“Mental Health on Arrival:
An Analysis of Refugee Mental Health in Utah”

Ji won Chang

Refugee Health Program

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UTAH DEPARTMENT OF HEALTH 288 North 1460 West Salt Lake City, Utah 84114

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Please direct questions or comments to:

Utah Department of Health
Bureau of Epidemiology
Refugee Health Program
Phone: (801) 538-6191
Fax: (801) 538-9913
288 North 1460 West
PO Box 142104
Salt Lake City, Utah 84114-2104

Executive Summary

The United States has the largest resettlement program in the world and welcomes more than half of all refugees resettled through the United Nations High Commissioner for Refugees (UNHCR) each year.[1-3] The state of Utah resettles more than 1,000 refugees every year and is currently home to 25,000 refugees.[4,5] While starting anew provides unparalleled hope and opportunity for many, hardships and significant losses during pre- and post-migration put refugees at a significant risk for psychiatric disorders.[6-8,11-16,18]

Mental health screenings, services, and follow-up care may be necessary to establish successful refugee self-sufficiency, resettlement, and integration into society. While recommended by the Centers for Disease Control and Prevention (CDC) and others,[6-9] various barriers have inhibited the provision of routine mental health screenings for newly arriving refugees.[24] Utah, recognizing the impact of mental health on the well-being of its refugees, is among the few states that have historically screened for mental health conditions during the domestic screening process.

Utilizing this mental health information collected during initial screenings, this study, through a secondary data analysis, established the baseline prevalence of mental health conditions and risk factors among refugees resettled in Utah during the period beginning October 1, 2009 to September 30, 2014. This analysis further described how mental health issues varied by age, sex, and nativity/culture. It determined best approaches and provided recommendations for maintaining the quality of the mental health data collected.

This study was conducted with the assistance of the Refugee Health Program (RHP) at the Utah Department of Health (UDOH) to help the health department, other refugee resettlement stakeholders, health care providers, and key decision makers in the state better understand, meet, and anticipate the mental health needs of its current and newly arriving refugee population. It was a step towards promoting awareness of and addressing mental health conditions of refugees arriving in Utah to help facilitate appropriate services and successful resettlement to Utah.[4]

Key Findings

- More than one-fourth of the total refugee population (27%) arriving in Utah had symptoms of mental health conditions.
- Among the 27%, 10% had anxiety, 9% had depression, and 25% showed symptoms of having suffered torture and violence.
- Of those with at least one risk factor, 15% had more than one concurrent risk factor.
- Of the Refugee Health Screener -15 scores reported, 39% had a high enough score to be referred for follow-up mental health services.
- The highest burden of mental health conditions and risk factors were among those between the ages of 45 and 64 years (41%).
- A higher percentage of women had mental health conditions and were twice as likely to be referred for services as men.
- Prevalence of risk factors did not vary with sex.
- Nearly to half of the Iraqi (52%), Sudanese (47%), and Afghani (45%) populations were symptomatic of mental health conditions.
- Most nativity/cultures had higher levels of anxiety than depression.
- Past experience with torture and violence was the most common risk factor, even after stratifying by age and nativity/culture.
- By far, the Iraqi and Sudanese populations had the highest collective burden of the three risk factors: torture and violence, anxiety, and depression.
- The nativity/cultures with the highest burden of anxiety, depression, and torture and violence were DRC Congolese (17%), Afghani (8%), and Sudanese (7%).
- Iraqi refugees were 1.4 times more likely to be referred than Sudanese refugees and nearly10 times (9.5) more likely than Ethiopian/Eritrean refugees.

Abbreviations

AF	Afghani
AK	Arkanese
BM	Burmese
BT	Bhutanese
CN	Chin
CU	Cuban
DC	Congolese (Democratic Republic of Congo)
ER	Eritrean
ET	Ethiopian
IR	Iranian
IZ	Iraqi
KA	Karen
KC	Kachin
KM	Kunama
KRI	Karenni
MO	Mon
RG	Rohingya
SB	Somali Bantu
SH	Shan
SO	Somali
SU	Sudanese

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Introduction & Background

"Refugees add to America's vitality and diversity by making substantial contributions to our economic and cultural life."[3(pp3)]

US Refugee Resettlement

The United Nations High Commissioner for Refugees (UNHCR) defines a refugee as a person who is outside their country of nationality and is unable or unwilling to return due to fear of persecution; this persecution can be related to race, religion, nationality, membership of a particular group, or political opinion.[1] The United States (US) is an imperative host to the worldwide resettlement process. While only1% of the total refugee population in need is resettled into third countries, more than half are resettled into the United States.[1,2]

Due to escalating global unrest, refugee arrivals have increased over the past few years with the US resettling nearly 70,000-80,000 refugees annually.[1-3] According to the State Department's Bureau of Population, Refugees, and Migration, more than 3 million refugees have been resettled in the US in the past 35 years.[2] The state of Utah alone resettles about 1,100 refugees yearly, and over 25,000 refugees, speaking more than 40 different languages, currently reside within Utah's borders.[4,5]

Gaps in the Resettlement Process

Resettlement into third countries provides unparalleled hope and opportunity to many, but hardships and significant losses during pre- and post-migration put refugees at increased risk for psychiatric disorders. Refugees may require mental health services in order to successfully transition, integrate, and become contributing members of society.[4,6] The Centers for Disease Control and Prevention (CDC) and a myriad of studies[6-9] recommend that mental health screening and follow-up care be provided to refugees upon arrival.[10] Unfortunately due to multiple barriers, mental health screenings or services are not a standard practice in the US.[6]

Refugees' predisposition to mental conditions and disorders largely results from exposure to environmental crises, both natural and manmade, such as war, state-sponsored violence, political oppression, and natural disasters, as well as the loss of family members, forced migration, and resettlement. [6-8,11-18] As a result of these experiences, this population has a higher burden of mental health conditions and is ten times more likely than the general population to suffer from conditions, such as post-traumatic stress disorder (PTSD).[19-23] Most common afflictions among refugees include PTSD, depressive disorders, anxiety disorders, brief reactive psychoses, and adjustment reactions.[6]

Barriers such as the availability of services have inhibited the routine provision of mental health screenings in newly arriving refugees.[24] Other barriers include language, different cultural or conceptual perceptions of health, [6,8,24] and the lack of knowledge about effectiveness of screening and treatment. [24] However, it is becoming increasingly evident that early detection and treatment of mental health conditions is necessary. Mental illness can be highly debilitating, impacting a refugee's ability to thrive, often resulting in unforeseen externalities, such as costs to the health care system. [26-33]

Resettlement into the US involves adjusting to societal norms. Language, financial and occupational demands, and psychiatric conditions often impair a refugee's ability to cope effectively with these significant life changes.[6,25] Resettlement can be overwhelming and may exacerbate existing or accelerate the onset of mental disorders. Furthermore, these types of illness have been shown to be associated with other health problems, such as cardiovascular diseases and inflammatory symptoms and diseases.[26-33]

Utah's Resettlement Process

The state of Utah, recognizing the vital importance of mental health for the well-being of refugees, offers a comprehensive and holistic health screening that includes a mental health assessment. Upon arrival in Utah, various agencies ensure that refugees have, among other services, monetary, employment, housing, education, health and acculturation assistance and support.[4] The Refugee Health Program (RHP), housed in the Division of Disease Control and Prevention, Bureau of Epidemiology, Utah

Department of Health, specifically coordinates and promotes health services to facilitate successful resettlement and integration into the community.[4]

The mission of the RHP is to, "…foster community health partnerships with those serving refugee populations through culturally appropriate health screening, education and referrals."[4(pp11)] The RHP focuses on services in five priority areas, including the provision of a comprehensive and holistic refugee health screening. In accordance with the Refugee Act of 1980,[2] the RHP contracts and establishes partnerships with local health care providers, local health departments, screening clinics, and resettlement agencies to provide an extensive health screening to all refugees within 30 days of arrival in Utah.

The purpose of the domestic health screening is to "reduce the spread of infectious disease, ensure ailments are identified and treated, promote preventive health practices, and to ensure good health practices to facilitate successful integration and self-sufficiency."[5(pp2)] Utah's domestic health screening includes a physical exam, tests for sexually-transmitted diseases and parasites, assessment of chronic illnesses, immunizations, presumptive treatment for parasites, tuberculosis screenings, and a mental health assessment (Appendix B).[4]

Information from these screenings is reported on health screening forms (HSFs) that are relayed to and compiled by the RHP staff into the Utah Refugee Health Access Database. The health information collected is used to ensure that newly arriving refugees receive timely services and follow-up care as indicated. Additionally, this information is analyzed and disseminated in reports describing refugee arrivals and health screening results for refugee health and resettlement stakeholders in Utah.

Significance of Study

Given the evidence, the RHP acknowledges that a valuable and unique component of its screening program and refugee health database is the mental health information collected. This study was conducted with two overarching goals in mind. First, through the process of conducting the study, a goal was to establish additional methods to standardize and maintain the quality of the mental health data collected from this point forward. A second goal was to utilize the information in the Refugee Health Access Database to report on the mental health status of refugees being resettled to Utah.

This is the first study to provide baseline information with respect to the prevalence of mental health conditions among refugees in the state of Utah. It will allow the RHP, refugee resettlement stakeholders, health care providers, and key decision makers in Utah to better understand, meet, and anticipate the needs of its current and newly arriving refugee population. It is a step towards promoting awareness and addressing mental health conditions to help facilitate appropriate services and successful resettlement and integration into Utah.[4]

Research Question

This study aimed to determine the prevalence of mental health conditions and risk factors among refugees resettled in Utah between October 1, 2009 and September 30, 2014, and to describe variation in health status by age, sex, and nativity/culture.

Objectives

The specific objectives of this study:

1. Standardize how mental health information is collected and entered into the state database;
2. Clean, update, and identify all data on refugees who received a mental health screening (≥ 14 years old) between October 1, 2009 and September 30, 2014;
3. Determine the prevalence of mental health conditions and risk factors for specific populations;
4. Conduct statistical analyses to determine how the prevalence of mental health conditions varies by age, sex, and nativity/culture; and,
5. Provide recommendations and make changes to maintain data quality moving forward.

Methodology & Research Design

Study Design

The study design for this report was a secondary data analysis of the existing mental health data in the Refugee Health Access Database. The primary predictor or exposure was refugee status from October 1, 2009 to September 30, 2014 and the outcome of interest was the presence of a mental health condition. As the Refugee Health Access Database contains only information about refugee arrivals to Utah, all individuals included in the dataset were considered to have had the exposure. Definitions of the outcome, or what was considered to be a mental health condition, are described in greater detail in the Procedures section of this paper.

Inclusion & Exclusion Criteria

To create the analysis data set a query was run on the Refugee Health Access Database including all refugees who were 14 years of age and older who had a screening date between October 1, 2009 and September 30, 2014. Refugees who out-migrated or had missing values for certain variables were included in the data set as long as a screening date was available and the refugee met the age cut-off.

Procedures

As indicated in objective (1), before producing this report the Refugee Health Access Database underwent fine-tuning and standardization relative to how mental health information was defined, collected, and cleaned. Working closely with the RHP staff more succinct protocols for screening providers and staff were created. Explanations of how variables were defined in this data set and will be defined moving forward, as well as a data dictionary of all variables, are described below.

Refugee Health Screener -15:

The variables RHS 1 and RHS 2 are based on the Refugee Health Screener 15 (RHS-15) (Appendix C). The RHS-15 is a validated screening instrument for common mental disorders and was used to evaluate the overall distress of newly arriving refugees.[8,24] Each refugee was asked questions related to mental well-being; answers to each question were scored and tallied. Two numeric scores for RHS 1 and RHS 2 were reported on the form and recorded in the database. If either score was high enough, a referral to a mental health agency for further assessment and follow-up should have been made. The defined cut-off values are greater than or equal to 12 for RHS 1 and greater than or equal to 5 for an RHS 2 score. As stated above, a high RHS 1 or RHS 2 score also resulted in Mental Health being checked as "yes," regardless of whether a referral was given or accepted.

Risk Factors:

The three risk factors for mental health conditions that are monitored and recorded in the health screening include anxiety, depression, and torture and violence. Healthcare providers have been instructed to note the presence of any of these risk factors at screening. Similar to Mental Health, these three risk factors are yes/no variables, and whether a risk factor was checked as yes on the health screening form was left to the discretion of the health care provider. If the health care provider had written any of the three risk factors, Mental Health would have been checked as "yes" in the database.

Mental Health:

The Refugee Health Access Database contains a variable called Mental Health. Mental Health is a yes/no variable, "yes" meaning that a refugee was symptomatic of mental health conditions. This variable was defined to be checked as "yes" in the database and screening forms if there was any indication of mental health conditions, such as the refugee had either an RHS 1 or RHS 2 score requiring referral, any of the three risk factors were present, a referral was suggested or noted, or a comment indicated a mental health condition. If none of these conditions were indicated, "no" was checked for Mental Health. In other words, there were no significant mental health conditions identified at time of screening. Mental Health was referred to as mental health conditions in this analyses.

Screening Referrals:

Referrals would also trigger Mental Health to be checked as "yes" in the database. Like risk factors, referrals were based on conditions such as high RHS-15 scores, mental health conditions, or based on the health care provider's overall assessment. In any case, a referral for

mental health follow-up, if noted anywhere, resulted in the refugee being marked as positive for Mental Health in the database. This was regardless of whether the referral was accepted or the individual met the other conditions qualifying as a "yes" for Mental Health.

Screening Comments:

Certain comments also triggered a yes, including provider notes indicating a mental health condition. The RHP staff evaluated comments written by the physician and determined whether Mental Health was checked as "yes" in the database. If a refugee was noted as having anger issues, insomnia, minor depression episodes, mild post-traumatic stress disorder (PTSD), schizophrenia, panic disorder, and/or problems sleeping or panic attacks, he or she was marked as positive for Mental Health. The refugee was also considered to have a mental health condition if they were noted as positive or mildly positive for mental health symptoms or as symptomatic of mental health but required follow-up for confirmation. A detailed discussion of comments not considered positive for Mental Health and limitations and biases with respect to comments is described in the Study Limitations & Recommendations section of this report.

Nativity/Culture:

The variable Nativity/Culture was not changed in the database or HSFs, but for this analysis was grouped into 10 overarching categories. The categories of nativity/culture are follows.

Categories of Nativity and Culture:

Afghani = Afghanistan
Ethnic Minorities from Burma = Arkanese, Burma, Chin, Karen, Kachin, Karenni, Mon, Rohingya, Shan
Bhutanese = Bhutan
Cuban = Cuba
DRC Congolese = Democratic Republic of Congo
Ethiopian/Eritrean = Eritrea, Ethiopia, Kunama
Iraqi = Iraq
Iranian = Iran
Somali = Somalia, Somali Bantu
Sudanese = Sudan

These categories of nativity/culture reflect the affiliation of a refugee to any specific group based on culture, language, ethnicity, etc. This categorization mimics the Proposed Refugee Admissions Reports groupings released by the United States government each fiscal year.[34]

Age at Arrival:

The variable Age at Arrival is continuous and numeric but for analyses was changed to a categorical variable based on age cut-offs utilized by Utah's Indicator-Based Information System for Public Health (IBIS-PH). Age Categories were 14-24, 25-44, 45-64, 65-84, and 85 years and older.

Data Definition Table

Variable	**Label**	**Description**	**Type**	**Code**
Arrival_Date	Date of Arrival (DOA)	Date of Arrival of the Refugee	Character	Date field
Screening_Date	Date of Screening (DOS)	Date of Screening of the Refugee	Character	Date field
Age_At_Arrival	Age at Arrival	Age of the Refugee at Arrival	Numeric	14-102
Gender	Sex	Sex of the Refugee	Numeric	0 = Females 1 = Males
Nativity_Culture	Nativity/Culture		Character	1 = Afghani 2 = Ethnic Minorities from Burma 3 = Bhutanese 4 = Cuban 5 = DRC Congolese 6 = Ethiopian/ Eritrean 7 = Iraqi 8 = Iranian 9 = Somali 10 = Sudanese
Mental_Health_	Mental Health	Whether an individual is considered symptomatic of mental health condition.	Numeric	0 = False 1 = True
Anxiety	Anxiety	Presence of a risk factor	Numeric	0 = False 1 = True
Depression	Depression	Presence of a risk factor	Numeric	0 = False 1 = True
Torture_Violence	Torture and Violence	Presence of a risk factor	Numeric	0 = False 1 = True
RHS__1	RHS 1	RHS Screener -15	Numeric	0-55
RHS__2	RHS 2	RHS Screener -15	Numeric	0-10
Screening_Comments	Screening Comments	Any general comments with respect to patient care	Character	Free Text
Mental_Health_Other	Other MH Comments	Any additional comments with respect to patient mental health	Character	Free Text
MHAccepted	Referral	Whether the individual accepted or decline a mental health referral	Character	Free Text
MHagency	Referral	Which agency the patient was referred to	Character	Free Text

For objective (2), using the created standardized definitions and protocols described above, the Refugee Health Access Database was cleaned and updated. While each variable explained above had its own check box or associated field on HSFs and in the database, at times much of this information was stored as free text in other fields such as Mental_Health_Other, MHAccepted, MHagency or the screening comments field. During this study, valuable information from this text was extracted and properly entered into their respective fields. A query was then run to identify all refugees 14 years and older who received a screening between October 1, 2009 and September 30, 2014 (n = 3,866).

Procedures for objectives (3) and (4) are described in the Statistical Analyses section of this report. With respect to objective (5), during and after the study, in conjunction with RHP staff, recommendations and technical changes were made to the access database and the health screening form. A discussion of these recommendations, changes, and variables created or standardized as a result of this analysis are described in detail in the Summary and Conclusion Section of this paper.

Statistical Analyses

The Results/Findings section is broken down into a description of the demographics of the refugee population as a whole. This includes distributions and frequencies of age, sex, and nativity/culture. Sex was stratified by age and nativity/culture by age and sex. (3) Next, the frequencies of mental health conditions, risk factors, and RHS-15 scores are presented. (4) These conditions and risk factors were stratified with respect to age, sex, and nativity/culture. All cleaning, updating, and statistical analyses were conducted using SAS software, version 9.4 (SAS Institute Inc., Cary, NC), Microsoft Excel, and Microsoft Access.

Results & Findings

Refugee Demographics:

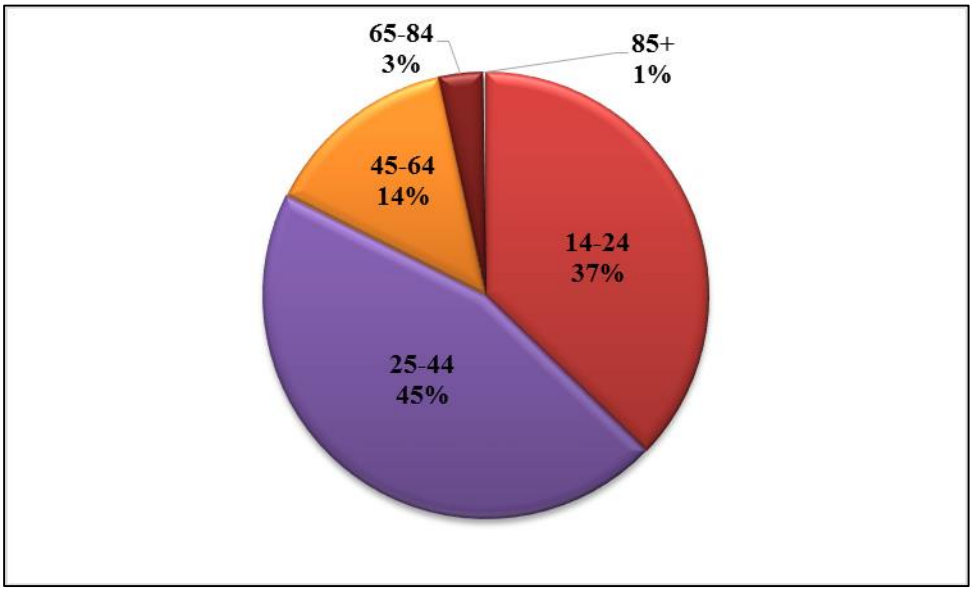
Approximately 3,866 refugees were 14 years and older and received a health screening between October 1, 2009 and September 30, 2014 in the state of Utah (Table 1). Overall, the refugee population was fairly young, with 45% of the population between the ages of 25-44 and 37% between 14-24 years old (Figure 1). The average age was 32 years old, with the oldest refugee being 102 years old (Table 1).

The study population consisted of more males (54%, 2,106) than females (46%, 1,760), with slightly more males across all age categories (Table 2). The distribution of ages was similar within both sexes respectively, about the same percentage within each age category (Figure 2). The maximum age in males was older, 102 years old, as compared to the oldest female at 88 years old (Table 2).

Table 1: Summary Statistics of Refugee Age at Arrival

N	Mean	Std Dev	25th Pctl	50th Pctl	75th Pctl	Minimum	Maximum
3866	32	14	21	29	40	14	102

Figure 1: Age at Arrival by Age Category

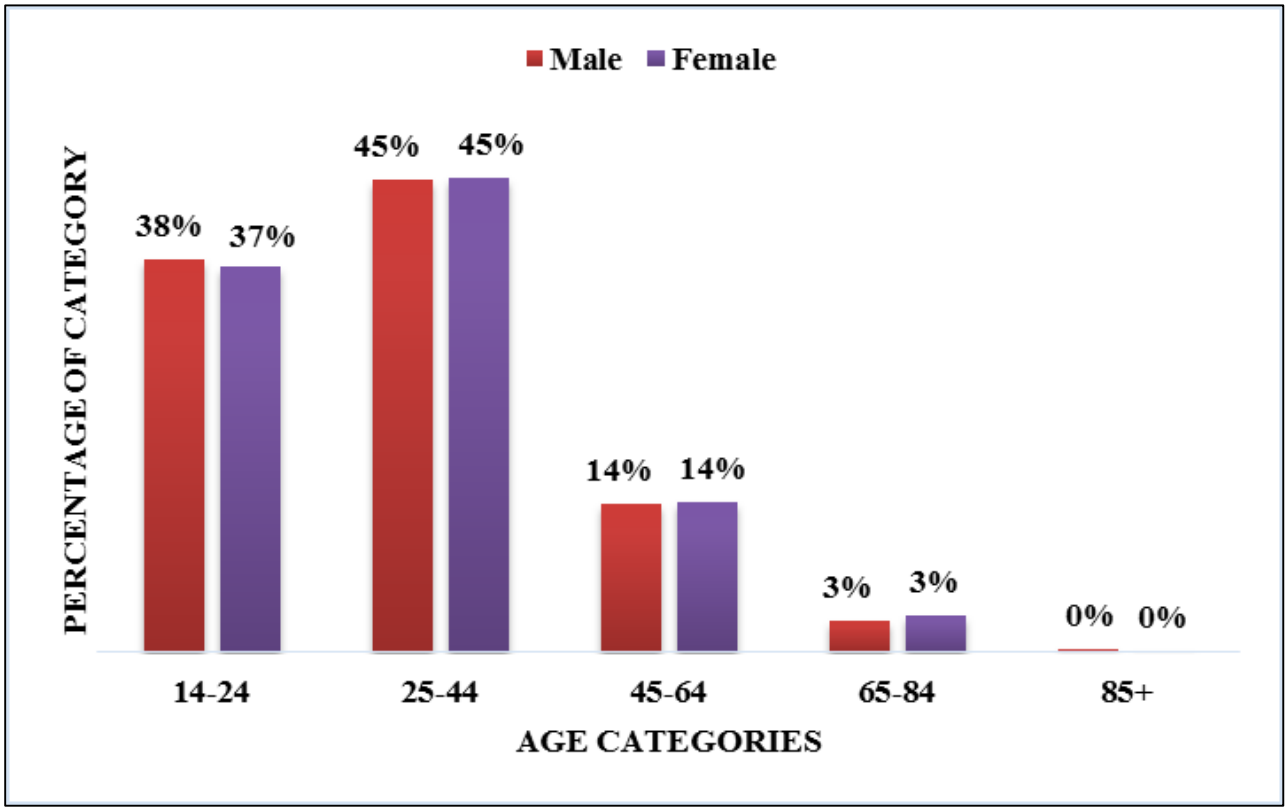


*Age Categories are 14-24, 25-44, 45-64, 65-84, and 85+ years old

Table 2: Summary Statistics of Refugee Age at Arrival by Sex

Sex	N	Mean	Std Dev	25th Pctl	50th Pctl	75th Pctl	Minimum	Maximum
Female	1760	32	14	21	29	41	14	88
Male	2106	32	14	21	29	40	14	102

Figure 2: Distribution of Age at Arrival by Sex



The study population consisted of refugees identifying as a number of different nativity/cultures including: Afghani, Bhutanese, Cuban, Congolese from the Democratic Republic of the Congo (DRC Congolese), Ethiopian/Eritrean, Iraqi, Iranian, Somali, Sudanese, and ethnic minorities from Burma. To see a complete of list of nativity/cultures please refer to the Procedures section of this report. The majority of the study population consisted of Iraqi (22%), Bhutanese (19%), ethnic minorities from Burma (16%), and Somali (16%) refugees (Figure 3, Appendix A).

All nativities had similar age compositions and each sub-population was fairly young with the majority of refugees being between the ages of 14 and 44 years old (Figure 4). Half of the nativity/cultures (DRC Congolese, Afghani, Somali, Ethiopian/Eritrean, and ethnic minorities from Burma) had more than 40% of their respective populations between the ages of 14-24 years old (Figure 4, 5, 6). As illustrated below, almost all arrivals listed, except Somalis and the DRC Congolese had over 40% of their populations between the ages of 25 and 44 years old (Figure 4, 5, 6). Even Somali and the DRC Congolese still had over one-fourth of their respective populations (38% and 26%) in the 25-44 age group.

While a quarter of the Iranian population was 45-64 years old, for all other nativity/cultures the 45-64 year olds made up less than 18% of the total populations. All nativity/cultures had fewer than 6% of their respective populations between 65 and 84 years old; less than 1% of the populations were older than 85 years old (Appendix A).

Figure 3: Study Population by Nativity/Culture

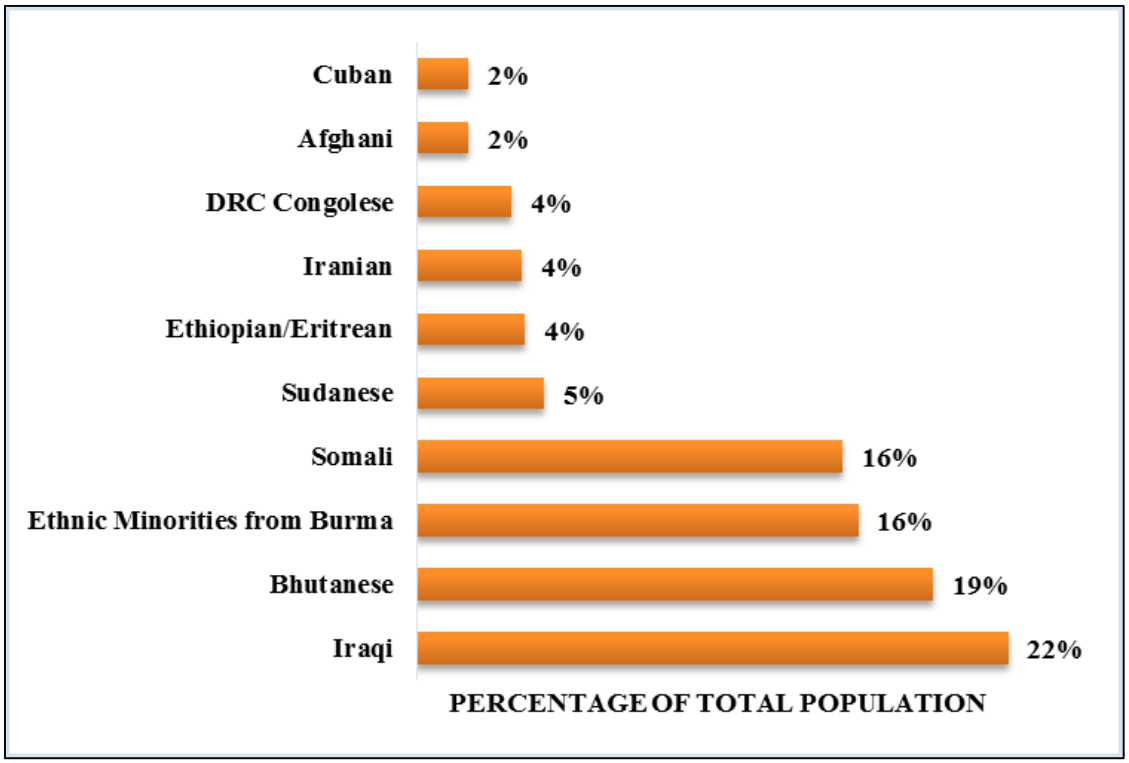


Figure 4: Nativity/Culture by Age Category

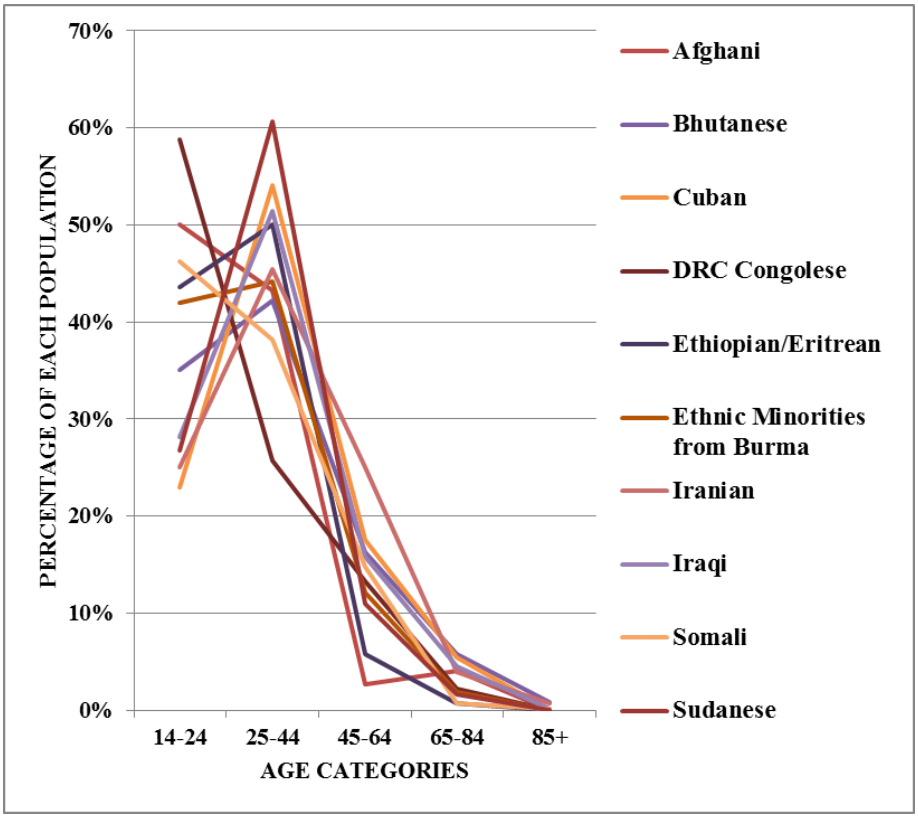


Figure 5: Percentage of Population Aged 14-24 Years Old

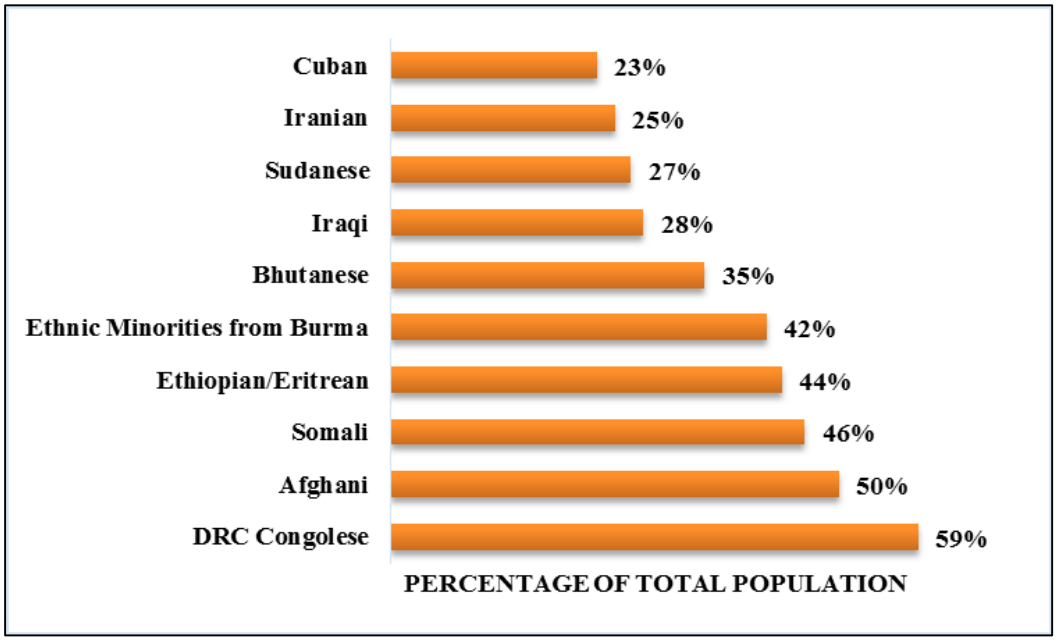
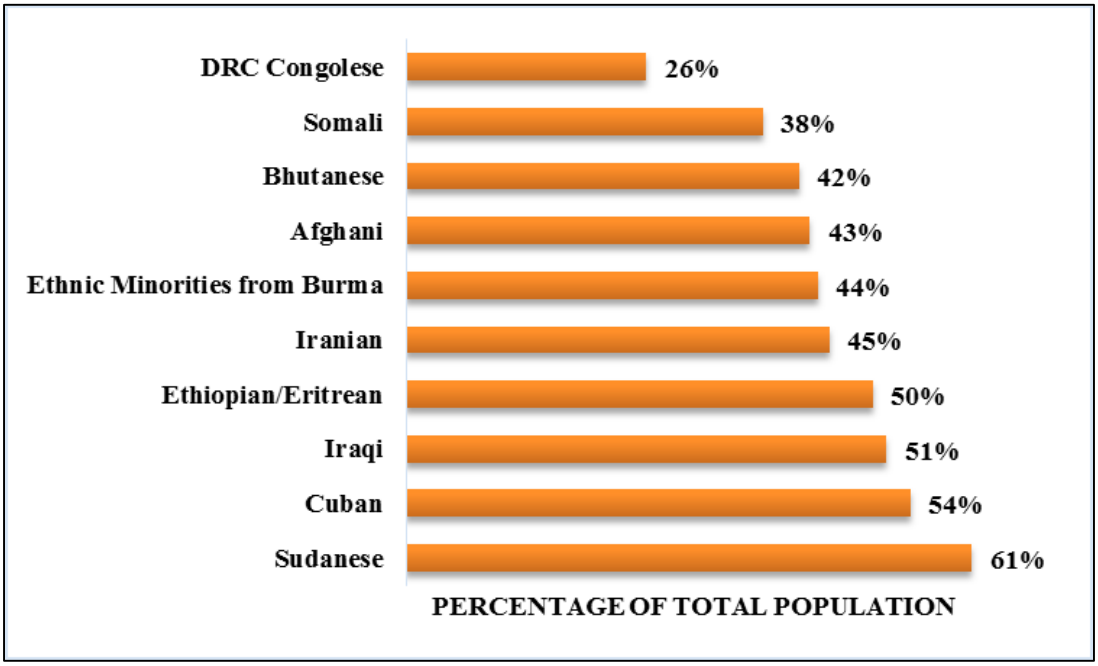
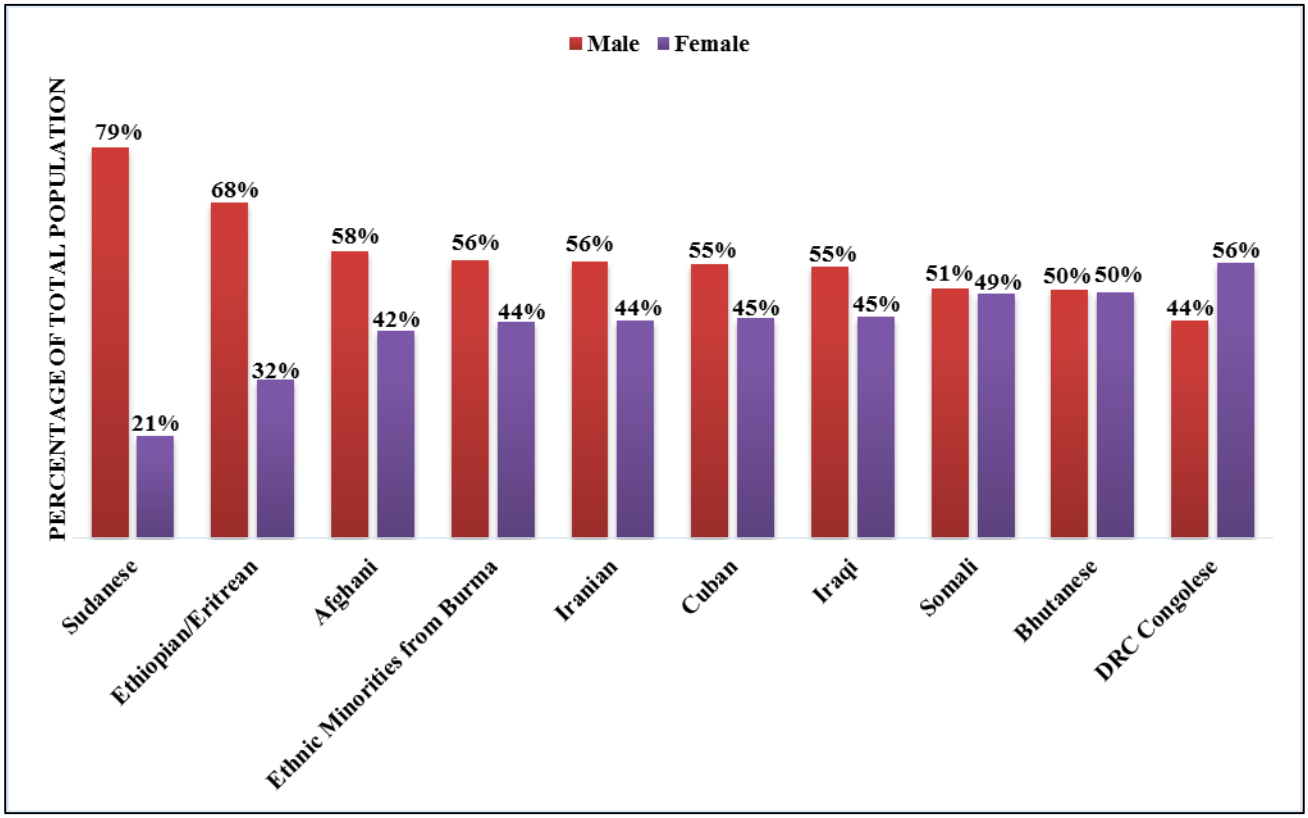


Figure 6: Percentage of Population Aged 25-44 Years Old



Across all nativity/cultures, except the Bhutanese and the DRC Congolese, there were more males than females (Figure 7). The most significant difference in the percentage of males and females were in the Sudanese (58%), Ethiopian/Eritrean (35%), and Afghani (16%) populations. There were almost three times the number of males as there were females in the Sudanese population (Figure 7). The rest of the nativity/cultures had a difference between the sexes of fewer than 12%. The Bhutanese population was the only population to have equal numbers of males and females, and there were 12% more females than males in the DRC Congolese population (Figure 7).

Figure 7: Percentage of Males and Females by Nativity/Culture



Refugee Mental Health Conditions

More than one-fourth of the population or 1,048 refugees were considered clinically symptomatic of mental health conditions (27%) (Figure 8). Of the 27% considered to have mental health conditions, the most common risk factor was past experience with torture and violence (25%), which was twice as prevalent as anxiety (10%) or depression (9%) (Figure 8). The burden of anxiety and depression were comparable, with only a 1% difference.

Of all refugees that had at least one of the three risk factors (n = 395), 85% (n = 335) had only one risk factor, 13% (n = 51) had two risk factors and 2% (n = 9) had all three risk factors concurrently (Figure 9). For the population with an RHS-15 score recorded, 39% reported a high enough RHS 1 or RHS 2 score (RHS 1 >= 12 or RHS 2 >= 5) to be referred for treatment and follow-up (Figure 10, 11).

Figure 8: Percentage of Mental Health Conditions and Risk Factors

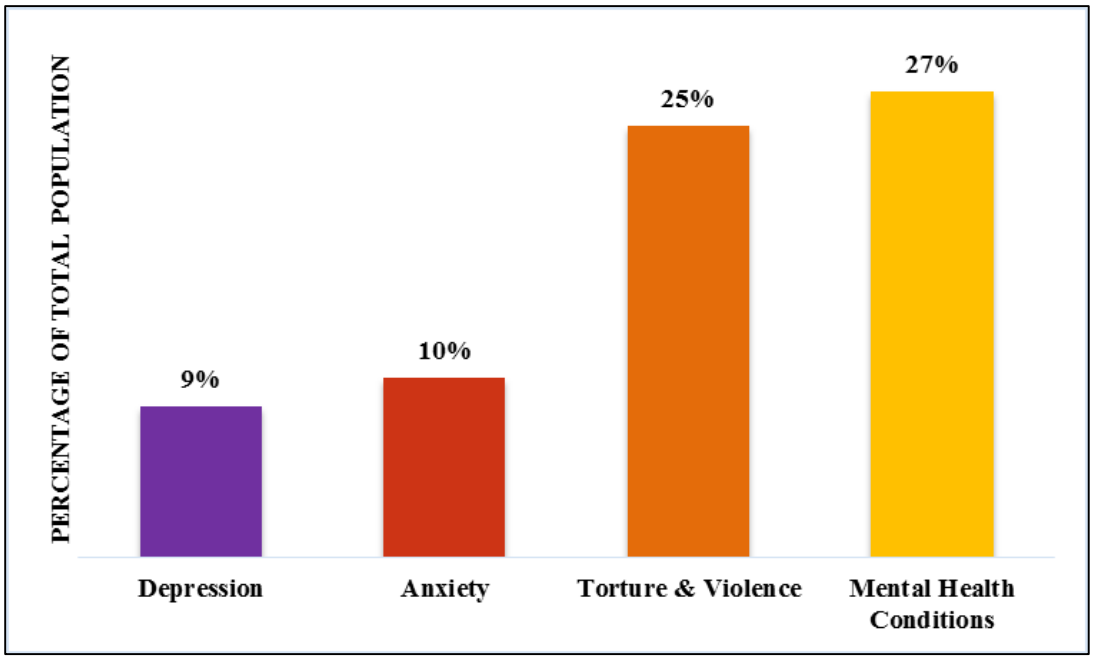


Figure 9: Percentage of Refugees with 1 Risk Factor or More

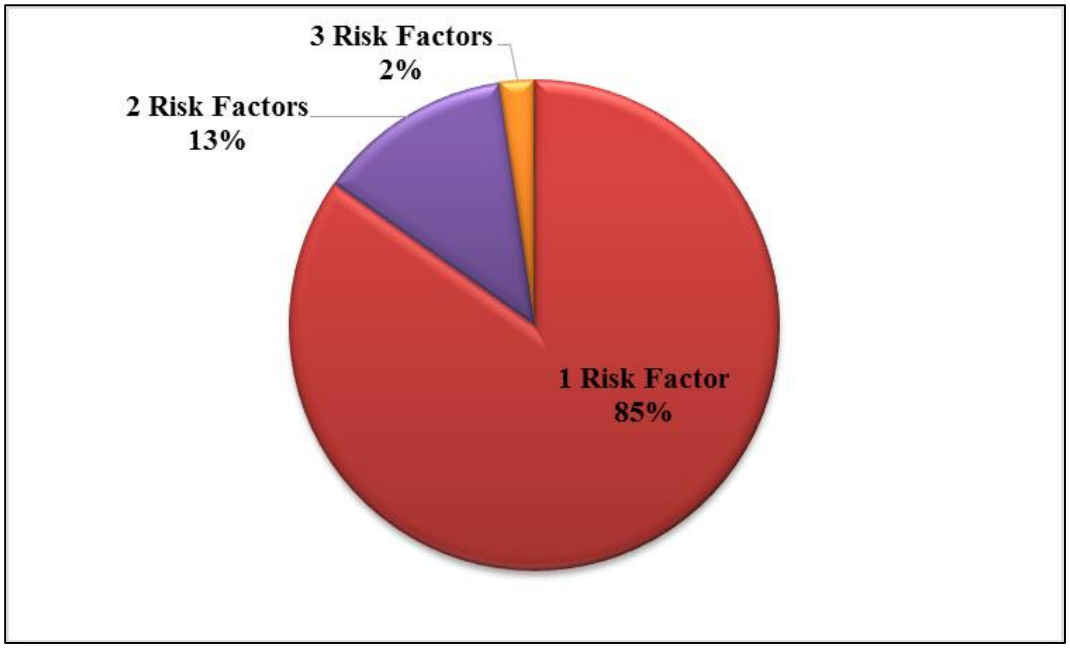
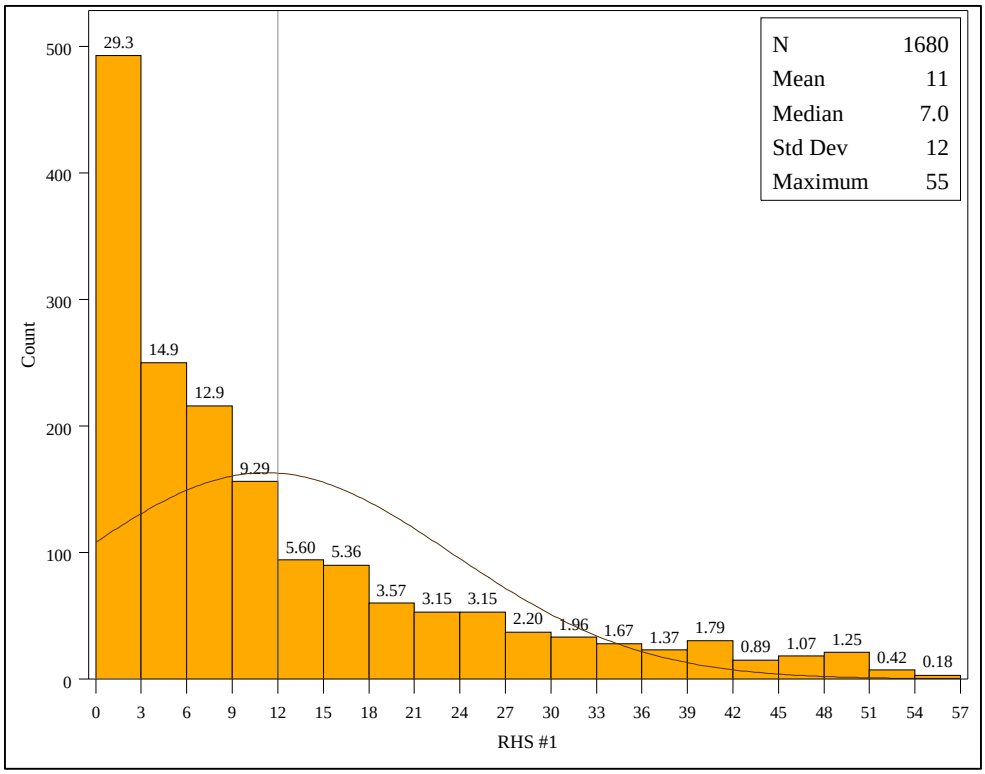
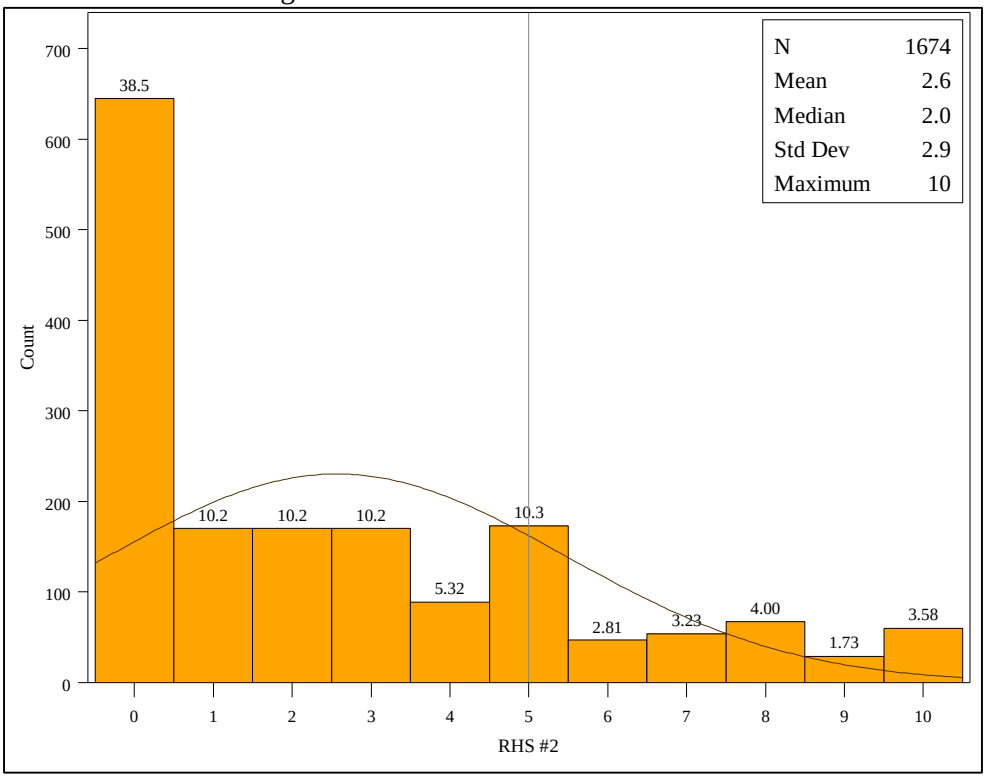


Figure 10: Distribution of RHS 1 Scores



*A reference line is drawn to show the cut-off RHS 1 (>=12) score requiring referral.

Figure 11: Distribution of RHS 2 Scores



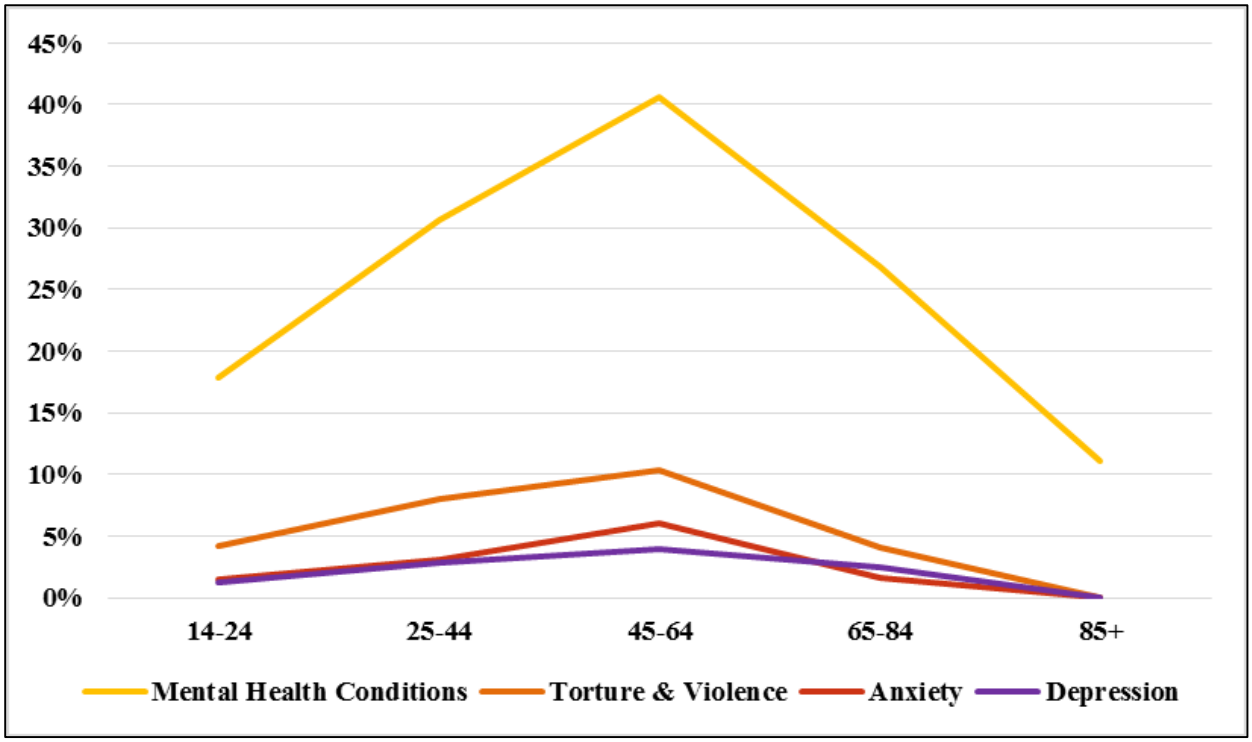
*A reference line is drawn to show the cut-off RHS 2 (>=5) score requiring referral.

Mental Health Conditions by Age:

When stratifying mental conditions by age, it was apparent that mental health was a concern across all age categories (Figure 12). The majority of mental health conditions occurred between the ages of 45-64 years old, with 41% of all 45-64 year olds (n = 1,438) considered to be symptomatic of mental health conditions. Age categories 25-44 and 65-84 appeared to have a lower burden but more than one-fourth of refugees in these age groups in each population experienced a mental health condition.

Similarly, all three risk factors were highest among 45-64 year olds. Even after stratifying by age, the most common risk factor was exposure to torture and violence. As described earlier, anxiety and depression were comparable. There was a slightly higher burden of anxiety among 45-64 year olds and a marginally higher percentage of depression among the 85 years and older category.

Figure 12: Age Distribution of Those with Mental Health Conditions and Risk Factors



Mental Health Conditions by Sex:

Overall, mental health conditions were higher in females than males by about 7%, but there was no difference in the percentage of risk factors between the sexes (Figure 13). The 7% difference seen between males and females was in part due to variances of RHS-15 scores. As shown in Figure 14, a much higher percentage of women had an RHS 1 or RHS 2 score that would have resulted in a referral for additional mental health care services (42% and 33%) (Appendix A). Based on RHS-15 scores, women were twice (2.02) as likely to be referred as men. The difference in the burden of mental health conditions could also have been a result of comments on HSFs by health care providers; limitations of the data did not allow for further analyses (see Study Limitations & Recommendations section).

Figure 13: Frequency of Risk Factors and Mental Health Conditions by Sex

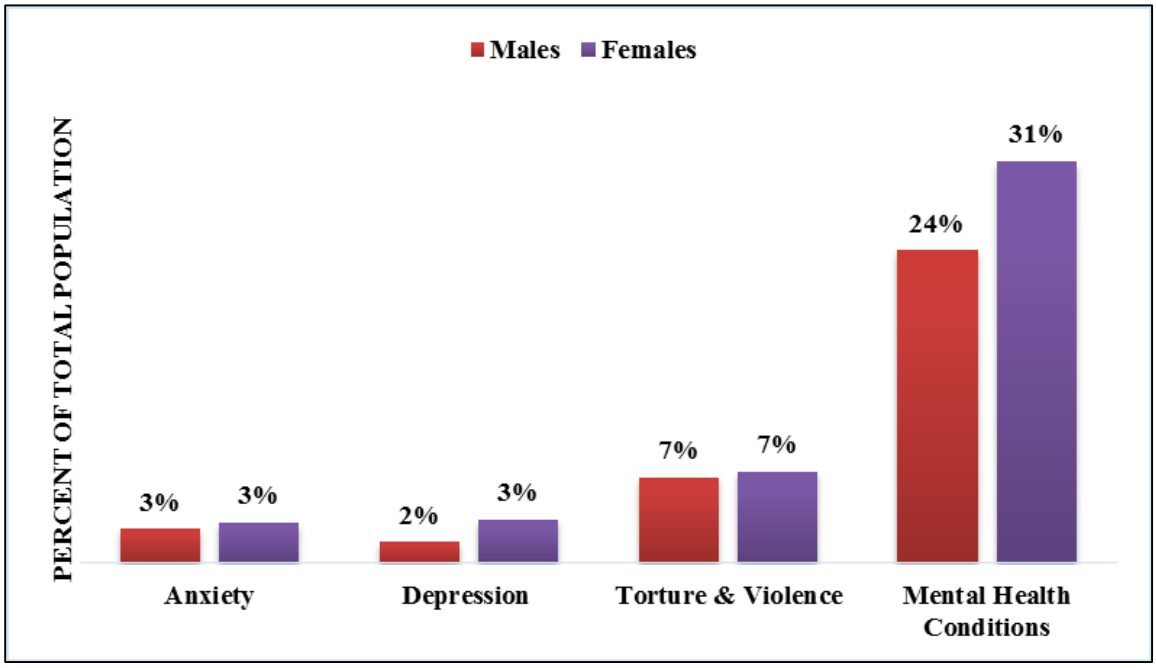
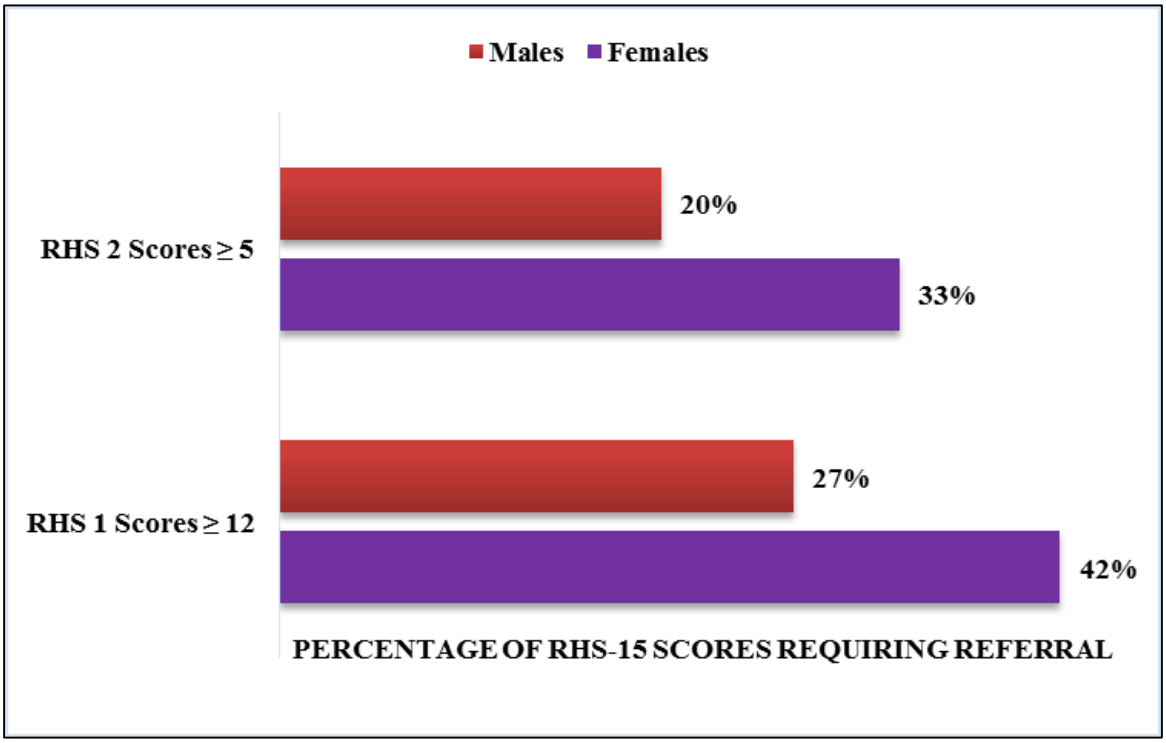


Figure 14: Percentage of High RHS-15 Scores by Sex

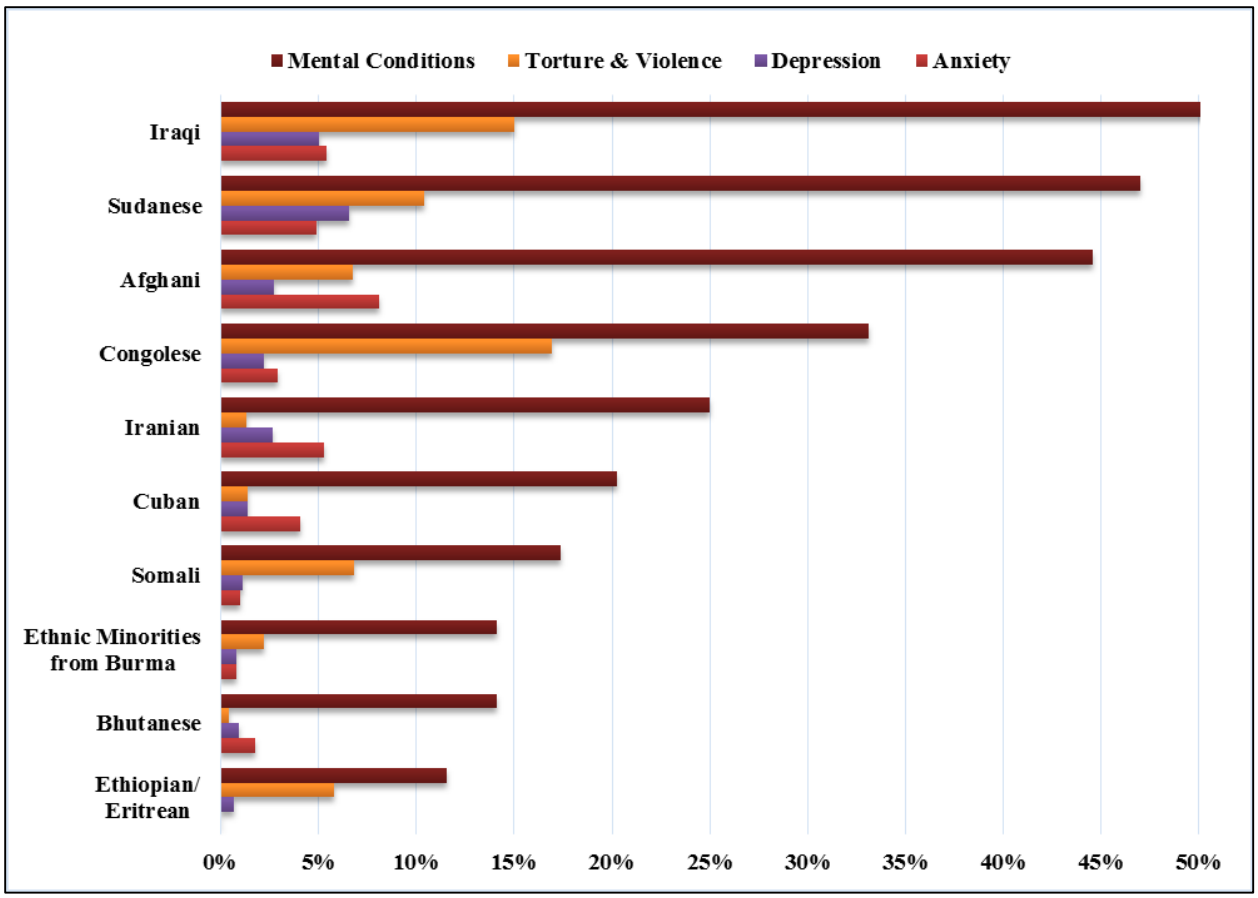


Mental Health Conditions by Nativity/Culture:

More than 12% of each nativity/culture population had mental health conditions upon arrival. Nearly half of the Iraqi (52%), Sudanese (47%), and Afghani (45%) populations were considered symptomatic of mental health conditions (Figure 15). The prevalence of risk factors varied widely in terms of nativity/cultures; torture and violence was still the most common risk factor, but relative levels of anxiety and depression fluctuated by population. Most nativity/cultures had higher levels of anxiety than depression; these groups included: Bhutanese, DRC Congolese, Cuban, Iranian, and Afghani.

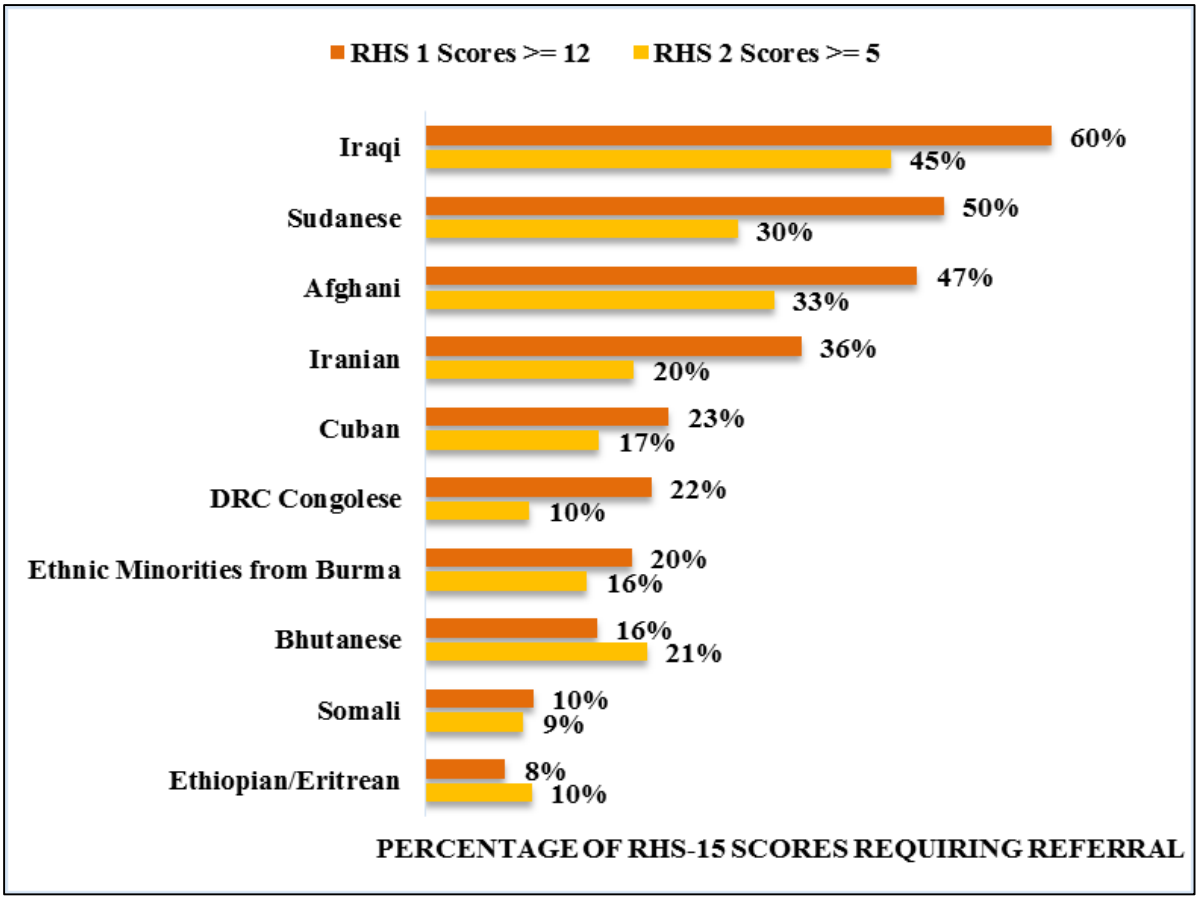
The DRC Congolese population had the highest exposure to torture and violence (17%), closely followed by the Iraqi population (15%), and the Sudanese population (10%). Highest percentages of anxiety were in the Afghani (8%), Iraqi (5%), Iranian (5%), and Sudanese (5%) populations. The highest burden of depression was seen among the Sudanese (7%) and Iraqi (5%) populations (Figure15).

Figure 15: Mental Health Conditions and Risk Factors by Nativity/Culture



Additionally, as shown in Figure 16, large percentages of the Iraqi, Sudanese, and Afghani populations had RHS 1 and RHS 2 scores requiring referral to additional mental health services. Of the Iraqi population, 60% would have been referred based on RHS 1 scores alone. Iraqi refugees were 1.4 times more likely to be referred than Sudanese refugees and almost ten times (9.5) more likely than Ethiopian/Eritrean refugees. Overall, the percentage of each respective population requiring referral to mental health services was significant, greater than 8% and as high as 60% (Figure 16).

Figure 16: Percentage of High RHS-15 Scores by Nativity/Culture



Summary and Conclusion:

Review of Findings

As indicated by the literature, mental health conditions and risk factors were indeed highly prevalent in the study population [35-44] and the findings of this study were comparable to other studies on the same subject matter. Similar to other studies, more than one-fourth of the total refugee population (27%) was symptomatic of mental health conditions, with 25% having past exposure to torture and violence, 10% having anxiety and 9% having depression.[8,9,45]

This study also found a slightly higher burden of anxiety than depression in the population in general.[45] As noted in other studies, risk factors and conditions did overlap in many people, with 15% of refugees having more than one concurrent risk factor and 2% having all three simultaneously.[45] Similar to studies, women had worse mental health outcomes when compared to men.[46,47] In fact, women were twice as likely to be referred for mental health services as men. The relationship between mental health and age is debated in the literature,[48-53] but this study found poor mental health status most prevalent among 45-64 year olds.

Key findings were differences seen between nativity/cultures with respect to mental health. Overall, the percentage of each respective nativity/culture with mental health conditions, risk factors, and high RHS-15 scores were significant. Over 12% of each nativity/culture population had mental health conditions upon arrival, up to half of the Iraqi (52%), Sudanese (47%), and Afghani (45%) populations. The nativity/cultures with the highest burden of anxiety, depression, and torture and violence

were the DRC Congolese (17%), Afghani (8%), and the Sudanese (7%). The percentage of the population requiring referral by nativity/culture ranged from 8% and to as high as 60%. In fact, Iraqi refugees were 1.4 times more likely to meet the criteria for referral than Sudanese refugees and almost 10 times (9.5) more likely as compared to Ethiopian/Eritrean refugees.

Study Limitations & Recommendations

Throughout the study a few key limitations with respect to how the data was collected, entered, and stored were discovered. When possible, changes to the Refugee Health Access Database, health screening forms, and data entry protocols were made. These limitations and updates are described in detail below.

First, the database did not allow for differentiation between refugees who did not receive a mental health screening and refugees who were considered as negative for Mental Health, or deemed mentally healthy. The study population considered healthy (2,818 or 73%) may have actually consisted of large numbers of refugees who were symptomatic of mental health conditions but were not screened. There was no way of determining how large this untested population was or how prevalent mental health conditions were in this subpopulation. As a result of this limitation, it was possible that the prevalence data reported in this study underestimated the true prevalence of these risk factors and conditions.

Recommendation 1: A variable called MH Screen Done has been added to the database to correct for this limitation. Similar to the variable Mental Health, MH Screen Done is a binary, yes/no variable but is checked if a screening was actually completed. A screening was completed and MH Screen Done was checked only if the health care provider indicated on the HSF that some sort of mental health assessment was conducted. A mental health assessment can be anything from reporting RHS-15 scores to the screening physician's overall assessment. Based on the information provided on the HSF, it was determined if MH Screen Done should be checked in the database. Current efforts are being made to update this new variable retrospectively, to as far back as October 1, 2009.

Secondly, a variable for refugee outmigration did not exist. Thus, the collection, entry, and storage of outmigration information were not uniform. If outmigration was noted by the health provider on an HSF form, it could have been written anywhere on the form and was subsequently entered into database in multiple locations. Finally, without a yes/no variable for outmigration, if entered, it was entered as free text, which is not identifiable in a query. Therefore, the query used to identify the study population could not differentiate or exclude refugees who had migrated out of Utah after receiving a health screening. Outmigration does not highly impact this study in particular, but moving forward this information could be useful, especially in terms of forecasting or determining the amount of mental health services necessary annually.

Recommendation 2: Like the creation of the variable MH Screen Done, a variable called Outmigrated was created. Outmigrated is a yes/no variable and was checked if anywhere on the HSF the health care provider had written that the refugee had or was planning on migrating out of Utah.

Thirdly, the data was incomplete with respect to certain variables with mental health referral information. From the existing data it could not be determined whether a mental health referral was made, accepted, or which agency was referred. While a variable for mental health referrals existed, referral information, like outmigration data, was scattered throughout numerous fields in the database and was highly inconsistent and stated in varied terminology. It appears as though only declined referrals were noted, and the vast majority of refugees given referrals declined or were lost to follow-up. Accepted referrals were almost never indicated. Additionally, over time, referral agencies have changed and some no longer exist. No analyses of mental health referrals were included in this report.

Another set of incomplete variables were RHS 1 and RHS 2 scores. The RHP and partnering screening clinics did not begin using the RHS-15 until mid-July 2012. The dataset for this study

spanned from October 1, 2009 to September 30, 2014, resulting in numerous missing RHS-15 scores. Approximately 57% of all RHS 1 (2,186) and RHS 2 (2,192) scores were missing. Excluding these subjects from the data set was impossible, as the exact date of implementation and utilization of the screener was not known and would have varied by clinic; also, excluding subjects or running the initial query starting on July 1, 2012 would have drastically reduced the sample size and power of the study. Given this limitation, RHS-15 scores as well as the number of refugees considered positive for Mental Health may have been highly underestimated by this study.

Lastly, there were limitations on how comments in various free text fields were coded in order to conduct the analysis. As noted in the Procedures section of this paper, comments describing mental health were used to update the variable Mental Health. The classification of these comments was based on the recommendation and guidance of RHP staff. Comments that were not considered indicative of mental health conditions included: substance abuse, presence of risk factors in which the patient was asymptomatic, patients considered healthy at screening who required follow-up for confirmation, patients in remission, headaches or migraines, and developmental disorders. Based on the coding of comments, the burden of mental health conditions could have been over or underestimated.

Recommendation 3: Unfortunately, with respect to incomplete variables described above, not much could be done. The RHP has, in an attempt to improve the data quality of these variables, made changes to HSFs. Now, nearly all of the mental health variables are located together in one specific area of the form (Appendix D). Also, RHP staff and health care providers have been re-trained in hopes of improving data collection of these variables.

Recommendations for Future Studies:

Merit of this report is the establishment of robust data collection moving forward and the provision of baseline information on the mental health status of refugees arriving in Utah, as this has never been done. Through this study, updates for specifically improving the Refugee Health Access Database, HSFs, and data entry and storage protocol were made (see Study Limitations & Recommendations section). While this report was an important step towards promoting awareness and understanding of refugees residing in Utah, to truly ensure appropriate mental health services and care, state and nationwide continuous research endeavors are necessary.

Recommendations for future studies include:

As previously stated, no mental health referral trends could be identified. According to the existing data, it appears that the vast majority of refugees who received a referral declined or were lost to follow-up. Steps are being taken to ensure completeness of this information moving forward. After which, analyses on referral data should be conducted to determine whether refugees are declining referrals, what the barriers are to accepting referrals, and how to improve the delivery and follow-up of mental health care. Given the baseline burden of mental health conditions in this population, an assessment of the capacity of mental health care services would be highly beneficial. Additionally, a weakness of this study was the lack of a comparison group. The next step would be to take this baseline information and conduct a comparison with the general population of Utah. Studies have shown that "refugees could be ten times more likely to have disorders than age-matched general populations."[7(pp1312)] Also, studies on the cost effectiveness of screening and treatment for mental health conditions in refugee populations should be conducted, as it is one of the most commonly noted barriers in the literature to providing mental health screenings.[24]

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Appendix A. Additional Graphs

Table 3: Study Population by Nativity/Culture

Frequency of Table by Nativity & Culture				
Nativity/Culture		**Individual Frequencies**	**Total Frequencies**	**Percentages**
Afghani	**AF**	43,31	**74**	**1.91%**
Bhutanese	**BT**	374, 371	**745**	**19.27%**
Ethnic Minorities from Burma	AK	6, 1	7	
	BM	38, 38	76	
	CN	83,60	143	
	KA	165, 143	308	
	KC	9, 6	15	
	KRI	31, 21	52	
	MO	8, 3	11	
	RG	14, 6	20	
	SH	4, 1	5	
	Total =		**637**	**16.48%**
DRC Congolese	**DC**	60, 76	**136**	**3.52%**
Cuban	**CU**	41, 33	**74**	**1.91%**
Ethiopian/Eritrean	ER	91, 35	126	
	ET	14, 12	26	
	KM	1, 3	4	
	Total =		**156**	**4.04%**
Iranian	**IR**	85, 67	**152**	**3.93%**
Iraqi	**IZ**	470, 383	**853**	**22.06%**
Somali	SB	5, 1	6	
	SO	306, 303	609	
	Total =		**615**	**15.91%**
Sudanese	**SU**	145, 38	**183**	**4.73%**

*The percentages listed above are of the entire refugee population (n = 3,866). In the individual frequencies column the first number presented is with respect to males and the second females.

Figure 17: Percentage of Population Aged 45-64 Years Old

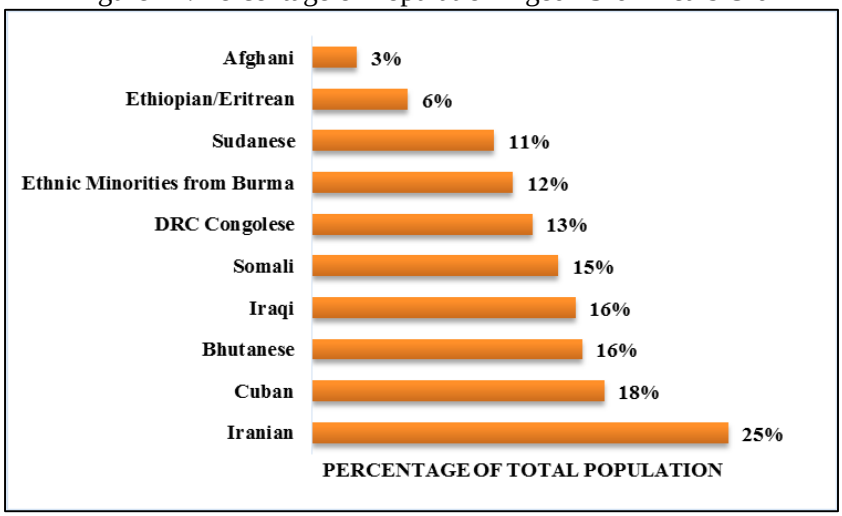


Figure 18: Percentage of Population Aged 65-84 Years Old

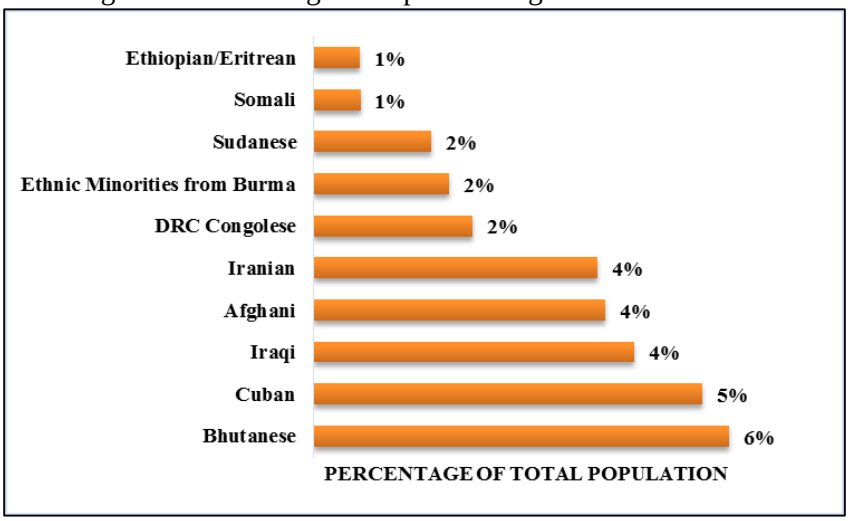


Figure 19: Percentage of Population Aged 85+ Years Old

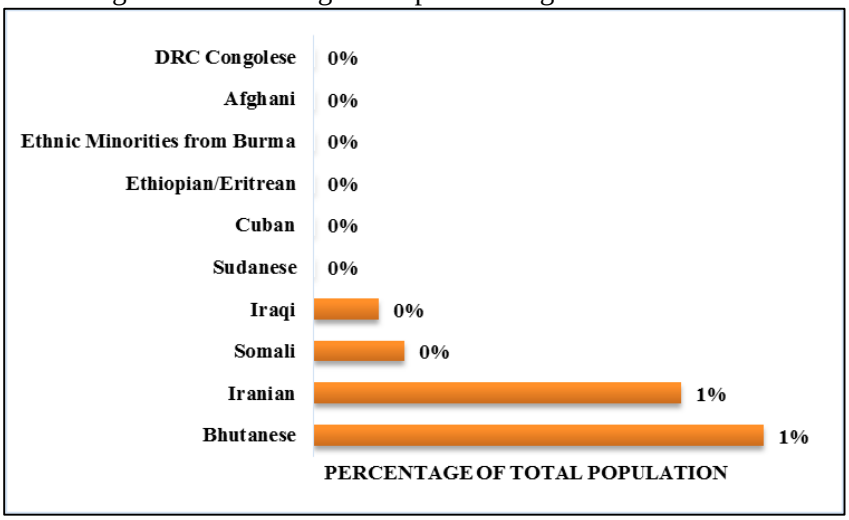
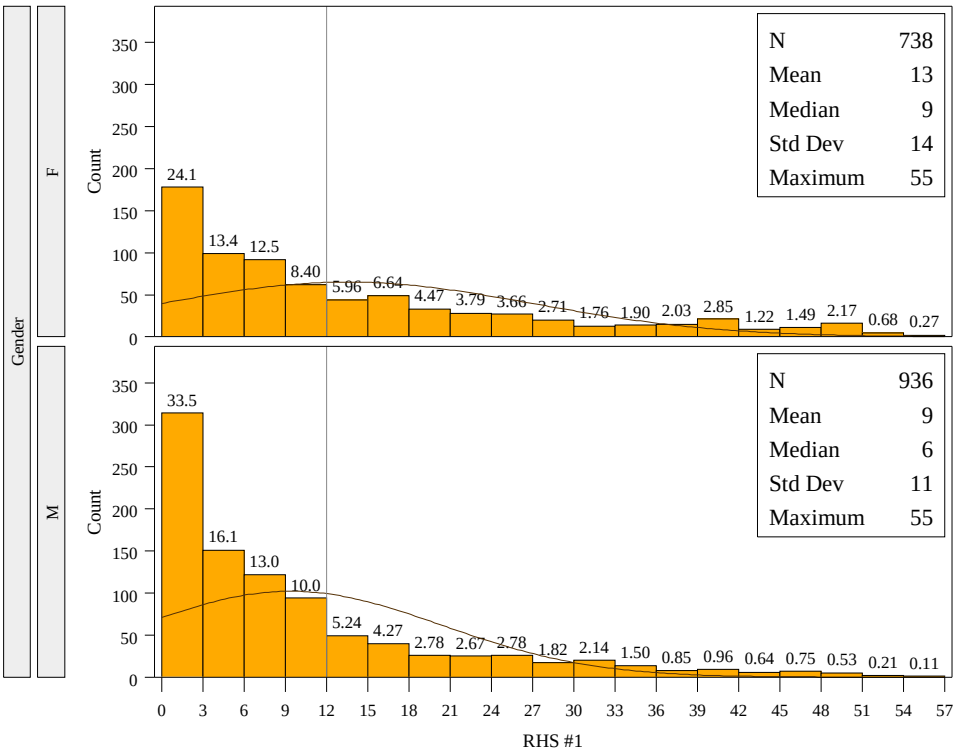
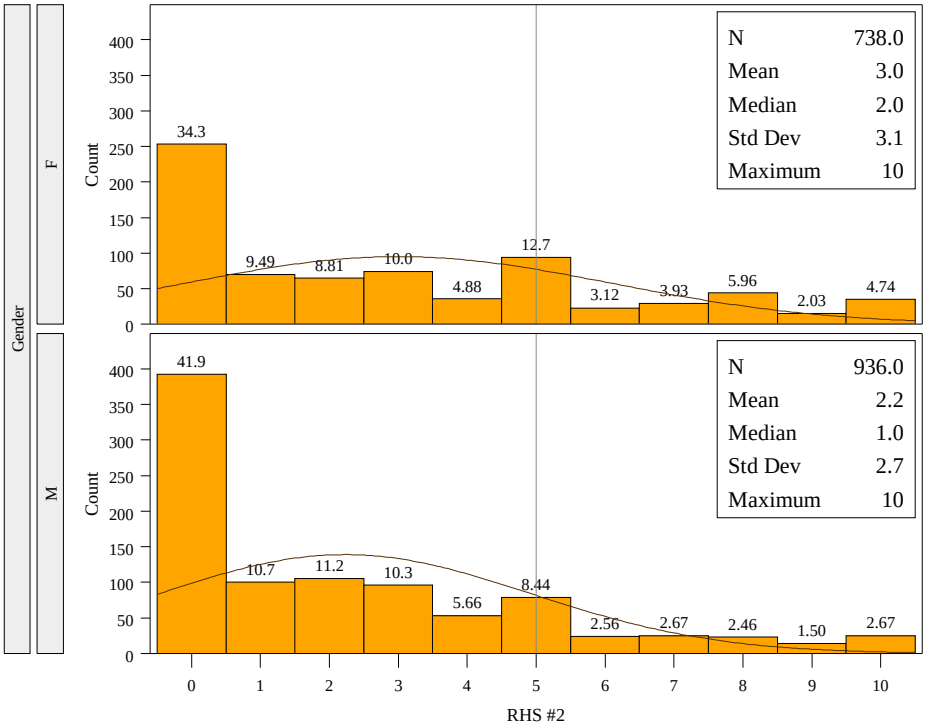


Figure 20: Distribution of RHS 1 Scores by Sex



*A reference line is drawn to show the cut-off RHS 1 (>=12) score requiring referral.

Figure 21: Distribution of RHS 2 Scores by Sex



*A reference line is drawn to show the cut-off RHS 2 (>=5) score requiring referral.

Appendix B. Excerpts from the Utah Refugee Health Program Manual

Utah Refugee Health Program

Bureau of Epidemiology
Treatment and Care Services Program

UTAH DEPARTMENT OF HEALTH

January 2014

Introduction

The United Nations defines a refugee as, ***"Any person who is outside any country of such person's nationality or, in the case of a person having no nationality, is outside any country in which such person last habitually resided, and who is unable or unwilling to return to, and is unable or unwilling to avail himself or herself of the protection of, that country 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.[1]"***

Providing refuge to individuals whose lives have been impacted by war, conflict or disaster is a key part of the United States' humanitarian efforts. Following World War II and the admission of 250,000 displaced Europeans, Congress enacted the first refugee legislation, "The Displaced Persons Act of 1948," which allowed for the admission of an additional 400,000 displaced Europeans[2].

In 1975, with the resettlement of hundreds of thousands of Vietnamese refugees, Congress recognized the need to establish a formal resettlement program. Congress passed the "Refugee Act of 1980," which standardized resettlement services for all refugees admitted to the United States. Administered by the Bureau of Population, Refugees and Migration (PRM), in conjunction with the Office of Refugee Resettlement (ORR) in the Department of Health and Human Services (HHS), the current refugee program contracts with nine voluntary agencies (VOLAGS) to ensure newly-arrived refugees successfully integrate into their new communities[3].

[1] http://www.acf.hhs.gov/programs/orr/resource/who-we-serve-refugees 8/24/12
[2] http://www.rcusa.org/index.php?page=history 8/23/12
[3] Ibid

Resettlement in Utah

There are estimated to be more than 25,000[4] refugees, speaking more than 40 languages, living in Utah; roughly 1,100 refugees arrive in Utah each year. Two resettlement agencies, Catholic Community Service (CCS) and International Rescue Committee (IRC), provide newly arrived refugees with direct services and support. During the first 90 days, known as the reception and placement period, refugees have access to monetary assistance along with employment, housing, education, health and acculturation support. Additionally, refugees typically have access to state-funded programs such as Medicaid and Supplemental Nutrition Assistance Program (SNAP). Utah is unique in that it offers refugees 24 months of direct supportive services. Refugees resettled through CCS receive direct support for 12 months. Then their case is transferred to the Refugee and Immigrant Center at the Asian Association of Utah (RIC-AAU), a community-based organization that provides employment, mental health, English as a second language (ESL), case management and citizenship services to refugees and immigrants. IRC provides supportive services to refugee clients for the full 24 months. The Utah Refugee Services Office (RSO), housed in the Department of Workforce Services (DWS), facilitates the support of the larger refugee community through various initiatives, including capacity building of ethnic-based community organizations, also known as Refugee Community Organizations (RCOs).

Nativity	Number of Individuals	Nativity	Number of Individuals
Afghanistan	61	Karenni	9
Arakanese	1	Kumana	4
Burma	21	Mon	2
Bhutan	95	North Korea	1
Burundi	8	Pakistan	20
Cambodia	1	Rohingya	11
Chin	26	Rwanda	14
China	1	Shan	3
Columbia	4	Somali	279
Congo	14	Somali Bantu	10
Cuba	20	Sri Lanka Tamil	4
DRC	82	Sudan	64
Egypt	1		
Eritrea	21		
Ethiopia	9		
Iran	17		
Iraq	361		
Karen	55		
Kachin	5		

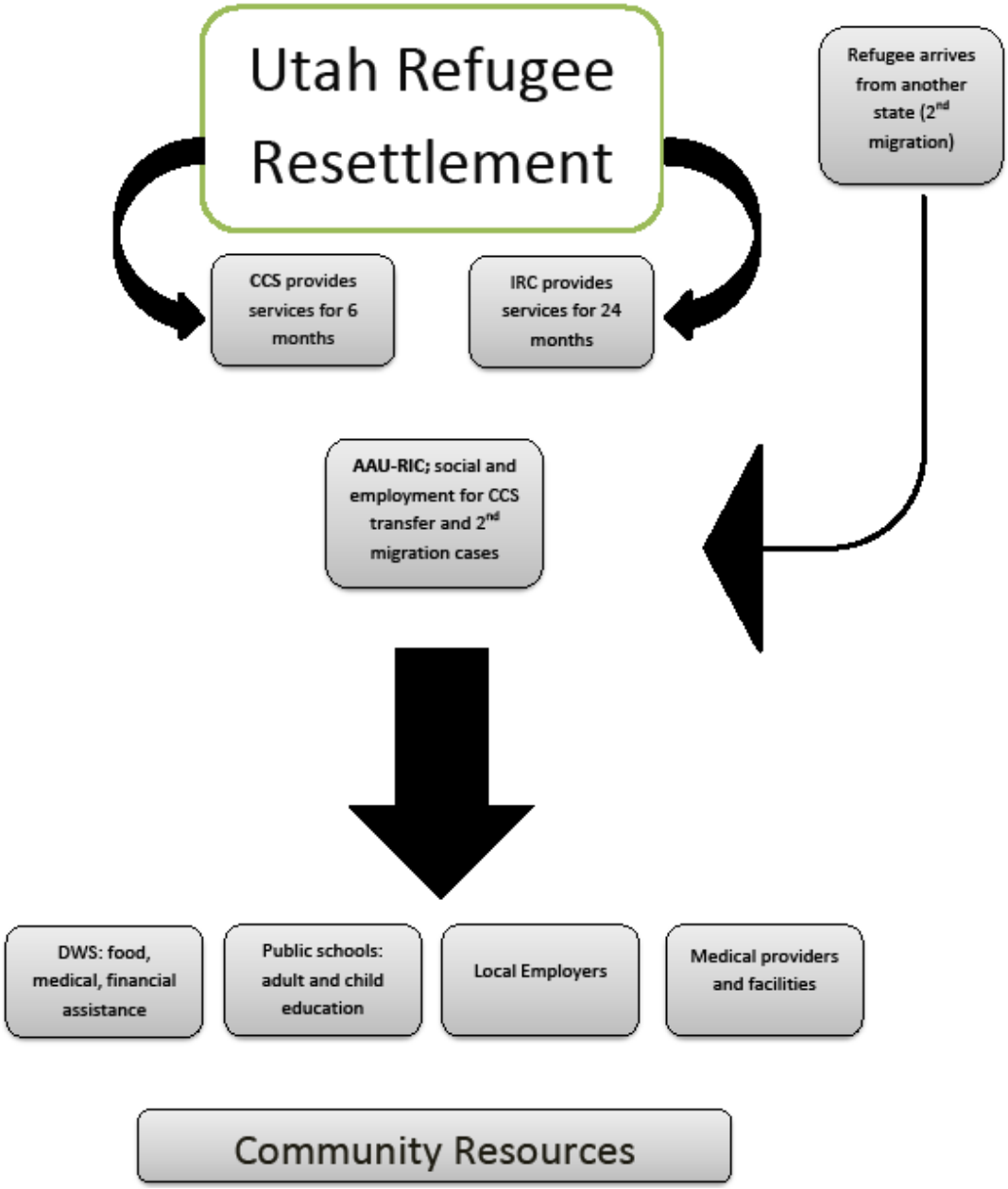
FY2014 Utah Arrivals
1,229 individuals

Source: UDOH Refugee Health Access Database

Community resources and partnerships are crucial to successful integration; agencies serving refugees rely on one another to ensure that services are timely, adequate and culturally and linguistically appropriate.

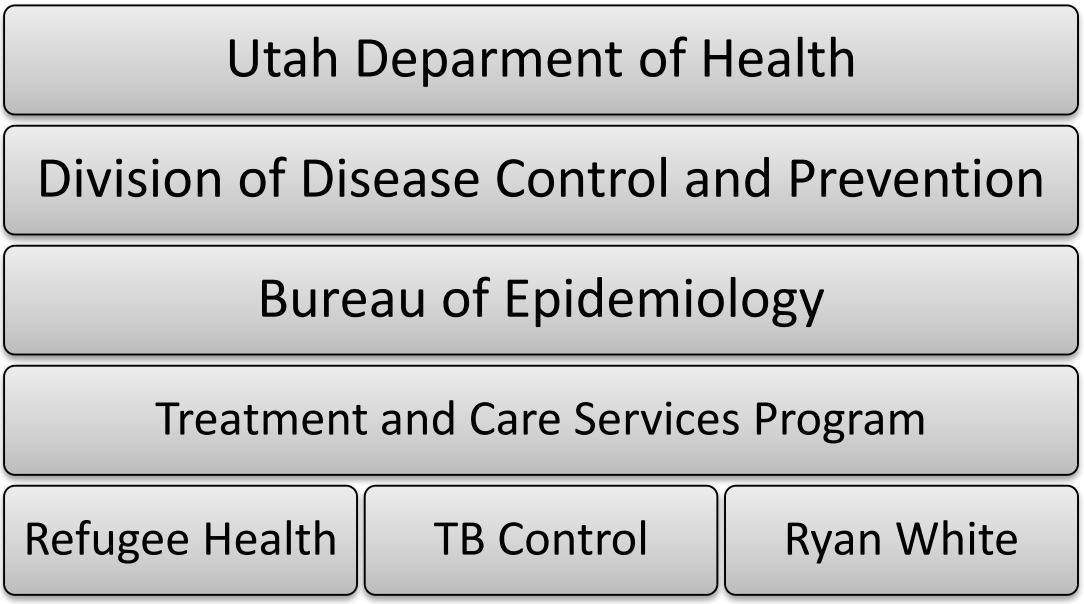
[4] State of Utah Refugee Office. Refugee 101. www.refugee.utah.gov

DWS facilitates access to government-funded programs such as Medicaid, SNAP, financial assistance and work readiness programs. Public schools within various school districts provide education for both children and adult learners; additionally local organizations provide ESL classes and tutors. Employment plays a major role in successful integration; staff from CCS, IRC, RIC-AAU and DWS work closely with local employers to identify and secure employment for refugee clients. Access to medical services is also an important factor in the integration process; numerous medical providers and facilities provide quality care to refugee patients. While the majority of Utah's refugee population lives in Salt Lake County, smaller communities have been established in Logan and Heber City where local organizations provide assistance.



Utah Department of Health Refugee Health Program

The mission of the Utah Health Department of Health (UDOH) is to: "Protect the public's health through preventing avoidable illness, injury, disability and premature death; assuring access to affordable, quality health care; and promoting healthy lifestyles."[5] Housed in the Division of Disease Control and Prevention, Bureau of Epidemiology, the Treatment and Care Services Program oversees the Utah Refugee Health Program.



The goal of the Utah Refugee Health Program is to: ***"Foster community health partnerships with those serving refugee populations through culturally appropriate health screening, education and referrals."*** By coordinating activities between local providers, resettlement agencies, local health departments, DWS, the Centers for Disease Control and Prevention (CDC) and ORR, the Utah Refugee Health Program facilitates and promotes health programs and services that are culturally and linguistically appropriate.

Services and funding provided by the program focus on five priority areas: 1) Health Screening; 2) Care Coordination; 3) Health Promotion; 4) Pandemic Preparedness; and 5) TB Control. The graphic on the following page describes current efforts in these five areas.

[5] http://health.utah.gov/

Program Goals and Objectives

1). The program will collaborate with resettlement agencies to ensure that at least 90% of newly arriving refugees complete a health screening within 30 days of arrival.

2). The program will monitor health screening results to ensure that 95% of individuals screened and identified with reportable conditions are referred for follow-up care and/or treatment within 30 days of receiving a report of the condition.

3). The program will monitor health screening results to ensure that 95% of individuals screened establish a medical home within 30 days of completing the screening.

4). The program will monitor resettlement agencies to ensure that 80% of screened individuals establish care with their health screening provider.

5). The program will work with resettlement agencies to ensure that 90% of individuals referred for a TB-related chest x-ray obtain the x-ray within 30 days of receiving chest x-ray order.

6). The program will coordinate with resettlement agencies and mental health providers to ensure that 90% of clients referred for mental health services complete an intake within the time frame recommended by the screening physicians.

8). The program will provide education to individuals serving as medical interpreters to improve understanding of the medical interpreter role, codes of conduct, medical terminology and other skills necessary to provide culturally competent, medically appropriate service.

Refugee Health Screening

The first interaction that refugees have with the health care system in the United States begins with the Refugee Health Screening. The Refugee Act of 1980 entitles each newly arriving refugee to a complete health screening exam within the first 30 days after arriving in the United States. The purpose of the domestic screening is to "reduce the spread of infectious disease, ensure ailments are identified and treated, promote preventive health practices, and to ensure good health practices facilitate successful integration and self-sufficiency."[6]

The program works closely with various clinics to provide a comprehensive Refugee Health Screening. Resettlement agencies, RIC-AAU, CCS and IRC, are responsible for scheduling the screening appointment, arranging transportation and interpretation, and ensuring each newly arrived refugee successfully completes the screening within 30 days.

Utah offers a comprehensive and holistic health screening (Appendix B); components of the screening include:

A. Physical exam—addresses health concerns and conditions in the following areas:
    - Cardiology
    - Dental
    - Dermatology
    - Endocrinology
    - ENT
    - Genitourinary
    - GI
    - Hematology
    - Musculoskeletal
    - Neurology
    - Nutrition
    - Obstetrics
    - Ophthalmology
    - Pulmonology
    - Preventive (family planning, tobacco)

[6] http://www.acf.hhs.gov/programs/orr/programs/preventive-health

B. Screening and testing—assess for sexually-transmitted diseases, parasites, deficiencies and chronic disease including:
   - HIV
   - Hepatitis B
   - Hepatitis C
   - Syphilis
   - Schistosomiasis
   - Strongyloides
   - Giardia
   - Anemia
   - Diabetes
   - Other intestinal parasites

C. Immunizations—the CDC's Advisory Committee on Immunization Practices (ACIP) vaccination requirements do not apply to refugees at the time of their initial admission to the United States; however, refugees must meet the vaccination requirements when applying for adjustment of status or permanent resident status in the United States (one year or more after arrival).[7]

D. Presumptive treatment—for parasites known to be common to specific regions from which refugees are arriving, specifically Schistosomiasis (Praziquantel) and Strongyloides (Ivermectin).

E. TB screening—targeted testing for latent TB infection (LTBI) primarily using QuantiFERON®-TB Gold (QFT-G), which is an alternate testing method for the tuberculin skin test (TST) and offers increased specificity and sensitivity. TST may be used if QFT-G blood draw is unsuccessful or if the QFT-G is indeterminate. The TST is still used for children aged five or younger.

F. Mental health Sscreening—the Refugee Health Screener 15 (RHS-15) is used to screen for depression, anxiety, PTSD and overall distress in refugees aged 14 and older.

Communicable and/or diseases of public health significance are reported to the local health department (LHD) and UDOH. If follow up is required, the LHD will either coordinate with the resettlement agency or contact the refugee directly. Refugees found to have an infectious disease, including parasitic or worm infections, will receive the appropriate medication or a prescription for the medication.

[7] http://www.cdc.gov/immigrantrefugeehealth/exams/ti/panel/vaccination-panel-technical-instructions.html

Mental Health

Clients identified during the Refugee Health Screening as requiring follow-up mental health care are referred to the appropriate agency. Currently there are two primary agencies providing mental health services to the refugee community.

Utah Health and Human Rights	**Refugee & Immigrant Center at Asian Association of Utah**
Utah Health and Human Rights (UHHR) is a nonprofit organization that provides highly-specialized and culturally competent mental health, medical, psychiatric, case management, and legal services to men, women, and children who have endured severe human rights abuses. UHHR helps refugees, immigrants, asylum seekers, and asylees heal from the physical and psychological impacts of torture and rebuild their lives. Evidence-based and holistic services promote health, dignity, and self-sufficiency and are guided by profound respect for the dignity and resiliency of clients. UHHR is a member of the National Consortium of Torture Treatment Programs.	The Refugee and Immigrant Center at Asian Association of Utah (AAU-RIC) provides comprehensive outpatient services including, but not limited to, mental health counseling, medication management, family counseling, and domestic violence and substance abuse treatment. AAU-RIC strives to improve the quality of life for refugees and immigrants. AAU-RIC is an interdisciplinary team of culturally competent professionals that include an Advance Practice Registered Nurse (APRN), psychologist, family services coordinators, Licensed Clinical Social Workers, Clinical Social Workers, and case managers who all have experience working with refugee and immigrant populations.
Services include: Mental health services to refugees, immigrants, asylees, and asylum seekers who have survived severe human rights abuses. Interpretive services. Training and consultation to community members and professionals statewide.	**Services Include:** Mental health services to refugees and immigrants in Salt Lake County. Interpretive services.

The RHS-15 is used to assess the mental health needs of newly arrived refugees. The RHS-15 (Appendix C) was designed as a simple tool that can be used during the initial health screening and/or in the primary care setting. The 15 questions address symptoms associated with depression, anxiety, trauma and overall well-being; the tool has been translated and validated in a number of refugee languages.

Refugees scoring ≥12 on questions one through 14 or ≥ 5 on the distress thermometer are identified as someone who may benefit from mental health services; an official referral is made for those individuals willing to accept mental health services. Referrals are coordinated through the Utah Refugee Health Program; the Refugee Health Specialist will notify the resettlement agency and mental health service provider of the referral, providing as much information as possible from the health screening. The mental health provider and resettlement agency then coordinate an intake date and time, transportation and interpretation, as needed.

All follow-up services are coordinated by the resettlement agency and service provider. Currently both IRC and CCS employ Mental Health Coordinators who are responsibile for coordinating all initial mental health referrals and follow-up appointments, while serving as a liaison between the resettlement agency and service providers. Additionally, both agencies administer the RHS-15 at specific intervals during the resettlement process, to specific groups of refugees, with the hope of identifying refugees in need of mental health services earlier in the resettlement process. In FY2014, 168 newly arrived refugees were identified and recommended for mental health services through the initial health screening.

In FY2014, the Refugee Mental Health Subcommittee (RMHSC) decided to focus on needs and available services for children with regard to mental health. As a result of that approach, the RMHSC identified gaps in the screening and referral process for newly arrived refugee children. The standardized screening tool, RHS-15, is only valid with individuals aged 14 and older. In order to enhance initial mental health screening and referral efforts among newly arrived children the Refugee Health Program, in partnership with the University of Utah College of Nursing, plans to conduct pilot screenings using the Strengths and Difficulties Questionnaire (SDQ). The screenings will occur during the initial health screening and participants will be randomly selected children aged 13 or younger. The Refugee Health Program anticipates findings regarding the appropriateness of the SDQ to be available by early 2015.

Appendix C. Refugee Health Screener -15

REFUGEE HEALTH SCREENER-15 (RHS-15)

Pathways to Wellness

Integrating Refugee Health and Well-being

Creating pathways for refugee survivors to heal

ENGLISH VERSION

DEMOGRAPHIC INFORMATION

NAME: _____ DATE OF BIRTH: _____

ADMINSTERED BY: _____ DATE OF SCREEN: _____

DATE OF ARRIVAL: _____ GENDER: _____ HEALTH ID #: _____

Developed by the *Pathways to Wellness* project and generously supported by the Robert Wood Johnson Foundation, The Bill and Melinda Gates Foundation, United Way of King County, The Medina Foundation, Seattle Foundation, and the Boeing Employees Community Fund.

Pathways to Wellness: Integrating Community Health and Well-being is a project of Lutheran Community Services Northwest, Asian Counseling and Referral Services, Public Health Seattle & King County, and Dr. Michael Hollifield. For more information, please contact Beth Farmer at 206-816-3252 or bfarmer@lcsnw.org.

REFUGEE HEALTH SCREENER (RHS-15)

Instructions: Using the scale beside each symptom, please indicate the degree to which the symptom has been bothersome to you over the past month. Place a mark in the appropriate column. If the symptom has not been bothersome to you during the past month, circle "NOT AT ALL."

SYMPTOMS	NOT AT ALL	A LITTLE BIT	MODER-ATELY	QUITE A BIT	EXTREMELY
1. Muscle, bone, joint pains	0	1	2	3	4
2. Feeling down, sad, or blue most of the time	0	1	2	3	4
3. Too much thinking or too many thoughts	0	1	2	3	4
4. Feeling helpless	0	1	2	3	4
5. Suddenly scared for no reason	0	1	2	3	4
6. Faintness, dizziness, or weakness	0	1	2	3	4
7. Nervousness or shakiness inside	0	1	2	3	4
8. Feeling restless, can't sit still	0	1	2	3	4
9. Crying easily	0	1	2	3	4

The following symptoms may be related to traumatic experiences during war and migration. How much in the past month have you:

10. Had the experience of reliving the trauma; acting or feeling as if it were happening again?	0	1	2	3	4
11. Been having PHYSICAL reactions (for example, break out in a sweat, heart beats fast) when reminded of the trauma?	0	1	2	3	4
12. Felt emotionally numb (for example, feel sad but can't cry, unable to have loving feelings)?	0	1	2	3	4
13. Been jumpier, more easily startled (for example, when someone walks up behind you)?	0	1	2	3	4

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REFUGEE HEALTH SCREENER (RHS-15)

14. Generally over your life, do you feel that you are:

Able to handle (cope with) anything that comes your way 0

Able to handle (cope with) most things that come your way 1

Able to handle (cope with) some things, but not able to cope with other things.....2

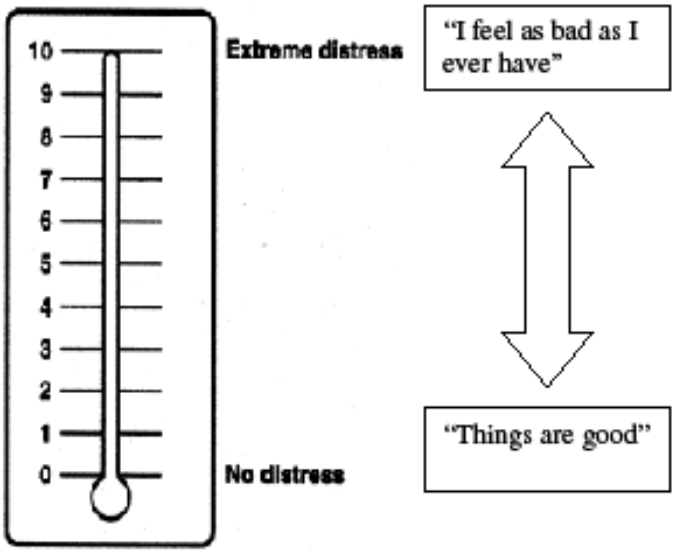
Unable to cope with most things.....3

Unable to cope with anything 4

15.

Distress Thermometer

FIRST: Please circle the number (0-10) that best describes how much distress you have been experiencing in the past week including today.



ADD TOTAL SCORE OF ITEMS 1-14: ___

SCORING

Screening is POSITIVE

1. **If Items 1-14 is ≥ 12 OR**
2. **Distress Thermometer is ≥ 5**

Self administered: ____
Not self administered: ____

CIRCLE ONE: **SCREEN NEGATIVE** **SCREEN POSITIVE REFER FOR SERVICES**

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Appendix D. New Health Screening Form

Please Print Legibly

REFUGEE HEALTH SCREENING FORM

Date of Arrival: _____ /_____/_____ Screening Clinic: _____ Screen Date: _____ /_____/_____

Last Name: _____ First Name: _____ Medicaid ID: _____

Address: _____ DOB: _____ /_____/_____ Sex: M F Alien ID: _____ Resettlement Agency: _____

Place of Birth: _____ Arrive From: _____ Nativity/Culture: _____

HEALTH ASSESSMENT FINDINGS:

Tuberculosis Test: PPD QFT Date: ____ /____/____	Results: _____mm Pos Neg Indeterminate Date: _____ /_____/_____	X-ray Results: Normal Abnormal Date: ____ /____/____

HIV 1 & 2 Tested: Y N Results:	RPR Tested: Y N Results: FTA:	Blood Lead Tested: Y N Results: µg/dl
Hep B (HbSAg) Tested: Y N Results:	Hep C Tested: Y N Results:	B 12 Tested: Y N Results:

Parasites Tested: Y N Results:	Schistosomiasis Tested: Y N Results:	Strongyloides Tested: Y N Results:
Treated: Y N	Praziquantel: Y N or Empirical: mg	Ivermectin: Y N Empirical: mg

Visual Acuity: Y N OS_____ OD_____ OU_____	Anemia Screened: Y N Hct: MCV:	Diabetes Screened: Y N Results: _____mg/

IMMUNIZATIONS:

DTaP/TD/Tdap	IPV	HIB	Meningococcal	Hepatitis B	MMR	Varicella	Pneumococcal	Hepatitis A	HPV	Influenza
___/____/____	___/____/____	___/____/____	___/____/____	___/____/____	___/____/____	___/____/____	___/____/____	___/____/____	___/____/____	___/____/____

MENTAL HEALTH:

Anxiety Depression Torture/Violence Other:		RHS-15: Score 1 _____ (≥12 = positive) Score 2 _____ (≥5 = positive)
MH Referral Accepted: Y N	Referral Agency: AAU UHHR Other	MH Intake to be done: □ 5 Days □ 14 Days □ 1Month

OTHER HEALTH CONDITIONS: check category if PRESENT, circle condition or write in space

□	Cardiovascular:	HTN	↑ BP without HTN	Heart Murmur				
□	Dental:	Caries	Calculus	Decay	Pain			
□	Dermatology:	Dermatitis	Scabies	Tinea				
□	Endocrinology:	Diabetes	Thyroid					
□	ENT:	Impacted Cerumen	Perforated TM					
□	Genitourinary:	Dysuria/BPH	Nocturia	UTI				
□	GI:	Abdominal Pain	Constipation	Diarrhea				
□	Hearing:	<Hearing	Tinnitus					
□	Hematology:	Eosinophilia	Macrocytic anemia	Microcytic anemia				
□	Musculoskeletal:	Arthritis	Low back pain	Loss of Limb	Other Pain			
□	Neurology:	Headaches	Neuropathy	Seizures				
□	Nutrition:	FTT	Malnutrition					WIC
□	Obstetrics/GYN:	Dysmenorrhea	Menorraghia	Pregnant	hCG (+) (-)	Depo due _____		
□	Ophthalmology:	Corneal opacity	<Vision					
□	Pulmonology:	Asthma	COPD	Hx TB B1 B2				
□	Preventive Exam:	Family Planning	Tobacco					
□	OTHER:							

COMMENTS:

Screening Physician: _____ Physician Signature_____