Mental Health Conditions in the Colorado Refugee and Immigrant Community

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Background

Colorado accepts on average 1,650 refugees each year and reported accepting more than 3,000 refugees between October 2021 to September 2022[1]

Mental health conditions (MHC), including depression, anxiety, and PTSD, are shown to be prevalent in this population[2,3]. However, little literature exists identifying the burden of MHC in this population in America, especially in Colorado

Hypothesis: Refugees have an increased prevalence of at least one MHC. Positive MHC screening is associated with demographic characteristics

Aims:
- Quantify the prevalence of MHC in refugees upon entry to Colorado
- Identify associations between MHC and various demographic characteristics

Methods

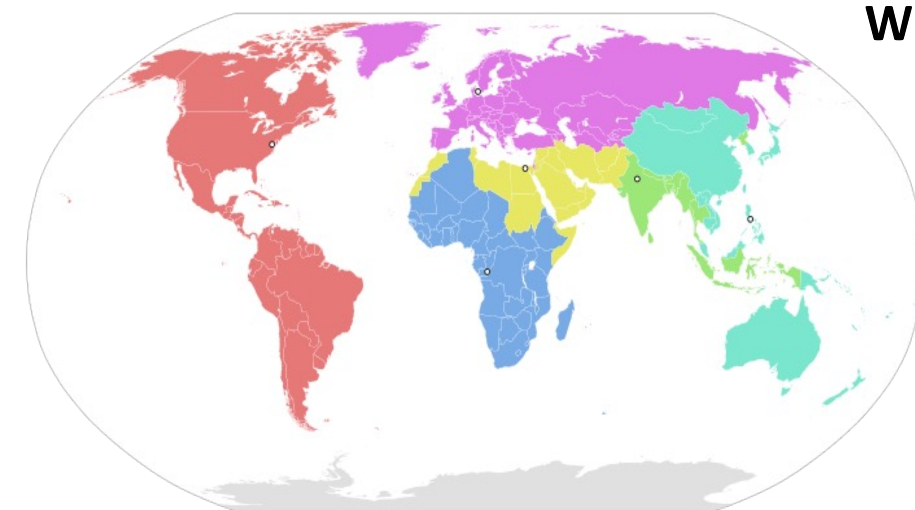
This was a cross-sectional study of 17,516 immigrants and refugees with a documented RHS-15 (mental health screening tool)[4] who arrived in Colorado between 2009-2020

Exposure Variables included demographic values:
Age
Gender
Geographic Region of Origin
Immigration Status
Arrival Year

Outcome Variable was defined as a positive RHS-15 screening for at least one MHC including: Depression, Anxiety, PTSD, Adjustment Disorder, and Alcohol/Substance Use Disorder

Univariate and multivariate logistic regression analysis were done to assess the association between each exposure variable and the outcome and to calculate the adjusted prevalence ratios of the categories within the exposure values

Results



WHO Geographic Regions[5]
- AFR (African Region)
- AMR (Region of the Americas)
- SEAR (South-East Asian Region)
- EUR (European Region)
- EMR (Eastern Mediterranean Region)
- WPR (Western Pacific Region)

- 16,073 (91.76%) screened positive for at least one MHC
- Most prevalent MHC were Depression (5.89%), PTSD (5.61%), and Anxiety Disorder (3.51%)
- Only Region of Origin and Immigration Status resulted in significant adjusted prevalence ratios

Characteristic	n (% of total)	Adjusted Prevalence Ratio (95% CI)
Gender		
Male (Ref)	10,888 (52.68%)	1.00 (*Ref*)
Female	9,779 (47.31%)	0.02 (-0.01, 0.01)
Age		
0-14	6,017 (29.11%)	0.004 (-0.01, 0.02)
15-24	5,066 (24.51%)	0.002 (-0.01, 0.02)
25-44 (Ref)	7,233 (34.99%)	1.00 (*Ref*)
45-64	1,906 (9.22%)	0.01 (-0.01, 0.03)
65+	449 (2.17%)	-0.0008 (-0.04, 0.04)
Region		
AFR *(Ref)*	7878 (38.11%)	1.00 (*Ref*)
EMR	6665 (32.24%)	0.01 (-0.01, 0.02)
AMR	1202 (5.81%)	-0.04 (-0.09, 0.01)
SEAR	3969 (19.20%)	**0.03 (0.01, 0.05)**
**Other Compilation*	957 (4.63%)	-0.02 (-0.05, 0.01)
EUR	510 (2.47%)	
WPR	428 (2.07%)	
Other	5 (0.03%)	
Unknown	13 (0.06%)	
Immigration Status		
Refugee *(Ref)*	16,450 (79.60%)	1.00 (*Ref*)
SIV	1,885 (9.12%)	-0.06 (-0.09, 0.08)
Asylee		-0.04 (-0.10, 0.01)
Domestic Asylee	883 (4.27%)	
Overseas Asylee	354 (1.71%)	
Trafficking Victim	112 (0.54%)	-0.01 (-0.91, 0.08)
Unaccompanied Refugee Minor	160 (0.77%)	-0.43 (-0.10, 0.02)
*Other (*Parolee, Haitian/Cuban, Amerasian immigrants*)	823 (3.98%)	**-0.05 (-0.08, -0.04)**
	Missing = 4	

Conclusions and Implications

Statistically significant relationships were found between prevalence of 1+ MHC and:
- Originating from the South-East Asian Region (APR = 0.03 (0.01, 0.05))
- Immigration status of Parolee, Haitian/Cuban, or Amerasian (APR = -0.05 (-0.08, -0.04))

This study supports the literature[2,3] stating increased prevalence of MHC in the refugee and immigrant population

Study strengths include large sample size and ability to use the RHS-15 in several languages
Study limitations include incomplete records and possible response bias and survey bias

Future Directions

Next steps include following up with individuals to identify if those who screened positive on the RHS-15 upon entry were connected with mental health services

Future studies will explore the associations between MHC with physical conditions

This data should be used to inform the design, tailoring, and implementation of MHC identification and intervention tools for this population

Literature

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This study was COMIRB exempt
I have no Conflicts of Interest
Thank you to my mentor, Dr. Madiha Abdel-Maksoud and to the CDPHE for supplying the data