342 Ethiopian immigrants in Toronto found that overall 36% of the sample smoke and that 80% of female and 56% of male smokers admitted that they were smoking more since their arrival in Canada (Hyman, Fenta & Noh, 2008).

In his review article of the "healthy immigrant" paradigm, Beiser (2005) asserts that results show that the health of immigrants/refugees not only declines so as to match that of the host country's population, it becomes worse (as cited in Beiser, 2005, pp. 35). Oza-Frank and colleagues (2011) analyzed the National Health and Nutrition Examination Survey (NHANES) data and found that the prevalence of diabetes among refugees/immigrants 25 to 44 years old in the U.S. varied from 1.4% after five years of residence in the country to 11% at 15 years of residence. A comparison of immigrants who have lived more than four years in New York to those more recently arrived, showed that those having been in New York longer had worse general health (24% vs. 17%) and were more likely to be obese (16% vs. 12%) (New York City, 2006). The contributions from our immigrant informants suggest that they generally recognize this health deterioration in their communities over time and would like to see these trends reversed.

On the other hand, many immigrants/refugees from Africa suffer from infectious diseases and parasitic conditions endemic in their countries of origin. Significant prevalence of intestinal parasites, tuberculosis and hepatitis B have been reported in resettled refugees (Stauffer & Rothenberger, 2007; Museru et al, 2010; Cain et al, 2008; Kempainen, Nelson, Williams & Hedemark, 2001; Eckstein, 2011). Findings from the Ohio Department of Health TB surveillance unit (personal communication, September 2011) show that the total number of cases of TB in Franklin County in 2010 was 66 cases with foreign-born representing 41 of these cases; 17 of these TB cases were diagnosed in persons from Somalia, 2 in persons from Ethiopia.

In terms of mental health, specific stressors are associated with the migration and resettlement experience and constitute predisposing factors to the development of psychological disorders in this vulnerable population. Prior to migration, many refugees and immigrants have been exposed to violence and torture, to the sudden loss of family members, friends and everything they held dear, to severe deprivation in refugee camps and separation from loved ones, to the loss of their entire way of life and the stress of relocating to an unknown country or foreign part of the world. Multiple factors such as the forced integration to a new culture, the lack of social network, social isolation and marginalization, the loss of prestige and social status, employment opportunities (even among those with high levels of education) and low socioeconomic status, impact refugees' mental health after resettlement (Kirmayer et al, 2011; Jablensky et al, 1994; Kroll, Yusuf & Fujiwara, 2011; Pumariaga, Rothe & Pumariaga, 2005). Perceived discrimination stands out as another stressor impacting the mental health of refugees particularly from

African countries (Venter & Gany,2009) . Hadley & Patil (2009) compared perceptions of discrimination among immigrants from East-Africa, West Africa and Eastern Europe. They demonstrated that immigrants from Africa were significantly more likely than their European counterparts to report experiences of discrimination. Older refugees and immigrants are recognized to be at higher risk of psychological distress because they are slower at learning the language and integrating to the new culture; they often live alone, they feel isolated and mourn the loss of their peer network and their respected status as elder (Kirmayer et al, 2011; Pumariiega et al, 2005; Brown, 2009). Previous studies have also explored the impact of migration on younger populations. Halcón and colleagues (2004) studied a group of Somali and Ethiopian refugee youth in Minnesota and found that many experience loneliness, sadness, social problems and mental and emotional problems, including PTSD after resettlement, associated with a history of war trauma and torture. Unfortunately, because of spiritual and cultural factors, mental illness is viewed as a weakness by these ethnic groups and fear of social stigma prevents them from seeking needed care.

Interviews also revealed challenges in regularly utilizing health care services among these communities. The lack of medical insurance was perceived as a huge barrier in both communities. Most are not able to afford insurance for diverse reasons, most frequently because once they find employment, their income surpasses the threshold required to receive Medicaid (an income lower than 100% of the Federal poverty level) and, after 8 months in the country, they are no longer eligible to receive Refugee Medical Assistance (Ohio Refugee Services, no date). Unemployment and underemployment are prevalent in these communities mainly because of the lack of relevant skills and difficulty with speaking English. The types of jobs available are frequently low paying or temporary jobs (housekeeping, meat carvers, taxi drivers): “Eighty percent of working Somalis do not have health care coverage” commented the leader of a community organization. Therefore, the very young and the very old are covered by Medicaid but those between 19 and 64 years old are most likely to be without insurance.

Participants indicated that the confusion and lack of understanding of the American health care system represented another barrier to health care access. This is hardly surprising; our health care system is complex and often difficult to navigate even for native citizens (O’Fallon, 2005). The necessity of preventive health services is often not fully accepted by immigrants from many developing countries. Given the predominantly rural and nomadic populations and the limited resources in the sub-Saharan health care systems, existing systems have focused on the management of communicable diseases and acute care issues at the expense of prevention-based interventions and non-communicable disease management (Sheik-Mohamed & Velema, 1999; Whiting, Hayes & Unwin, 2003).Therefore, while many refugees/immigrants are familiar with infectious and parasitic diseases, they are not well informed about most chronic diseases, their long-term management and the behaviors and risk factors associated with their development.

In addition to the limited understanding of the western health care system, cultural competency in health care services emerges as an important factor. Difficulties in communication due to language were overwhelmingly viewed as an important barrier by participants. Among the refugee/immigrant population, health literacy is hampered by limited English proficiency and the slow transition to a new culture. This low health literacy is believed to significantly contribute to ineffective interactions between providers and non-English speaking immigrants. These suboptimal encounters often result in lack of compliance with prescribed treatment and follow-up, less than optimal outcome and patient dissatisfaction (Venters & Gany, 2011; Schillinger et al, 2002). This language barrier has been considered a "health hazard" for non-English speaking immigrants and refugees (Bernstein, 2005). Flores (2005) conducted a thorough literature review to assess whether the use of medical interpreters had an effect on the quality of care received by immigrants and concluded that the services of a trained medical interpreter was likely to result in heightened patient satisfaction and better clinical outcomes.

VIII. Implications

Several strategies to address the needs of these population groups and enhance their health and well-being are suggested by the previous discussion.

Develop and implement culturally targeted and integrated community outreach and health promotion programs

Perhaps more than for any other immigrant groups, education is a powerful determinant of health behaviors and health outcomes among immigrants from Ethiopia and especially among refugees from Somalia. Due to the lack of previous formal education, the difficulty in reading and/or speaking their own language as well as English, and the striking differences between their previous way of life and the American culture, education is even more essential to the adaptation and well-being of these ethnic groups. An integral component of any effective health promotion and education strategy targeting these groups should therefore initially deal with basic education requirements related to various aspects of their life in the U.S., such as hygiene and nutrition, and the behavioral links to diseases.

Address cultural and linguistic barriers to health care and develop self-sufficiency in immigrant communities

As suggested by our participants, health promotion efforts targeting these communities of immigrants should include a thorough and intensive education about the western health care system, information about available services and resources, and step-by-step instruction on where and how to access them. Clear eligibility guidelines, rationale and guidance for the utilization of preventive care services and behavior modifications (immunization, screening, exercise, etc.) should be provided. Whenever feasible, use trained medical interpreters to facilitate interactions between providers and patients. Improving access to English as a Second Language programs to adult immigrants will also go a long way toward increasing self-efficacy among these patients. On the other hand, existing research suggests that care delivered in a culturally competent way could improve provider-patient interactions, enhance quality of care, encourage utilization of services, increase compliance with recommended treatments and bring about positive health outcomes (Flores, 2005; Brach & Fraserirector, 2000; Juckett, 2005). To provide patient-centered care to these special communities, it should be recommended that health care practitioners be from diverse ethnic backgrounds, knowledgeable about immigrants' health issues and sensitive to the cultural and religious beliefs and attitudes of their immigrant patients. It is important that providers caring for refugees broaden their understanding of their patients' sociocultural context and how it may impact their health, make all efforts to build trust with their patients, communicate with them either directly or through interpreters, empower their patients to take an active role in their care and remain alert to potential factors that may prevent positive health outcomes. As stressed by a couple of participants, the establishment of a health center (Federally Qualified Health Center or FQHC) providing a usual source of care from providers of similar ethnic groups or familiar with these ethnic groups, and offering the services of trained workers from these communities, could help alleviate disparities in access and quality of care among these ethnic groups. A comprehensive review of relevant literature conducted by Politzer and colleagues (Poltizer et al, 2001), suggests that such strategy could positively impact the utilization of health services and health outcomes.

The use of ethnic community members as trained lay health advisors or community health workers would build capacity in the communities, and provide an evidence-based mechanism to reach their most vulnerable members and establish a bridge between the health care system and the immigrant populations. Research has shown that the use of native interpreters or trained bilingual staff can improve communication between patients and providers and increase compliance with treatment (Hart et al, 2010; Culhane-Pera et al, 2010).

In addition, input from educated members of these communities and their active and visible participation in

the design, planning and delivery of programs and services to their compatriots is a demonstrated approach to ensuring the cultural appropriateness of any intervention and ensure the acceptance and cooperation of the targeted communities. Highly educated members of these communities, unable to directly transfer their skills to the U.S. labor force, feel alienated and unused. With needed resources and proper support, they could be part of the solution. They would be valuable assets and enthusiastic allies to interventions seeking to improve the quality of life and welfare of their fellow refugees or immigrants.

Collect group specific health data using both quantitative and qualitative methods

Current data on immigrants and refugees health in the U.S. is not adequate. Information about the prevalence of health conditions and their risk factors in immigrant and refugee groups, their use and experiences of health care services are necessary to corroborate anecdotal evidence and provide a baseline on which to build and guide future interventions and formulate policies. Research to supply this information is critical; however, data collection with these culturally different communities is slow, challenging and complex. Specific data on ethnicity, pre-migratory location, and primary language would be useful in estimating and addressing the health care needs of communities. Appropriate funding which would strengthen networks between communities and organizations, allow the development of a community-based participatory effort, and provide for translation and interpretation into English is not available.

Build up cultural competency and improve access in mental health care

Awareness should be raised among health care providers and workers about the mental health challenges facing immigrants and refugees and particularly elders in these population groups. The emotional and mental problems of refugee elders and of elders in other minority ethnic immigrants are neglected and need to be evaluated and specifically addressed. The cultural stigma attached to mental illness in these minority communities, and the fear of being labeled “crazy” and of being shunned by family and peers, shape decisions to seek treatment and force people to endure mental distress and go undetected. Information about mental health and access to services should be made available in various formats and languages and the use of community support groups evaluated for effectiveness and outcomes.

Improve the quality of reproductive care among refugee women

Women from East-Africa and especially from Somalia, have unique needs during pregnancy and child birth for various reasons but largely because the majority has been affected by cultural practices of female circumcision before entering the U.S. (WHO, 2006; Small et al, 2008). As a result, women immigrants and their families may feel treated differently by the health care system. Studies examining Somali immigrants living in Western societies have exposed negative feelings and perceptions of discrimination in obstetrical settings as being associated with FGC and leading to difficult childbirth experiences (Beine et al, 1995; Chalmers and Hashi 2000; 2002; Vangen et al, 2004). Cultural training of health care providers may help in enhancing patient /provider communication and clear clinical protocols to guide the care of circumcised women would improve reproductive care outcomes. Research to inform interventions to educate circumcised women as well as their care providers would enhance the quality of care, the experiences and outcomes of pregnancy for these women.

In conclusion, it is certain that the make-up of the U.S. population is gradually changing due to the continuous influx of immigrants and refugees over the years. Importantly, the place of origin of these new comers is also changing. A recent report from the Center for Immigration Studies (Camarota, 2011) reports that the U.S. immigrant population has reached 40 million, "the highest number in the nation's history" (p.1). The same data shows that in 2010, 4% of the population of Ohio was foreign-born. As these newcomers assimilate to our culture, learn new languages, adopt new ways of life, learn to appreciate different foods and values, as the receiving society, the U.S. will in turn be exposed to new cultures, values and languages, discover different foods and customs and

slowly transform in the process as well. In order to preserve and enhance the public's health, the U.S. health care system needs to adapt and change based on information about these immigrants/refugees. Gathering information on the unique ways in which they approach health and wellness, their use of health care services, and the evolution of their health care needs over time, is critical. It is also important to include them in the process of designing strategies to maintain and enhance their health and achieve their full social and economic potential. This study represents such an attempt.

Limitations and Strengths

We recognize that due to the sampling approach, the perceptions of fourteen individuals may not represent those of entire communities. However, we interviewed men and women with a wide range of age, education and occupation, who have been actively involved in their community and appeared to be trusted by their peers and others in their respective communities. These individuals are likely to know and understand the challenges faced by their communities, and what they see as potential strategies to assist them in addressing these problems. Nonetheless, interviews reflect perceptions and values of individual participants and rely solely on self-report assumed to accurately represent reality; this must be taken in consideration when interpreting collected information. Another limitation is that most interviews were not recorded and results rely only on field notes taken by the interviewer. To address this limitation, drafts of interview transcripts were reviewed by the community leaders to ensure accuracy of the information.

Given the paper's limitations, the study has several notable strengths. First there is strength in exploring participants' experiences in such a targeted manner. The use of qualitative methods brings out underlying issues that are not able to be captured in a quantitative survey. The study also explores an understudied area and provides a better understanding of the most critical health care problems and barriers to accessing health care from the perspective of key stakeholders.

Acknowledgements

This project was funded by a seed grant from the Ohio State University College of Public Health, Division of Health Behavior and Health Promotion. It would have been impossible to carry out this research without the support and the constant help of Dr. Seleshi Asfaw and Mr. Neal Barkan of the Fountain of Life Foundation, a multicultural community-based organization whose mission is to improve quality of life for all refugees and immigrants in the Franklin County area. Our project benefited from their guidance, and from the feedback and counsel of members of the Foundation's Advisory Board. We particularly thank Dr. Asfaw for his assistance with translation, and recruitment of study participants. We are also indebted to Fatima Moallim and those in the Somali community who supported our efforts. We thank all participants who unselfishly shared their experiences with us.

References

- Antecol H, & Bedar K.(2006). Unhealthy assimilation: Why do immigrants converge to American health status levels? *Demography*, May; 43(2):337-360.
- Beine, K., Fullerton, J., Palinkas, L., & Anders, B. (1995). Conceptions of prenatal care among Somali women in San Diego. *Journal of Nurse Midwifery*, 40(4), 376-381.

Beiser M. (2005). The health of immigrants and refugees in Canada. *Canadian Journal of Public Health*, March-April; 96(Suppl 2): S30-44. Review.

Berman H, Giron ER, & Marroquin AP. (2009). A narrative study of refugee women who have experienced violence in the context of war. *Canadian Journal of Nursing Research*, Mar; 41(1):144-165

Bernstein N. (2005). Language barrier called health hazard in ER. *New York Times*, April 21, 2005, C-20. Accessed on April 2013 at:

http://azbilingualed.org/News%202005/language_barrier_called_health_hazard%20in%20ER.htm

Bhui K, Craig T, Mohamud S, Warfa N, Stansfeld SA, Thornicroft G, Curtis S & McCrone p. (2006). Mental disorders among Somali refugees. Developing culturally appropriate measures and assessing socio-cultural risk factors. *Social Psychiatry and Psychiatric Epidemiology*, 41(5): 400-408.

Brach C, & Fraserirector I. (2000). Can cultural competency reduce racial and ethnic disparities? A review and conceptual model. *Medical Care Research and Review*, Nov; 57 (Suppl 1): 181–217.

Brown LA, Mott TE, & Malecki EJ. (2007). Immigrant profiles of U.S. urban areas and agents of resettlement. *The Professional Geographer*, Feb; 59(1), 56–73. [doi: 10.1111/j.1467-9272.2007.00591.x]

Brown PL. (2009). Invisible immigrants, old and with "nobody to talk to". *New York Times*
Published: August 30. Accessed on April 2013 at:

<http://www.nytimes.com/2009/08/31/us/31elder.html?pagewanted=all>

Cain KP, Benoit SR, Winston CA, MacKenzie WR. (2008). Tuberculosis among foreign born persons in the United States. *JAMA*, Jul 23; 300(4):405-412.

Camarota SA. A record-setting decade of immigration:2000-2010. *Centers for Immigration Studies*. Accessed April 30, 2013 at: <http://www.cis.org/2000-2010-record-setting-decade-of-immigration>

Cartwright CP. (2006). The changing epidemiology of HIV/AIDS at a Minnesota hospital: impact of demographic change and viral diversity. *Journal of Medical Virology*, 78(Suppl 1): S19-21.

Chalmers B & Hashi KO. (2000). Somali women's birth experience in Canada after female genital mutilation. *Birth*, 27(4), 227-234.

Chalmers B., & Omer-Hashi, K. (2002). What Somali Women Say About Giving Birth in Canada. *Journal of Reproductive & Infant Psychology*, 20(4), 267-282.

Chen J, Ng E, & Wilkins R. (1996). Health expectancy by immigrant status, 1986 and 1991. *Health Reports*, Winter; 8(3): 29-37.

Culhane-Pera KA, Allen M, Pergament SL, Call K, Adawe A, de la Torre R, Hang M, Jama F, Navas M, Ortega L, Vue P & Yang TT. (2010). Improving health through community-based participatory action research. Giving immigrants and refugees a voice. *Minnesota Medicine*, April; 93(4): 54-57.

Danaei G, Finucane MM, Lin JK, Singh GM, Paciorek CJ, Cowan MJ, Farzadfar F, Stevens GA, Lim SS, Riley LM & Ezzati M. (2011). National, regional, and global trends in systolic blood pressure since 1980: systematic analysis of health examination surveys and epidemiological studies with 786 country-years and 5.4 million participants. *Lancet*, Feb; 377 (9765): 568–577

DesMeules M, Gold J, McDermott S, Cao Z, Payne J, LaFrance B, Vissandjée B, Kliewer E & Mao Y. (2005). Disparities in mortality patterns among Canadian immigrants and refugees, 1980–1998: results of a national cohort study. *Journal of Immigrant and Minority Health*, Oct; 7(4): 221–232.

Dunn J, & Dyck I. (1998). Social Determinants of Health in Canada's Immigration Population: Results from the National Population Health Survey. In: Vancouver Center of Excellence: Research on immigration and integration in the Metropolis, Working Paper Series # 98-20, 1998. Accessed April 2013 at URL: <http://mbc.metropolis.net/assets/uploads/files/wp/1998/WP98-20.pdf>

Eckstein, B. (2011). Primary Care for Refugees. *American Family Physician*, Feb; 83 (4): 429-436.

Ellis BH, MacDonald HZ, Lincoln AK, & Cabral HJ. (2008). Mental Health of Somali adolescents refugees: the role of trauma, stress and perceived discrimination. *Journal of Consulting and Clinical Psychology*, Apr; 76(2):184-193.

Fennelly K. (2006). Listening to the Experts: Provider recommendations on the health needs of immigrants and refugees. *Journal of Cultural Diversity*, Winter; 13(4): 190-201.

Fenta H, Hyman I, Rourke SB, Moon M & Noh S. (2010). Somatic symptoms in a community sample of Ethiopian immigrants in Toronto, Canada. *International Journal of Culture and Mental Health*, 3(1):1-15.

Flores, G. (2005). The impact of Medical Interpreter services on the quality of health care: A systematic review. *Medical Care Research and Review*, Jun; 62 (3):255-299 [doi:10.1177/1077558705275416]

Franco-Paredes C, Dismukes R, Nicolls D, Hydron A, Workowski K, Rodriguez-Morales A, Wilson M, Jones D, Manyang p, & Kosarski P. (2007). Persistent and untreated tropical infectious diseases among Sudanese refugees in the United States. *American Journal of Tropical Medicine & Hygiene*, Oct;77(4):633-5.

Gallagher Vongkhamphra E, Davis VC, & Adem N. (2010). The resettling process: A case study of a Bantu refugee's journey to the USA. *International Social Work*, March; 54(2): 246-257.

Garber RF, Hood N, Sullivan K, & Poliandro J. (2007). United Way of Central Ohio: 2007 Racial Disparities Report. Community Research Partners (CRP), November 2007. Accessed April 2013 at: <http://communityresearchpartners.org/14651.cfm?action=detail&id=87>

Gill GV, Mbanya JC, Ramaiya KL, & Tesfaye L. (2009). A sub-Saharan African perspective of Diabetes. Review. *Diabetologia*, Jan; 52(1):8–16.

Goel MS, McCarthy EP, Phillips RS, & Wee CC. (2004). Obesity among US immigrants subgroups by duration of residence. *JAMA*, Dec 15; 292(23): 2860-2867.

Hadley C, & Patil C. (2009). Perceived discrimination among three groups of refugees resettled in the USA: associations with language, time in the US and continent of origin. *Journal of Immigrant and Minority Health*, Dec; 11(6): 505-512

Halcón LL, Robertson CL, Savik K, Johnson DR, Spring MA, Butcher JN, Westermeyer JJ, Jaranson JM. (2004). Trauma and coping in Somali and refugee youth. *Journal of Adolescent Health*, Jul; 35(1): 17-25.

Hart D, Bowen J, DeJesus R, Maldonado A & Jiwa F. (2010). Using Medical Interpreters. *Minnesota Medicine*, April; 93(4):42-44. Also accessed April 2013 at: <http://www.minnesotamedicine.com/CurrentIssue/ClinicalHartApril2010/tabid/3373/Default.aspx>

Hyman I, Fenta H, Noh S. (2008). Gender and the smoking behaviour of Ethiopian immigrants in Toronto. *Chronic Diseases in Canada*, 28(4): 121-127.

Jablensky A, Marsella AJ, Ekblad S, Jansson B, Levi L, & Bornemann T. (1994) Refugee mental health and well-being: Conclusions and recommendations. In: AJ Marsella, T Bornemann, S Ekblad, & J Orley (Eds), *Amidst Peril and Pain. The Mental health and Well-Being of the World's Refugees* (pp 327-339). American Psychological Association, Washington DC.

Jaranson JM, Butcher J, Halcon L, Johnson DR, Robertson C, Savik K, Spring M, & Westermeyer J. (2004) Somali and Oromo refugees: correlates of torture and trauma history. *American Journal of Public Health*, April; 94(4), 591-598.

Juckett G. (2005). Cross-cultural medicine. *American Family Physician*, Dec 1; 72(11): 2267-2274.

Kempainen R, Nelson K, Williams DN, & Hedemark L. (2001). Mycobacterium tuberculosis Disease in Somali Immigrants in Minnesota. *Chest*, 119(1):176-180.

Kirmayer LJ, Narasiah L, Munoz M, Rashid M, Ryder AG, Guzder J, Hassan J, Rousseau C, Pottie K, for the Canadian Collaboration for Immigrant and Refugee Health (CCIRH). (2011). Common mental health problems in immigrants and refugees: general approach in primary care. *Canadian Medical Association Journal*, September 6; 183(12): E959-E967. [doi:10.1503/cmaj.090292]

Kroll J, Yusuf AI, Fujiwara K. (2005). Psychoses, PTSD, and depression in Somali refugees in Minnesota. *Social Psychiatry and Psychiatric Epidemiology*, Jun; 46 (6): 481-493.

Lauderdale D, Wen M, Jacobs E, & Kandula N. (2006). Immigrant perceptions of discrimination in health care. *Medical Care*, 44, 914e920.

Matheson K, Jordan S, & Anisman H. (2008). Relations between trauma experiences and psychological, physical and neuroendocrine functioning among Somali refugees: Mediating role of coping with acculturation stressors. *Journal of Immigrant and Minority Health*, Aug; 10(4): 291–304.

Mbanya JCN, Motala AA, Sobngwi E, Assah FK & Enoru ST. (2010). Diabetes in Sub-Saharan Africa. *Lancet*, Jun; 375(9733): 2254 - 2266.

Mbewu A., Mbanya JC. (2006). Cardiovascular Disease. In: DT Jamison, RG Feachem, MW Makgoba, ER Bos, FK Baingana, KJ Hofman, & KO Rogo (Eds), *Disease and Mortality in Sub-Saharan Africa*. Chapter 21, 2nd edition. Washington, DC: World Bank.

McDonald JT, & Kennedy S. (2004). Insights into the 'healthy immigrant effect': health status and health service use of immigrants to Canada. *Social Science & Medicine*, Oct; 59(8):1613-1627.

Mensah GA. (2008). Ischaemic heart disease in Africa. *Heart*; 94: 836–843

Miles MB, & Huberman AM. (1994). *Qualitative data analysis: An Expanded Sourcebook*, pp 11 (2nd edition) Thousand Oaks, CA: Sage Publications.

Museru OI, Vargas M, Kinuya M, Alexander KT, Franco-Paredes C, & Oladele A. (2010). Hepatitis B virus infection among refugees resettled in the US: high prevalence and challenges in access to health care. *Journal of Immigrant and Minority Health*, Dec; 12(6):823-827

O'Fallon A. (2005). Culture within a culture: US Immigrants confront a health system that many citizens can't manage. *Virtual Mentor (AMA Journal of Ethics)*, Jul; 7(7).

Accessed on April 2013 at: <http://virtualmentor.ama-assn.org/2005/07/msoc1-0507.html>

Ohio Refugee Services. Ohio Department of Job and Family Services (ODJFS). Refugee Services: Services and benefits. Accessed on April 2013 at: <http://jfs.ohio.gov/refugee/>

Ohmans P. (2000). Embracing diversity. *Minnesota Medicine*, 83(12): 16.

Oza-Frank R, & Narayan KM. (2010). Effect of length of residence on overweight by region of birth and age at arrival among US immigrants. *Public Health Nutrition*, Jun; 13(6): 868-875.

Oza-Frank R, Stephenson R, & Narayan VKM. (2011). Diabetes prevalence by length of residence among US immigrants. *Journal of Immigrant and Minority Health*, 13:1-8.

Palinkas LA, Pickwell SM, Brandstein K, Clark TJ, Hill LL, Moser RJ, & Osman A. (2003). The journey of wellness : Stages of refugee health promotion and disease prevention. *Journal of Immigrant Health*, Jan; 5(1):19-28.

Palmer D, & Ward K. (2007). Lost: listening to the voices and mental health needs of forced migrants in London. *Medicine, Conflict and Survival*, July-Sept; 23(3):198-212.

Pavlish CL, Noor S, & Brandt J. (2010). Somali immigrant women and the American health care system: Discordant beliefs, divergent expectations, and silent worries. *Social Science & Medicine*, July; 71(2): 353-361.

Politzer RM, Yoon J, Leiyu S, Hughes RG, Regan J & Gaston MH. (2001). Inequality in America: The contribution of health centers in reducing and eliminating disparities in access to care. *Medical Care Research and Review*, Jun; 58(2): 234-248

Pumariega AJ, Rothe E, & Pumariega JB. (2005). Mental Health of Immigrants and Refugees. *Community Mental Health Journal*, October; 41(5): 581-597

Sandelowski M. (1986). The problem of rigor in qualitative research. *Advances in Nursing Science*, April; 8(3): 27-37.

Schillinger D, Grumbach K, Piette J, Wang F, Osmond D, Daher C, Palacios J, Sullivan JD & Bindman AB. (2002). Association of health literacy with diabetes outcomes. *JAMA*, 288 (4): 475-482

Sheik-Mohamed A. & Velema JP. (1999). Where health care has no access: the nomadic populations of Sub-Saharan Africa. *Tropical Medicine and International Health*, Oct; 4(10): 695-707. Accessed April 2013 at: <http://onlinelibrary.wiley.com/doi/10.1046/j.1365-3156.1999.00473.x/pdf>

Singh GK, Siahpush M. All-cause and cause-specific mortality of immigrants and native born in the United States. *American Journal of Public Health* March; 91(3): 392-399.

Small R, Gagnon A, Gissler M, Zeitlin J, Bennis M, Glazier R, Haelterman E, Martens G, McDermott S, Urquia M, Vangen S. (2008). Somali women and their pregnancy outcomes postmigration: data from six receiving countries. *BJOG: An international Journal of Obstetrics and Gynaecology*, 115:1630–1640.

Stauffer WM, & Rothenberger M. (2007). Hearing Hoofbeats, Thinking Zebras: Five diseases common among refugees that Minnesota physicians need to know about. *Minnesota Medicine*, March; 90(3):42-46.

Stauffer VM, Weinberg M, Newman RD, Causer LM, Hamel MJ, Slutsker L, & Cetron MS. (2008). Pre-departure and post-arrival management of *P. Falciparum* malaria in refugees relocating from sub-Saharan Africa to the United States. *American Journal of Tropical Medicine & Hygiene*, Aug; 79(2):141-146

The United Nations High Commissioner for Refugees (UNHCR). *Global trends 2010:2010 in Review. Trends at a glance*. Geneva, Switzerland, 2011. Available at: <http://www.unhcr.org/4dfa11499.html>

The World Factbook , 2009. AFRICA. Washington, DC: Central Intelligence Agency (CIA), 2009. Accessed April 2013at: <https://www.cia.gov/library/publications/the-world-factbook/index.html>

Vangen S, Johansen RE, Sundby J, Traen B, Stray-Pedersen B. (2004). Qualitative study of perinatal experiences among Somali women and local health care professionals in Norway. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 112:29–35.

Varkey P, Jerath AU, Bagniewski S, & Lesnick T. (2007). Intestinal parasitic infections among new refugees to Minnesota, 1996-2001. *Travel Medicine and Infectious Disease*, July; 5(4):223-229

Venters H, & Gany F. (2011) African Immigrant Health (Review). *Journal of Immigrant and Minority Health*, April; 13(2): 333-344.

Venters H, Gany F. (2011). African immigrant health. *Journal of Immigrant and Minority Health*, Apr;13(2):333-44. Epub 2009 Apr 4.

Walker P, & Barnett E. (2007). Introduction to the field of refugee and immigrant healthcare. In: P. Walker, & E. Barnett (Eds.), *Immigrant Health*, pp1-9. Philadelphia, PA: Elsevier.

Whiting DR, Hayes L, & Unwin NC. (2003). Diabetes in Africa - Challenges to health care for diabetes in Africa. *Journal of Cardiovascular Risk*, Apr; 10(2): 103-110.

World Health Organization. (2006). WHO study group on female genital mutilation and obstetric outcome. WHO collaborative prospective study in six African countries. *Lancet*, 367(9525):1835-1841