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Skander M'zah Date

Mental health status and service assessment for Syrian adult refugee population resettled in Metropolitan Atlanta: A cross-sectional survey

By

Skander M'zah, MD
Master of Public Health

Hubert Department of Global Health

_____

Dabney P. Evans, PhD MPH
Committee Chair

Barbara Lopes Cardozo, MD, MPH
Committee Member

A thesis submitted to the Faculty of the Rollins School of Public Health of Emory University in partial fulfillment of the requirements for the degree of Master of Public Health in Global Health 2017.

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Skander M'zah, MD

Medical Doctorate
Faculty of Medicine of Tunis
Tunisia
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Dabney P. Evans, PhD MPH
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ABSTRACT

The war in Syria generated the biggest influx of refugees since World War II. The United States welcomed 20,017 Syrian refugees in 6 years. Mental health illnesses are a big burden on the refugee population. We aimed to assess the mental status of the Syrian refugee population in Metropolitan Atlanta and the mental health care services. We conducted a cross-sectional survey of 25 participants between June 2016 and March 2017 in Metropolitan Atlanta.

We used a questionnaire of 90 closed and partially closed ended questions. We used the Hopkins Symptoms Checklist 25 and Post Traumatic Stress Disorder-8.

Our findings showed high rates of anxiety symptoms (60%), Post Traumatic Stress Disorder (84%) and depression (44%). However, only 20% of the participants went to see a mental health professional. The main reasons for not seeking professional help were a lack of information and access to transportation. The lack of information expressed by our study participants is reflecting both a language barrier and a lack of active counselling and orientation offered to the refugees. This may indicate a lack of awareness from the resettlement agencies and health institutions.

This study is the first to be conducted on mental health of resettled Syrian refugees in the U.S. These findings suggest that there is an obvious need for a larger study that would assess the real magnitude of psychological distress among this population in order to guide a public health intervention.

ACKNOWLEDGEMENTS

I would like to dedicate this work to the Syrian people, who welcomed me in their family nest and shared with me their most personal suffering.
I would like to thank them for their hospitality and their trust.
I would like to extend my gratitude to Dr Dabney Evans and Dr Barbara Lopes Cardozo, who made this study come to life.
Last, I would like to thank my family, friends and all those who believed in me.

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INTRODUCTION

The world is witnessing the highest number of displaced individuals since the aftermath of World War II. At the end of 2015, the UNHCR reported 65.3 million forcibly displaced individuals "resulting from persecution, conflict, generalized violence, or human rights violations"(UNHCR, 2015b). 24 people worldwide are displaced every minute – 34,000 people per day. This number is 4 times higher than in 2005. Non-Syrian refugees comprise the majority of refugees resettled in the U.S. However, the relatively recent Syrian crisis has produced more than half of the refugees worldwide (54%). The number of Syrian refugees exceeded 5 million at the end of 2015 (UNHCR, 2015b).

A large proportion of refugees have experienced traumatic events as a result of war and displacement ranging from discrimination to psychological and physical torture (UNHCR, 2014). The causal link between traumatic events experienced by refugees and mental health illnesses being well established, refugee mental health has become a big concern. Mental health is a key component for asylum seekers' integration in their host countries. If untreated, mental illnesses can impact negatively on refugees and lead to negative coping. Resettlement agencies in the United States are offering many services to help the refugees adjustment. Mental health care is still not included as a basic need and has little funding. A study conducted in 2006, showed that 40% of refugees in the United States expressed a need for mental health care services (Ehntholt & Yule, 2006). This is why it is important to have a better understanding of the scale of psychological disorders among the Syrian Refugees. We can then estimate the mental health services needed and identify the means to improve them.

The purpose of this study is to assess the mental status of the Syrian refugee population in Metropolitan Atlanta and the mental health care services. The following specific aims guided the development of the thesis project:

- Aim 1: To assess the mental health status of the adult Syrian Refugees in Atlanta
    - Estimate the frequency of mental health illnesses: depression, anxiety and Post Traumatic Stress Disorder (PTSD) among the study participants
    - Assess the traumatic events encountered by the participants before and after their migration
- Aim 2: To assess the needs for mental health care services

The findings of our study will help characterize the mental health status and services mental for Syrian refugees resettled in the U.S. These findings may be used to advocate for the improvement of mental health services for refugees in the United States.

LITTERATURE REVIEW

I- INTRODUCTION

This chapter provides background information on mental health illnesses among refugees in general and Syrians in particular. First, an overview of the Syrian war context outlines the potential stressors impacting mental health illnesses among Syrians. The review then moves into an overview of the migration difficulties– including refugee camps and non camp settings- experienced by the refugees in countries of first asylum. Then, the chapter gives definitions and known prevalence of Post Traumatic Stress Disorder, depression and anxiety among refugees assessed by previous studies. Next, the review details the U.S. refugee selection, vetting, and processing procedure. The literature review provides numbers on the influx of Syrian refugees in the U.S. in general and in the state of Georgia in particular. We also expose past and current political blockages to Syrian resettlement in the U.S. Finally, the literature review addresses post migration difficulties reported in previous studies. This chapter concludes with the gaps in the existing research and the relevance of the current study.

II- PRE-MIGRATION

Over the course of the Syrian conflict, Syrians were victims of multiple human rights violations. Trapped in the crossfire between multiple actors (the Syrian army, Islamist State of Iraq and Syria (ISIS), rebel groups, Russian, Turkish and the coalition forces). UNHCR has reported 'massacres, executions, hostage taking, torture, separation from family, unlawful executions, enforced disappearance and sexual violence' (UNHCR, 2014). In 2014, UNHCR estimated that 210,000 people were killed and 840,000 injured in the Syrian conflict. The life expectancy of the Syrian population decreased from 75.9 years in 2010 to 55.7 at the end of 2014. In addition to being exposed to violence, many Syrians experienced increasing levels of poverty, loss of livelihood and limited access to essential needs (UNWOMEN, 2014). When "traumatization" is "repeated and prolonged" in addition to difficult life conditions, the risk of developing mental health disorders is higher (Acarturk et al., 2015).

III- MIGRATION - DISPLACEMENT

In addition to war trauma, refugees are also subject to long periods of exile. This exile period associated with "unemployment, discrimination, and social isolation" is "significantly associated with levels of self-reported anxiety and depression"(Miller et al., 2002). Syrian refugees face numerous challenges inside and outside Syria. 6.5 million of them are internally displaced (UNHCR, 2017), making them "the biggest internally displaced population in the world."
From the beginning of the war in 2011, the UNHCR counted 50 displaced Syrian families "every hour of every day"(UNHCR, 2017).

Almost 5 million Syrian refugees were registered in neighboring countries including Turkey, Lebanon, Jordan, Iraq and Egypt. This number is reported by UNHCR and doesn't account for unregistered refugees.

Twelve percent of these refugees are living in "formal refugee camps"(UNHCR, 2016). More than 80% of Syrian refugees are living in urban settings, fleeing the bleak conditions inside the camps. Iraq counts 62% of Syrian refugees living in urban or informal settlements. This number reaches 82% in Jordan (UNHCR, 2017). Overcrowded refugee camps are causing the number of unregistered urban refugees to grow.

As refugees, Syrians are not authorized to work legally in countries of first asylum; which leaves them dependent on illegal labor or aid from assistance organizations (UNHCR, 2016).

Due to the protracted nature of the Syrian crisis, international assistance for the host countries is dwindling. The UNHCR cash allowance "to help a refugee pay for housing, food, and medical care has been reduced to $7 per month per person" (UNHCR, 2016). The funding shortage forced the United Nations World Food Program (WFP) to make budget cuts. In 2015, the WFP reduced their "assistance to 1.6 million Syrian refugees in the five countries"(WFP, 2015).

This situation is even more critical for vulnerable groups such as female head of households. In Lebanon, the proportion of Syrian households living below the poverty line increased from 50% to 70% in one year. This loss of livelihood and the harsh living conditions push refugees to take extreme survival measures such as illegal work, sending their children to beg or trying to flee illegally to Europe (UNHCR, 2016). "The lack of resources, health services, freedom of movement, documentation and education" Syrians faced put them at a higher risk of mental health disorders (Norwegian Refugee Council, 2014).

IV- PSYCHOLOGICAL DISTRESS AND MENTAL HEALTH DISORDER

Demand for psychological support has been growing among Syrian refugees related to the increase in psychological trauma related to war. In fact, an increase of the number of Syrians with “severe mental health disorders” has been found by Lebanese psychiatric hospitals (UNHCR, 2015a). International Medical Corps (IMC) reported that 54% of the Syrians assessed by their mental health facilities in four countries had severe emotional disorders (including depression and anxiety) (Lebanon, Syria, Turkey and Jordan) (IMC, 2014).

In the Middle East, mental illness has long been stigmatized and socially condemned, yet the war trauma has made Syrians more accepting in seeking treatment for their conditions (Cultural Orientation Resource Center, 2014). However, due to a “overstretched capacity and a shortage of trained mental health providers” the quality of those services is often inadequate for this rising demand (Weissbecker, I. and A. Leichner, 2014). ‘These mental health disorders can be:

- worsening of an existing condition,
- new problems developed as a result of violence and displacement
- problems adjusting to “post-emergency context” including refugees camps and host countries’(Hassan, Ventevogel, Jefee-Bahloul, Barkil-Oteo, & Kirmayer, 2016).

Psychological distress is a term used to describe ‘an emotional state associating depression and anxiety symptoms’ (Pawlikowska et al., 1994). Psychological distress can manifest in a “wide range of emotional, cognitive, physical and behavioral and social problems” (Hassan et al., 2016). The most common mental illnesses among refugees are “depression, anxiety disorders, and posttraumatic stress disorder (PTSD) increases” (Acarturk et al., 2015). Improving refugees

"mental health and psychosocial well-being" has been identified as a priority by the Inter-Agency Standing Committee (IASC) (Inter-Agency Standing Committee (IASC), 2007).

Post Traumatic Stress Disorder

Post Traumatic Stress Disorder (PTSD) was adopted in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) (Breslau, 2009). It is defined by symptoms following an identified traumatic event presumed to be the cause (Breslau, 2009). PTSD symptoms are grouped into three categories:"(1) re-experiencing the traumatic event, (2) avoidance of stimuli that resemble the event and numbing of emotional responsiveness , and (3) increased arousal (American Psychiatric Association, 2013). Being exposed to traumatic events does not necessarily result in PTSD symptoms. Almost, 80% of the U.S. resident population has been exposed to one or more posttraumatic stress disorder (PTSD)–level traumatic events, as defined in the DSM-IV. However, less than 10% has developed PTSD (Breslau, 2009). This rate is higher among war refugees. Studies reported 86% (Carlson & Rosser-Hogan, 1994) of war refugees with PTSD symptoms. A systematic review of 18 studies showed a prevalence rate for PTSD of 36% (Lindert, Ehrenstein, Priebe, Mielck, & Brähler, 2009) among refugees in different locations. A meta-analysis conducted including 7,000 refugees showed that a refugee resettled in western countries is 10 times more likely to have PTSD compared to individuals among the same age(Fazel, Wheeler, & Danesh, 2005). In a cross-sectional study conducted in camps settings in Turkey, 33.5% of the Syrian refugees presented PTSD (Alpak et al., 2015). This rate reaches 71% for people "with the following features: females diagnosed with a history of a psychological disorders, having a family history of psychiatric disorder and experiencing two or more traumatic events" (Alpak et al., 2015). In comparison, the prevalence of PTSD in the

general American population is between 7 and 8% (US Department of Veterans Affairs, 2014). The loss of “emotional and social support” exacerbates symptoms of PTSD (Gorst-Unsworth & Goldenberg, 1998). With the ongoing war and social isolation, Syrian refugees are extremely vulnerable to PTSD.

Depression

Depression is defined as a ‘depressed mood or a loss of interest or pleasure in daily activities for more than two weeks, mood change from the person's baseline and a function impairment (social, occupational, educational)’(American Psychiatric Association, 2013). The DSM IV defines depression by the daily presence of 5 of 9 specific symptoms: (1) depressed mood , (2)decreased interest or pleasure, (3) significant weight change (5%) or change in appetite, (4) change in sleep: insomnia or hypersomnia, (5) change in activity: psychomotor agitation or retardation, (6)fatigue or loss of energy, (7) feelings of worthlessness or or inappropriate guilt,(8) diminished ability to think or concentrate, or more indecisiveness (8), suicidal thoughts or suicide, or (9) has suicide plan (American Psychiatric Association, 2013). The WHO estimate that 350 million are affected by depression worldwide (WHO, 2016). In 1990, depression was ranked forth leading disease burden and is expected to hold the second place by 2020(Rf Mollica et al., 2004). A systematic review including 24,051 refugees from different countries found a depression prevalence rate of 44% (Lindert et al., 2009). Another study conducted by Médecins Sans Frontières, showed that among the 1,144 psychiatric patients of their clinics in Lebanon 28.8% had depression disorder as primary diagnosis (Bastin et al., 2013). An epidemiological study found a significant increase in depressive disorders among Syrian refugees. The depression rates in Syria, before the war, was in the global range of depression prevalence, between 8 and 12% (Andrade et al., 2003). Another

study showed that the prevalence of depression in Syria went from 6.5% prior to the war to 43.9% in 2016 (Naja, Aoun, El Khoury, Abdallah, & Haddad, 2016). Depression represents an economic burden as much as a social one. In fact, untreated, severe forms of depression can lead to social isolation and more importantly to suicide attempts. More than 800,000 people worldwide commit suicide per year (WHO, 2016).

Anxiety

Anxiety disorders include: "separation anxiety disorder, selective mutism, specific phobias, social anxiety disorder, panic disorder, agoraphobia, and generalized anxiety disorder"(American Psychiatric Association, 2013). Anxiety is marked, persistent and impairs daily activities. Anxiety disorders, often occur in association with major depression, alcohol and other substance-use disorders, or personality disorders(Craske & Stein, 2016). A systematic review of research done between 1980 and 2009 showed a global prevalence for anxiety disorders of 7.3%(Baxter, Scott, Vos, & Whiteford, 2013). This means that "one in 14 people around the world at any given time has an anxiety disorder and one in nine will experience an anxiety disorder in a given year"(Baxter et al., 2013). Anxiety is present with many mental health disorders. However, very few studies assessed specifically anxiety symptoms among refugees. In Lebanon, 15.6% of the 1144 refugee psychiatric patients treated by Médecins Sans Frontières clinics presented anxiety disorders (Bastin et al., 2013). Other studies reported higher prevalence. A systematic review including 10 studies found a prevalence of 40% for anxiety disorders among refugees (Lindert et al., 2009). Another study conducted in Lebanon, reported an anxiety rate of 41% among the older Syrian refugee population (Strong, Varady, Chahda, Doocy, & Burnham, 2015).

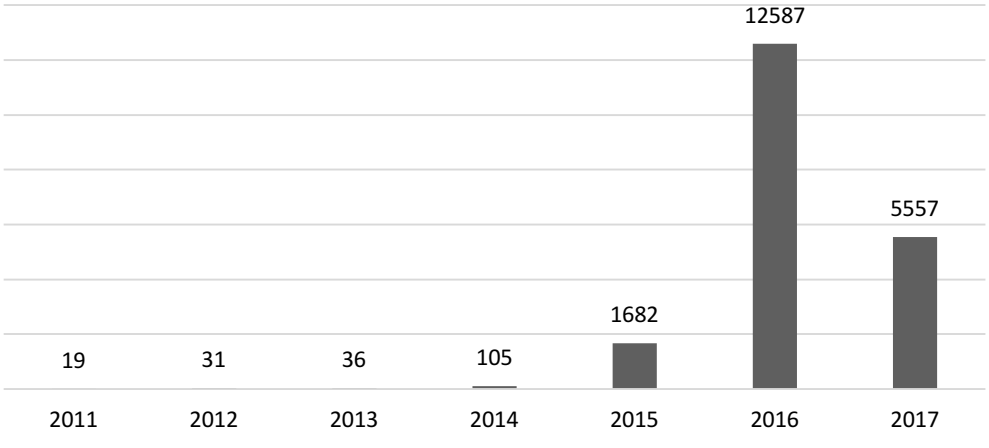
V- RESETTLEMENT IN THE U.S.

U.S. resettlement procedure

Resettlement represents a “key to safety” for persecuted populations fleeing conflicts(UNHCR, n.d.). Resettlement is defined by the UNHCR as “the transfer of refugees from an asylum country to another State that has agreed to admit them and ultimately grant them permanent settlement”(UNHCR, n.d.). Therefore, it represents the “only durable solution”. Few countries are part of UNHCR resettlement program. ‘Less than 1% of the refugees worldwide are resettled’(Migration Policy Institute, 2015). The United States is the “world’s top resettlement country” for the majority of them (Migration Policy Institute, 2015). The majority of refugees resettled are referred by the United Nations High Commission for Refugees (UNHCR). These individuals are designated “priority 1”. They are defined by the U.S. Refugee Admissions Program as: “individual cases referred by virtue of their circumstances and apparent need for resettlement. Individual refugee cases are identified and referred to the U.S. resettlement program by UNHCR, a U.S. embassy, or a designated NGO” (Migration Policy Institute, 2015). All refugees considered for resettlement go through rigorous and intensive security screenings, background checks, and interviews conducted by the U.S. State Department as well as by the intelligence agencies including DOD, Homeland Security, CIA, and the FBI (Amy Popoe, 2015). This process takes an average of 18 to 24 months. The International Organization for Migration (IOM) is in charge of transportation to the United states after medical screening (Migration Policy Institute, 2015).The refugee admission ceiling is decided by the U.S. president in consultation with Congress at the beginning of every fiscal year. The president of the United

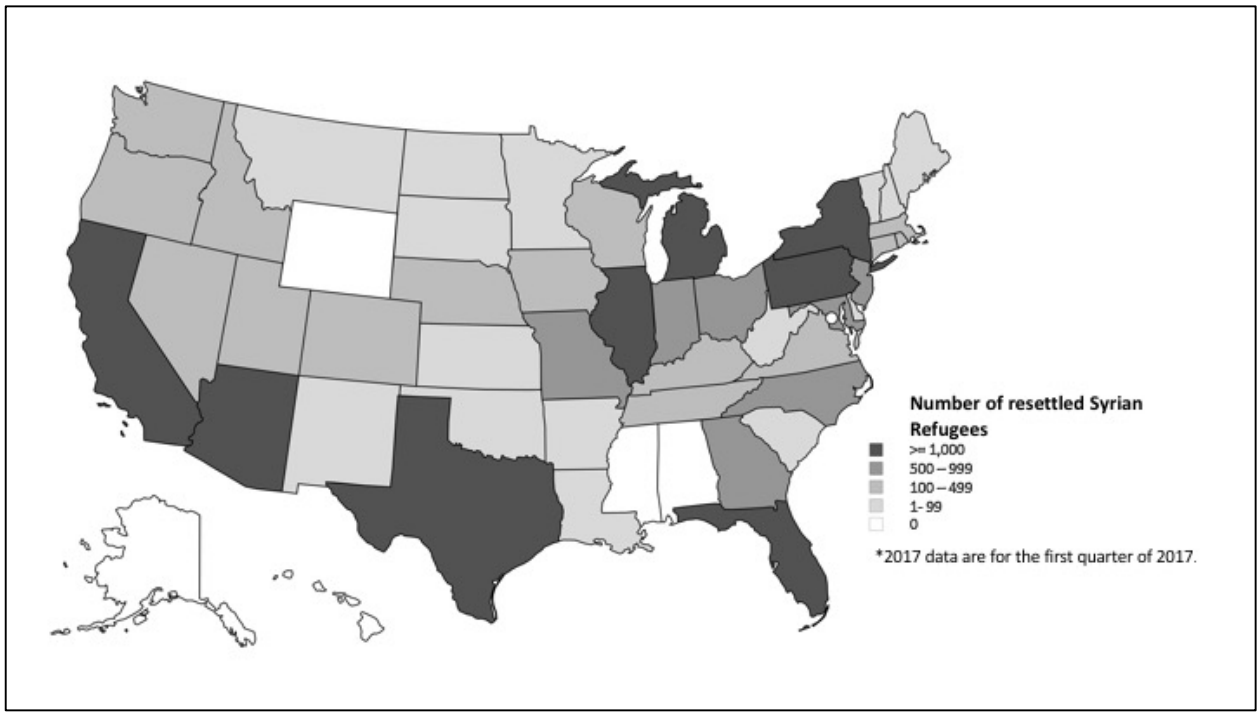
States also determines the refugees' nationalities rates for the upcoming year. In 1993, in response to the conflict in the Balkans, it reached 142,000. Since then, the U.S. annual refugee admission ceiling has been declining; 2008, was the only exception. In 2010, the ceiling was raised by 10,000 to adjust for the situation in Iraq. Between 2008 and 2011, the threshold stayed at 80,000 to decline to 76,000 in 2012 and in 2013 to 70,000 (Migration Policy Institute, 2015). In response to the Syrian refugee crisis, the Obama administration raised the refugee admission ceiling to 85,000 for 2015 and 100,000 for 2017 Fiscal Year. They also increased specifically the number of Syrian refugees admitted in 2015 to at least 10,000. The number of Syrian refugees resettled in the United States scaled up from 31 in 2012 to 1,682 in 2015 and 12,587 in 2016 (Figure 1). A total of 20,017 Syrian refugees were resettled in the United States between October 1, 2011 and March, 2017 (Refugee Processing Center, the U.S Department of State, Bureau of Population, Refugees and Migration (BPRM), 2017).

Figure 1: Syrian Refugees resettled in the United States, FY 2011-17*



Source: Refugee Processing Center, tabulation of data from the U.S department of State, bureau of population, refugees and migration, "admissions and arrivals" database, accessed January 18, 2017.

Figure 2: Map of distribution of Syrian Refugees resettled in the U.S by state between 2012 and 2017*

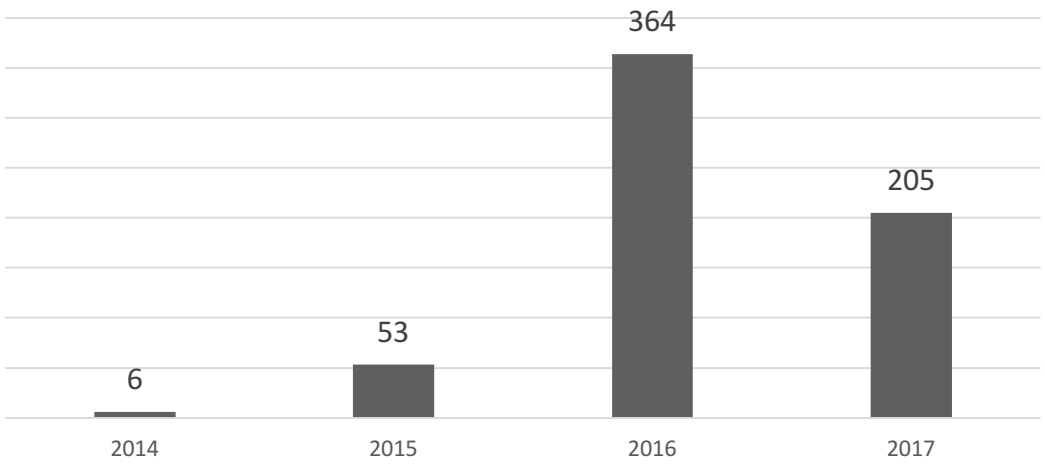


Source: Refugee Processing Center, tabulation of data from the U.S department of State, bureau of population, refugees and migration, "admissions and arrivals"

Upon their arrival, refugees are assigned to one of the private resettlement agencies that have a "cooperative agreement with the State Department"(Carol Colloton, 2014). Resettlement agencies are funded by the US State Department Reception and Placement Program and supplemented with aid from other federal funding mechanisms including from the Department of Health and Human Services. These NGO resettlement agencies coordinate services and supplemental aid from other government programs (Supplemental Nutrition Assistance Program, Medicaid) in order to assure a number of services to the refugees during the first 30 to 90 days of arrival including "including food, housing, clothing, employment services, follow-up medical care, and other necessary services"(Carol Colloton, 2014). Services offered to the refugees after this period are funded by the Office of Refugee Resettlement (ORR). One year

after their resettlement, refugees are required to apply for lawful permanent resident (LPR) status. Being a lawful permanent resident, they have the right to "own property, attend public schools, join certain branches of the U.S. armed forces, travel internationally without an entry visa" (Migration Policy Institute, 2015). As a LPR, admitted refugees may also apply for U.S citizenship, five years after their resettlement.

Figure 3 : Number of Syrian Refugees resettled in the State of Georgia between 2014 and 2017*



Source: Refugee Processing Center, tabulation of data from the U.S department of State, bureau of population, refugees and migration, "admissions and arrivals" database, accessed January 18, 2017.

Each year, the state of Georgia welcomes 2,500 to 3,000 new refugees. In 2017, Georgia received 0.64% (205 refugees) of the total number of Syrian refugees resettled in the U.S. Syrians represented 16.4% of the total number of refugees newly arrived in Georgia (Figure 3). 88% of the total number of Syrian refugees were resettled in metropolitan Atlanta (including Marietta, Clarkston and Stone Mountain).

U.S. Refugee Resettlement opposition

Resettlement of Syrian refugees had always been problematic. Even prior to president Trump's election, 24 governors were openly opposed to resettling refugees from Syria in their states. The Paris terrorist attacks gave Georgia's governor, Nathan Deal, a pretext to call for a hold on Syrian refugees. Indeed, in November 2015, Governor Deal announced that the state of Georgia will not be accepting any Syrian refugee and sent a letter to President Obama informing him about his decision (Governor Nathan Deal Office of the Governor, 2015). Based on U.S. immigration legislation "only the federal government may decide who can enter the United States as a refugee" (Federation of American Immigration Reform: Fact Sheet, 2015); which made the governor's order illegal. Under Deal's executive orders, state agencies could not process any refugee acceptance paperwork. Soon after that, the Georgia Department of Human Services ordered its employees to put a hold on processing any food stamps and Medicaid applications for Syrian Refugees resettled after November 2016. This last executive order led to a warning by the Federal Supplemental Nutrition Assistance Program who urged the state to reconsider their decision as it is a violation of the Food and Nutrition Act of 2008. Under pressure from Attorney General Sam Olens, Governor Deal withdrew his executive order in January 2016. Donald Trump's election in November 2016, reopened the door to a new ban, this time at the Federal level. The U.S. President, Donald Trump, has halted all Syrian refugee resettlement indefinitely along with other countries he considers to be a terrorist threat including Somalia, Sudan, Iraq, and Yemen(The White House, 2017). He has also halved the number of total refugees to be resettled in 2017. More cuts to refugee resettlement and immigration programs are expected soon.

VI- POST MIGRATION STRESSORS

Moving to a new country, refugees need to adjust to their new environment. Adjusting to the host country can be an additional source of stress. It requires "psychological and socio-cultural adaptations"(Berry, 1997). A study conducted in Australia on Sudanese refugees showed that post-migration experiences can be a predictor for mental health wellbeing. The biggest concern expressed by the refugees was their concern about distance from family, employment and difficulties adjusting to the cultural life. These difficulties were found to be correlated to an "increase in depression, anxiety and somatization". The new environment comes with difficulties and stressors. Post migration stressors are not to be neglected. In fact, adjustment to a new culture is an additional stress increasing the risk of mental disorders (Laban, Gernaat, Komproe, van der Tweel & De Jong, 2005). A study conducted among Bhutanese refugees in the U.S. showed that language was the most common post migration difficulty – reported in 71% of the refugees surveyed. The same study found "family separation" and "worrying about the family left in the home country" as strongly linked to the individual's suicide (Hagaman et al., 2016). Another study showed that a lack of social support is one of the most important risk factors for mental health illnesses among refugees along with an ongoing war in the country of origin. Whereas, the presence of economic opportunities and access to work as well as a maintenance of the socioeconomic status are protective factors (Porter & Haslam, 2005).

VII- SUMMARY OF CURRENT PROBLEM AND STUDY RELEVANCE

Due to the high prevalence of mental health problems among refugees and the burden they can represent for rebuilding their new lives in the host country; an assessment of the mental health status and needs is required in order to plan an intervention and insure the best resettlement conditions. So far, no studies targeting Syrian refugees' mental health has been conducted in the United States.

MANUSCRIPT

CONTRIBUTION OF STUDENT

I have contributed to all aspects of this thesis project, from the design phase to writing of the final conclusions and recommendations. In collaboration with Dr. Barbara Lopes Cardozo and Dr Dabney Evans, I developed the project objective and aims. With the help of Pr Solveig Argeseanu Cunningham, I designed the survey instrument. I performed an extensive review of the literature in conjunction with the development of my data collection instrument. I conducted all data collection, and I was responsible for all data management and analysis. I wrote all parts of this thesis project. Dr. Dabney Evans and Dr Barbara Lopes Cardozo provided written and verbal feedback throughout all stages of this thesis project.

ABSTRACT

The war in Syria generated the biggest influx of refugees since World War II. The United States welcomed 20,017 Syrian refugees in 6 years. Mental health illnesses are a big burden on the refugee population. We aimed to assess the mental status of the Syrian refugee population in Metropolitan Atlanta and the mental health care services. We conducted a cross-sectional survey of 25 participants between June 2016 and March 2017 in Metropolitan Atlanta.

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This study is the first to be conducted on mental health of resettled Syrian refugees in the U.S. These findings suggest that there is an obvious need for a larger study that would assess the real magnitude of psychological distress among this population in order to guide a public health intervention.

INTRODUCTION

Resettlement is the “key to safety” for many refugees escaping war and persecution(UNHCR, n.d.). But after being exposed to multiple traumatic events, adjusting to new country becomes even harder. The war in Syria generated the biggest influx of refugees since World War II (UNHCR, 2015b). The war has displaced over 5 million people (UNHCR, 2015b). The conflict in addition to years of displacement to refugee camps or in urban areas, can contribute to severe mental illness among Syrian refugees.

A study reported over 54% of Syrian refugees with severe emotional disorder (IMC, 2014). The most common mental illnesses were depression, anxiety and Post Traumatic Stress Disorder (Acarturk et al., 2015). Psychological support is critical to address those issues. Yet, without data on mental health among refugees, no public health intervention can be planned.

The United States welcomed 20,017 Syrian refugees in 6 years (Refugee Processing Center, the U.S Department of State, Bureau of Population, Refugees and Migration (BPRM), 2017).

The purpose of this study is to assess the mental status of the Syrian refugee population in Metropolitan Atlanta and the mental health care services. This research’s findings can guide future larger studies and be used to advocate for better and more adjusted mental health services for Syrian refugees.

METHODS

Survey instrument

We used a questionnaire of 90 closed and partially closed ended questions. The questionnaire employed a mixed method framework in order to encompass fully the Syrian refugee context. The survey included questions on socio-demographics, a mental health services assessment, post migration stressors, and standardized tools to assess refugee's mental health. The instrument contained 6 sections:

- Demographic section
- Hopkins Symptoms Checklist 25 (HSCL 25) (Parloff, Kelman, & Frank, 1954)
- Traumatic events list (derived from (RF Mollica, 1992))
- Post Traumatic Stress Disorder-8 (PTSD-8) (Hansen et al., 2010)
- Mental health service assessment (original)
- Post migration trauma events (derived from (Ellis et al., 2015))

The socio-demographic variables: age, gender, marital status, level of education, region of origin, last occupation, ability to read/write English, country of first asylum, duration of stay in refugee camps or in non-camp settings, length of the migration procedure and day of arrival in the U.S. We used the Hopkins Symptoms Checklist 25 (HSCL 25) to assess symptoms of anxiety, depression and psychological distress. The HSCL-25 is a set of 25 questions designed to assess symptoms of anxiety and depression and includes: 10 anxiety symptom questions and 15 depression symptoms questions. We asked the refugees to score the symptoms on a 4-point

scale of severity. Mean scores range from 0 to 4"("Indochinese versions of the Hopkins Symptom Checklist-25," 1987; Kleijn, Hovens, & Rodenburg, 2001; R. F. Mollica, 1999).

We considered an average score of 1.75 out of 4 or higher as positive for anxiety and depression symptoms, respectively (Vonnahme, Lankau, Ao, Shetty, & Cardozo, 2015). The use of the Arabic translation of this instrument has been validated among refugees with good psychometric properties (Kleijn et al., 2001). We assessed the pre-migration traumatic experiences using a traumatic events list of 15 items, derived from the Harvard Trauma Questionnaire (HTQ) (Kleijn et al., 2001; RF Mollica, 1992) and adjusted to the Syrian context. The participants were asked to say if they encountered certain events since the beginning of the war in Syria.

In order to assess posttraumatic stress disorder (PTSD) symptoms, we used PTSD- 8. This test showed "good psychometric properties in three independent samples of whiplash patients, rape victims, and disaster victims" (Hansen et al., 2010). The PTSD-8 was derived from the first 16 items of the Harvard Trauma Questionnaire (HTQ), corresponding to the DSM-IV criteria for PTSD. We used it to assess symptoms of Post-Traumatic Stress Disorder through the following items: 'four intrusive, two avoidance and two hypervigilance items. Participants were asked to answer on a four-point scale ('not at all' (1), 'a little' (2), 'quite a bit' (3), and 'all the time' (4)). We considered each set of items (intrusion, avoidance and hypervigilance) positive if at least one of its item was scored 3 or higher. The calculated score gave a score for PTSD symptom severity (Hansen et al., 2010). All the instruments used in this survey (HSCL 25, PSTD 8 and HTQ) have previously been validated in Arabic (Arnetz et al., 2014).

To assess mental health services availability, we designed 9 questions. Those were used to assess preexisting mental health conditions and treatments, the need for mental health support since resettlement and the availability and quality of the mental health services offered to refugees. Finally, a 14-item checklist was adapted from the post-migration living difficulties checklist used with Bhutanese refugees (Vonnahme et al., 2015). The study team chose the items relevant to the Syrian context. The checklist assessed the causes of stress faced by Syrian refugees resettled in Atlanta. The participants were asked to scale the stressors on a four-point scale ('not at all' (1), 'a little' (2), 'quite a bit' (3), and 'extremely (4)).

Study Population and recruitment

Our sampling frame consisted of the database of "Georgians for Syria" -a community organization supporting Syrian refugees in Atlanta from. From this database we conducted a convenience sample of 25 refugees. Inclusion criteria included: being a documented Syrian refugee of 18 years old and older, and having been resettled between March 2011 and March 2017 in Metropolitan Atlanta. We excluded those who could not complete the interview due to a physical or mental impairment. A total of 25 Syrian refugees were included in the sample. The interviewer visited participants in their homes and administered the survey individually to each adult household member. The Interviews were conducted face to face by the Principal Investigator - a native Arabic speaker.

IRB statement

The study protocol was approved by the Emory Institutional Review Board (IRB) (Approval number IRB00087212). During the recruitment process all participants verbally consented to study participation. Prior to the visit, an oral consent via phone was received from the

participants and an appointment for a home visit was set. An informed consent script was developed by the study team and translated to Arabic. Verbal consent was noted on the consent form by the interviewer prior to each interview.

RESULTS

We conducted a cross-sectional survey of 25 participants between June 2016 and March 2017 in Metropolitan Atlanta.

- Participants Demographics

The majority of the participants were males (75%). 92% were married (9%) with a median of 3.8 children per family (range= 1- 8) (Table 1). The majority came from 3 main Syrian governorates: Dar'aa (40%), Damascus (24%) and Aleppo (20%). The median of age of the participants was 37.5 (range= 20 - 55). Both genders were similar in terms of mean ages (males: 37.6 and females: 37.3). 20% of them were under 30 years old while 40% were between 30 and 40 years old. A total of 3 participants (12%) had no education. 24% went only to primary school, 36% went to college and 28% went to University. 32% were able to read and write English. 3 out of the 25 participants presented a physical disability.

Table 1 Demographic characteristics of Syrian refugee participating in the survey, Metropolitan Atlanta, Georgia, 2016 (N=25)

Variable	Male n (col%) (n=15)	Female n (col%) (n=10)	Total N=25 (%)
Age			
Median	37.6	37.3	37.5
Range	21 - 55	20 - 54	20-55
Marital status*			
Married	15(100%)	8(80%)	23(92%)
Single	0	1(10%)	1(4%)
Widowed	0	1(10%)	1(4%)
Level of education*			
None	2(13.4%)	1(20%)	3 (12%)
Primary	4(26.6%)	2(20%)	6 (24%)
College	6(40%)	3(30%)	9(36%)
University	3(20%)	4(40%)	7(28%)
English*			
Read and write	4(26.7%)	4(40%)	8(32%)
No	11(73.3%)	6(60%)	17(68%)
Employed			
Yes	9(60%)	3(30%)	12 (48%)
No	6(40%)	7(70%)	13 (52%)

- Migration history

The refugees surveyed reported a median of 3.7 forced migrations inside and outside of Syria. 84%(21) of the participants fled Syria in 2012, while 8% fled in 2011 and 12% in 2013. After leaving Syria, 15 (60%) participants stayed in refugee camps (48% went to Jordan). The average time spent in camps was 8.6 months (Range=0.25 – 60 months). 21 participants (84%) stayed in a non camp settings. The average time spent in non camp settings was 43 months (Range=24 - 60). The migration procedure to the United States took more than 2 years for 13.5 % of the study participants, between 1 and 2 years for 73% and between 6 and 12 months for

13.5% of them. Median time in the United States post- resettlement was 11 months (range= 6 - 15) (Table 2).

Table 2: Migration history of Syrian refugee participating in the survey, Metropolitan Atlanta, Georgia, 2016 (N=25)

Variable	Total N (%)
Number of forced migrations inside Syria	
Median	4.27
Range	1 - 20
Been in refugees camps	
Yes	15 (60%)
No	10 (40%)
Length of stay in camps (in months)	
Median	8.6
Range	0.25 - 60
Stayed in none camp settings	
Yes	21 (84%)
No	4 (16%)
Length of stay in non camps settings (in months)	
Median	40.5
Range	24 - 60
Length of the US migration procedure	
6 to 12 months	6 (24%)
1 to 2 years	11 (44%)
More than 2 years	8 (32%)

- Mental Health Conditions (Table 3)

Prior to their resettlement in the United States, 12% (3) of participants had a previously diagnosed mental health condition and were already under treatment. Using the HSCL 25, we reported 60% (15) of the participants with anxiety symptoms, 44%(11) with depression symptoms and 60%(15) with psychological distress. Using the PTSD-8, we reported 21 participants positive for at least one item from each of the PTSD symptom clusters. This means

that 84% of the study group presented symptoms of PTSD. (9 people (36%) scored positive for the three PTSD items). Only 4 participants (16%) had a negative score for the three PTSD items.

Table 3: Stated symptoms of mental health conditions of Syrian refugee participating in the survey, Metropolitan Atlanta, Georgia, 2016 (N=25)

Condition	n (%)
History of diagnosed mental health condition	3(12%)
Anxiety[a]	15(60%)
Depression[a]	11(44%)
Psychological distress [a]	15(60%)
PTSD	
Intrusion	17(68%)
Avoidance	16(64%)
Hypervigilance	15(60%)
Overall PTSD diagnosis (case definition)b	21(84%)
Positive for at least one condition	21(84%)

[a] In order to assess symptoms of anxiety, depression, and psychological distress, we used the Hopkins Symptom Checklist (HSC). We considered positive for the anxiety and depression symptoms, respectively an average score of 1.75 or higher out of 4. The psychological distress score is the average of the anxiety and depression. We considered a person to be positive for psychological distress when the score is of 1.75 or higher out of 4

[b] A possible PTSD diagnosis would be considered if at least one item from each of the PTSD symptom clusters (Intrusion, Avoidance, hypervigilance) is positive (an item score of 3 or above is considered positive).

[c] No percentage is is given due to varying missing data for each condition assessment

The findings show overlaps between depression, anxiety and post-traumatic stress Disorder (figure 4). 8 (32%) participants had an association of the three. 75% (18) of the participants had an overlap of at least 2 conditions. Depression and Anxiety were never isolated. 96% of our population experienced at least one traumatic event prior to resettlement.

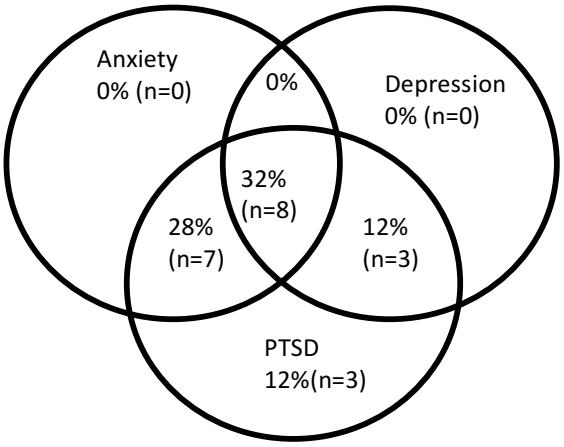

Figure 4: Overlapping symptoms of depression, anxiety and post-traumatic stress disorder in Syrian refugees (n=25)

Within the range of traumatic events, the five most commonly reported were: lack of food or water (72%), murder or death of a family member (68%), exposure to a combat situation (64%), forced separation from family members (64%) and lack of shelter (60%) (table 4). No one reported having been a victim of rape or sexual abuse nor having had a life-threatening accident.

Table 4: Traumatic events experienced before resettlement

Traumatic event	Number of participants N (%)
Suffered from a Lack of food or clean water	18 (72%)
Murder or violent death of a family member	17 (68%)
Exposed to a Combat situation	16 (64%)
Forced separation from family members	16 (64%)
Lacked shelter	15 (60%)
Oppressed because of ethnicity, religion or sect	14 (56%)
Serious physical injury of family member or friend from combat situation or landmine	14 (56%)
Ill health without access to medical care	11 (44%)
Threatened with a weapon	9 (36%)
Witnessed murder	7 (28%)
Tortured	6 (24%)
Being abducted	2 (8%)
Serious physical injury from a combat situation	1 (4%)
Rape or sexual abuse	0 (0%)
A life-threatening accident	0 (0%)

- Post migration difficulties (Table 5)

The most common post-migration difficulty reported was the language barrier (88%) followed by worries about family members in Syria (84%). Inability to pay living expenses was also a big concern expressed by 60% of the surveyed population while a lack of help from charity organizations was reported in 56% of the cases. Discrimination and difficulties maintaining cultural and religious traditions were not reported nor was the lack of religious community.

Table 5: Top 5 of the most severe trauma events reported by the study participants

Post migration Traumatic Event	Total N Reporting the trauma event as Severe to very severe (%)
Language barrier	22 (88%)
Worries about family back at home	21(84%)
Inability to pay living expenses	15 (60%)
Little help from charities or other agencies	14 (56%)
Poor access to counseling services	14(56%)

- Mental health services assessments

Only 7 participants (28%) reported having felt the need to talk with a health provider about a psychological discomfort. Only 5 (20%) of them, actually went to see a mental health professional. 60% of them qualified the visit to be very helpful, while 40% said that the visit was not helpful at all. For those who felt the need to see a health provider but did not go, a lack of information and access to transportation were the two main reasons reported.

- Study limitations

The results come from a modest convenience sample of 25 participants. This survey describes a specific cluster of Syrian refugees in Metropolitan Atlanta and cannot be generalized to the overall Syrian refugee populations in the U.S. or to other refugee populations. We reported demographic characteristics in frequencies and percentage for the total with a stratification by gender. We reported medians and ranges for continuous variables.

Due to the small sample size, we were unable to perform any multivariable analyses or show associations between traumatic events, demographic characteristics and mental health illnesses.

DISCUSSION

This cross-sectional study explored mental health status and service needs for Syrian refugees resettled in Metropolitan Atlanta. The findings will help guide and advocate for better mental care to Syrian refugees.

The results of this study showed a substantial mental health burden among the Syrian refugee population. Among our sample of resettled Syrian refugees, rates of depression symptomatology (44%) were consistent with previous studies in other refugee groups. In fact, the literature reports prevalence of depression of 44% (Lindert et al., 2009) and 43.9% (Naja et al., 2016). Anxiety symptoms (60%) were more frequently reported among our sample compared to the rates found by other research teams (Lindert et al., 2009; Bastin et al., 2013).

The occurrence of PTSD reported in our study was 84%. PTSD occurred more frequently than was found among other surveys of Syrian refugees. In Turkey, a cross sectional survey reported 33.5% of the Syrian refugees with PTSD symptoms (Alpak et al., 2015). In this study the highest prevalence of PTSD was 71% among refugees "with the following characteristics: females diagnosed with a history of a psychological disorders, having a family history of psychiatric disorder and experiencing two or more traumatic events" (Alpak et al., 2015). The high rate of mental illness in this population can be explained by the high proportion of participants exposed to traumatic events prior to resettlement (Acarturk et al., 2015). 72% of the refugees surveyed reported suffering from a lack of food or clean water and 68% had a family member or a friend murdered during the war.

Only 20% of participants went to see a mental health professional despite high reports of mental illness symptoms. This highlights the gap between the need for mental health services and their use (Hagaman et al., 2016).

The social stigma of a diagnosed mental illness is deeply ingrained into the Syrian culture, this may 'influence the help seeking behavior and the adherence to treatment' (Hassan et al., 2016). The provision of mental health services in non-medical settings may help reduce this stigma. In fact, integrating psychosocial programs in community centers can help 'diminish the social stigma and increase access '(Hassan et al., 2016). Study participants mentioned that the main reasons for not seeking professional help -for those who felt the need for psychological support- were a lack of information and access to transportation. In fact, availability, accessibility, and perceived efficacy of mental services highly influence the use of such services (Hagaman et al., 2016).

This may indicate a lack of awareness from the resettlement agencies and health institutions. The lack of information expressed by our study participants is reflecting both a language barrier and a lack of active counselling and orientation offered to the refugees. More culturally and linguistically appropriate services are critical to ease refugees access and use of mental health support. All the refugees interviewed lived in a housing complex with limited access to public transportation. Better access to public transportation in addition to a would improve accessibility and use of the mental health services by the refugees.

It was very difficult to deliver such survey to a population where mental health illnesses are still strongly socially stigmatized which explains the small study sample size. We report 5 direct and 3 indirect refusals to answer to the survey questions. Having the survey delivered by a native

Arabic speaker who grew up in a similar culture helped reduce bypass these difficulties at a certain extent.

To our knowledge this is the first study of the mental health needs of Syrian refugees resettled in the United States. In spite of the study limitations, our findings still highlight the high burden of mental health illnesses among Syrian refugees. A larger study needs to be conducted to give more statistically significant data.

The overall conclusion of this study points to the critical need for better access and more culturally acceptable mental health services. Our findings can be used as a stepping stone for a larger study and advocacy efforts in for better access to mental health services among refugees.

PUBLIC HEALTH IMPLICATIONS

Our study points out the necessity of establishing a systematic screening of Syrian refugees for mental health illnesses. Lutheran Services of Georgia and International Rescue Committee –two of the main resettlement agencies in Georgia- have already a screening for mental health illnesses as part of the Refugee Health Screening (RHS-15)(Hollifield et al., 2013). But this screening is not systematic and lacks active counselling and follow up.

The social stigma of mental health illnesses along with language barriers and lack of transportation were pointed out as obstacles of mental health services use. A non-medical setting may help reduce this stigma. In fact, integrating psychosocial programs in community centers can help 'diminish the social stigma and increase access '(Hassan et al., 2016) – especially if those centers are closer to the refugees housing.

CONCLUSION

In conclusion, our study results suggest a high burden of mental health diseases among Syrian refugees resettled in Atlanta and a high exposure to traumatic events. The present work highlighted the necessity of improving access and acceptability of mental care services. Due to the study limitations, we were unable to produce generalizable conclusions. This study being the first to be conducted on mental health of resettled Syrian refugees in the U.S., there is an obvious need for a larger study that would assess the real magnitude of psychological distress among this population in order to guide a public health intervention.

THESIS REFERENCES

Acarturk, C., Konuk, E., Cetinkaya, M., Senay, I., Sijbrandij, M., Cuijpers, P., & Aker, T. (2015). EMDR for Syrian refugees with posttraumatic stress disorder symptoms: results of a pilot randomized controlled trial. *European Journal of Psychotraumatology*, *6*(0). https://doi.org/10.3402/ejpt.v6.27414

Alpak, G., Unal, A., Bulbul, F., Sagaltici, E., Bez, Y., Altindag, A., … Savas, H. A. (2015). Post-traumatic stress disorder among Syrian refugees in Turkey: A cross-sectional study. *International Journal of Psychiatry in Clinical Practice*, *19*(1), 45–50. https://doi.org/10.3109/13651501.2014.961930

American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (Fifth Edition). American Psychiatric Association. https://doi.org/10.1176/appi.books.9780890425596

Amy Pope. (2015). Infographic: The Screening Process for Refugee Entry into the United States. Retrieved from https://obamawhitehouse.archives.gov/blog/2015/11/20/infographic-screening-process-refugee-entry-united-states

Andrade, L., Caraveo-anduaga, J. J., Berglund, P., Bijl, R. V., Graaf, R. D., Vollebergh, W., … Wittchen, H.-U. (2003). The epidemiology of major depressive episodes: results from the International Consortium of Psychiatric Epidemiology (ICPE) surveys. *International Journal of Methods in Psychiatric Research*, *12*(1), 3–21. https://doi.org/10.1002/mpr.138

Arnetz, B. B., Broadbridge, C. L., Jamil, H., Lumley, M. A., Pole, N., Barkho, E., … Arnetz, J. E. (2014). Specific Trauma Subtypes Improve the Predictive Validity of the Harvard Trauma Questionnaire in Iraqi Refugees. *Journal of Immigrant and Minority Health*, *16*(6), 1055–1061. https://doi.org/10.1007/s10903-014-9995-9

Bastin, P., Bastard, M., Rossel, L., Melgar, P., Jones, A., & Antierens, A. (2013). Description and Predictive Factors of Individual Outcomes in a Refugee Camp Based Mental Health Intervention (Beirut, Lebanon). *PLoS ONE*, *8*(1), e54107. https://doi.org/10.1371/journal.pone.0054107

Baxter, A. J., Scott, K. M., Vos, T., & Whiteford, H. A. (2013). Global prevalence of anxiety disorders: a systematic review and meta-regression. *Psychological Medicine*, *43*(5), 897–910. https://doi.org/10.1017/S003329171200147X

Berry, J. W. (1997). Immigration, Acculturation, and Adaptation. *Applied Psychology*, *46*(1), 5–34. https://doi.org/10.1111/j.1464-0597.1997.tb01087.x

Breslau, N. (2009). The Epidemiology of Trauma, PTSD, and Other Posttrauma Disorders. *Trauma, Violence, & Abuse*, *10*(3), 198–210. https://doi.org/10.1177/1524838009334448

Carlson, E. B., & Rosser-Hogan, R. (1994). Cross-cultural response to trauma: A study of traumatic experiences and posttraumatic symptoms in Cambodian refugees. *Journal of Traumatic Stress*, *7*(1), 43–58. https://doi.org/10.1007/BF02111911

Carol Colloton. (2014). How Refugee Resettlement in the United States actually work. American Foreigh Service Association. Retrieved from http://www.afsa.org/how-refugee-resettlement-united-states-actually-works

Craske, M. G., & Stein, M. B. (2016). Anxiety. *The Lancet*, *388*(10063), 3048–3059. https://doi.org/10.1016/S0140-6736(16)30381-6

Cultural Orientation Resource Center. (2014). Refugees from Syria.

Ehntholt, K. A., & Yule, W. (2006). Practitioner Review: Assessment and treatment of refugee children and adolescents who have experienced war-related trauma: Practitioner Review: Assessment and treatment of refugee children and adolescents. *Journal of Child Psychology and Psychiatry*, *47*(12), 1197–1210. https://doi.org/10.1111/j.1469-7610.2006.01638.x

Ellis, B. H., Lankau, E. W., Ao, T., Benson, M. A., Miller, A. B., Shetty, S., … Cochran, J. (2015). Understanding Bhutanese refugee suicide through the interpersonal-psychological theory of suicidal behavior. *American Journal of Orthopsychiatry*, *85*(1), 43–55. https://doi.org/10.1037/ort0000028

Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: a systematic review. *The Lancet*, *365*(9467), 1309–1314. https://doi.org/10.1016/S0140-6736(05)61027-6

Federation of American Immigration Reform: Fact Sheet. (2015, November). The role of States in the Refugee Resettlement Process. Retrieved from http://www.fairus.org/DocServer/state_local/The_Role_of_States_in_the_Refugee_Resettlement_Process_Nov_2015.pdf

Gorst-Unsworth, C., & Goldenberg, E. (1998). Psychological sequelae of torture and organised violence suffered by refugees from Iraq. Trauma-related factors compared with social

factors in exile. *The British Journal of Psychiatry*, *172*(1), 90–94. https://doi.org/10.1192/bjp.172.1.90

Governor Nathan Deal Office of the Governor. (2015, November). Deal: Georgia will not accept Syrian refugees.

Hagaman, A. K., Sivilli, T. I., Ao, T., Blanton, C., Ellis, H., Lopes Cardozo, B., & Shetty, S. (2016). An Investigation into Suicides Among Bhutanese Refugees Resettled in the United States Between 2008 and 2011. *Journal of Immigrant and Minority Health*, *18*(4), 819–827. https://doi.org/10.1007/s10903-015-0326-6

Hansen, M., Andersen, T. E., Armour, C., Elklit, A., Palic, S., & Mackril, T. (2010). PTSD-8: A Short PTSD Inventory. *Clinical Practice & Epidemiology in Mental Health*, *1*(1), 101–108. https://doi.org/10.2174/1745017901006010101

Hassan, G., Ventevogel, P., Jefee-Bahloul, H., Barkil-Oteo, A., & Kirmayer, L. J. (2016). Mental health and psychosocial wellbeing of Syrians affected by armed conflict. *Epidemiology and Psychiatric Sciences*, *25*(2), 129–141. https://doi.org/10.1017/S2045796016000044

Hollifield, M., Verbillis-Kolp, S., Farmer, B., Toolson, E. C., Woldehaimanot, T., Yamazaki, J., … SooHoo, J. (2013). The Refugee Health Screener-15 (RHS-15): development and validation of an instrument for anxiety, depression, and PTSD in refugees. *General Hospital Psychiatry*, *35*(2), 202–209. https://doi.org/10.1016/j.genhosppsych.2012.12.002

IMC. (2014). SYRIA CRISIS Addressing Regional Mental Health Needs and Gaps in the Context of the Syria Crisis. Retrieved from http://internationalmedicalcorps.org/document.doc?id=526

Indochinese versions of the Hopkins Symptom Checklist-25: a screening instrument for the psychiatric care of refugees. (1987). *American Journal of Psychiatry*, *144*(4), 497–500. https://doi.org/10.1176/ajp.144.4.497

Inter-Agency Standing Committee (IASC). (2007). *IASC guidelines on mental health and psychosocial support in emergency settings*. Geneva, Switzerland: IASC.

Kleijn, W. C., Hovens, J. E., & Rodenburg, J. J. (2001). POSTTRAUMATIC STRESS SYMPTOMS IN REFUGEES: ASSESSMENTS WITH THE HARVARD TRAUMA QUESTIONNAIRE AND THE HOPKINS SYMPTOM CHECKLIST-25 IN DIFFERENT LANGUAGES. *Psychological Reports*, *88*(2), 527–532. https://doi.org/10.2466/pr0.2001.88.2.527

Laban, C. J., Gernaat, H. B. P. E., Komproe, I. H., van der Tweel, I., & De Jong, J. T. V. M. (2005). Postmigration Living Problems and Common Psychiatric Disorders in Iraqi Asylum Seekers in the Netherlands: *The Journal of Nervous and Mental Disease*, *193*(12), 825–832. https://doi.org/10.1097/01.nmd.0000188977.44657.1d

Lindert, J., Ehrenstein, O. S. von, Priebe, S., Mielck, A., & Brähler, E. (2009). Depression and anxiety in labor migrants and refugees – A systematic review and meta-analysis. *Social Science & Medicine*, *69*(2), 246–257. https://doi.org/10.1016/j.socscimed.2009.04.032

Migration Policy Institute. (2015, November). MPI Fact Sheet: Profile of Syrian Immigrants in the United States.

Miller, K. E., Weine, S. M., Ramic, A., Brkic, N., Bjedic, Z. D., Smajkic, A., … Worthington, G. (2002). The relative contribution of war experiences and exile-related stressors to levels of psychological distress among Bosnian refugees. *Journal of Traumatic Stress*, *15*(5), 377–387. https://doi.org/10.1023/A:1020181124118

Mollica, R. (1992). The Harvard Trauma Questionnaire. Validating a cross-cultural instrument for measuring torture, trauma, and posttraumatic stress disorder in Indochinese refugees.

Mollica, R., Cardozo, B. L., Osofsky, H., Raphael, B., Ager, A., & Salama, P. (2004). Mental health in complex emergencies. *The Lancet*, *364*(9450), 2058–2067. https://doi.org/10.1016/S0140-6736(04)17519-3

Mollica, R. F. (1999). Disability Associated With Psychiatric Comorbidity and Health Status in Bosnian Refugees Living in Croatia. *JAMA*, *282*(5), 433. https://doi.org/10.1001/jama.282.5.433

Naja, W. J., Aoun, M. P., El Khoury, E. L., Abdallah, F. J. B., & Haddad, R. S. (2016). Prevalence of depression in Syrian refugees and the influence of religiosity. *Comprehensive Psychiatry*, *68*, 78–85. https://doi.org/10.1016/j.comppsych.2016.04.002

Norwegian Refugee Council. (2014, March). The Consequences of Limited Legal Status for Syrian Refugees in Lebanon.

Parloff, M. B., Kelman, H. C., & Frank, J. D. (1954). COMFORT, EFFECTIVENESS, AND SELF-AWARENESS AS CRITERIA OF IMPROVEMENT IN PSYCHOTHERAPY. *American Journal of Psychiatry*, *111*(5), 343–352. https://doi.org/10.1176/ajp.111.5.343

Pawlikowska, T., Chalder, T., Hirsch, S. R., Wallace, P., Wright, D. J. M., & Wessely, S. C. (1994). Population based study of fatigue and psychological distress. *BMJ*, *308*(6931), 763–766. https://doi.org/10.1136/bmj.308.6931.763

Porter, M., & Haslam, N. (2005). Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: a meta-analysis. *Jama*, *294*(5), 602–612.

Refugee Processing Center, the U.S department of State, bureau of population, refugees and migration. (2017). Syrian Refugees resettled in the United States, FY 2012-17: Admissions and arrivals database. Refugee Processing Center.

Strong, J., Varady, C., Chahda, N., Doocy, S., & Burnham, G. (2015). Health status and health needs of older refugees from Syria in Lebanon. *Conflict and Health*, *9*(1). https://doi.org/10.1186/s13031-014-0029-y

The White House. (2017, March). Executive Order Protecting The Nation From Foreign Terrorist Entry Into The United States. Retrieved from https://www.whitehouse.gov/the-press-office/2017/03/06/executive-order-protecting-nation-foreign-terrorist-entry-united-states

UNHCR. (2014). International protection considerations with regard to people fleeing the Syrian Arab Republic, Update iii.

UNHCR. (2015a). Culture, Context and the Mental Health and Psychosocial Wellbeing of Syrians A Review for Mental Health and Psychosocial Support Staff Working with Syrians Affected by Armed Conflict 2015. Retrieved from http://www.unhcr.org/55f6b90f9.pdf

UNHCR. (2015b). Global Trends: Forced displacement in 2015. Retrieved from http://www.unhcr.org/en-us/statistics/unhcrstats/576408cd7/unhcr-global-trends-2016.html

UNHCR. (2016, April 8). FACT SHEET: Syrian refugee crisis Background: Conditions for Syrian refugees. Retrieved from http://lirs.org/wp-content/uploads/2015/10/LIRS_SyriaFactSheet.pdf

UNHCR. (2017). UNHCR: Internally Displaced People. Retrieved from http://www.unhcr.org/sy/29-internally-displaced-people.html

UNHCR. (n.d.). Resettlement. Retrieved from http://www.unhcr.org/en-us/resettlement.html

UNWOMEN. (2014). "We just keep silent": Gender-based violence amongst Syrian refugees in the Kurdistan Region of Iraq. Retrieved from http://reliefweb.int/report/iraq/we-just-keep-silent-gender-based-violence-amongst-syrian-refugees-kurdistan-region-iraq

US Department of Vetrans Affairs. (2014). PTSD: National center for PTSD. Retrieved from http://www.ptsd.va.gov/public/PTSD-overview/basics/how-common-is-ptsd.asp

Vonnahme, L. A., Lankau, E. W., Ao, T., Shetty, S., & Cardozo, B. L. (2015). Factors Associated with Symptoms of Depression Among Bhutanese Refugees in the United States. *Journal of Immigrant and Minority Health*, *17*(6), 1705–1714. https://doi.org/10.1007/s10903-014-0120-x

Weissbecker, I. and A. Leichner. (2014). Addressing Mental Health Needs among Syrian Refugees.

WFP. (2015, July). WFP Forced To Make Deeper Cuts In Food Assistance For Syrian Refugees Due To Lack Of Funding. Retrieved from https://www.wfp.org/news/news-release/wfp-forced-make-deeper-cuts-food-assistance-syrian-refugees-due-lack-funding

WHO. (2016, April). Depression Fact sheet. Retrieved from http://www.who.int/mediacentre/factsheets/fs369/en/