

Health Literacy Assessment in Refugees Residing in San Antonio, Texas

Yun Shi, MD, PhD; Christine Song, DO; Sireesha Teegala, MD; Hayley Hamilton-Bevil, MD; Karla Acosta, MD; Maryse Bakouetila, MD; Christine Camacho, MD; Chi Stasio, DO; Tran Nguyen, MD; Priscila Ibarra, MD; Seena Jose, MD; Brian So, DO; Sanna Bhajjan, DO; Sabeen Abdullah, Tatiana Cordova, MD; Howaida Werfelli, MPH; Fozia Ali, MD

Department of Family and Community Medicine, UT Health San Antonio

BACKGROUND

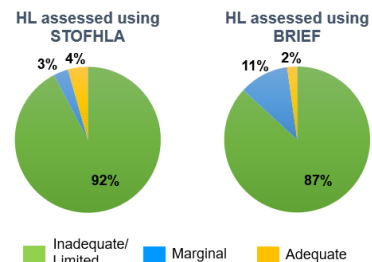
- Low health literacy (HL) is closely associated with poor health outcomes. It was estimated that more than one-third of the US adult population have below basic HL.
- Inadequate HL has been postulated to be one of the major barriers to healthcare in the refugee population.
- To date, there were no published studies on the general HL in the refugee population in San Antonio, TX.



RESULTS

Demographics
(only 4 parameters shown)

	N (%)
Age	
18-24	8 (8.8%)
25-44	69 (75.8%)
45-64	14 (15.4%)
65+	0 (0.0%)
Gender	
Male	42 (46.2%)
Female	49 (53.8%)
Nationality	
Afghani	49 (53.8%)
Burmese	27 (29.7%)
Congolese	1 (1.1%)
Iraqi	5 (5.5%)
Other	9 (9.9%)
Native language	
Arabic	9 (9.9%)
French	5 (5.5%)
Pashto	49 (53.8%)
Burmese	27 (29.7%)
English	1 (1.1%)



Breakdown of HL levels in refugees assessed by either STOFHLA or BRIEF (% shown of 91 samples)

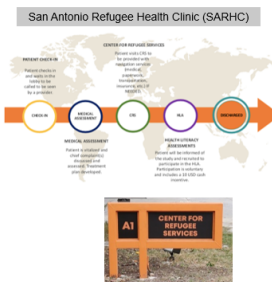
CONCLUSIONS

- To our knowledge, this is the first study to examine the health literacy of refugees resettled in San Antonio, Texas.
- This study found that the overwhelming majority of participants had low health literacy levels.
- The multilevel factors correlated to health literacy were educational level of attainment, income and English language proficiency in reading and writing across both health literacy tools.
- The translation of the BRIEF and STOFHLA into multiple new languages allows for the integration of a validated tool for assessment of refugee needs.



METHODS

- **Design:** A quantitative cross-sectional study using a convenience sample
- **Settings:** Self-reported refugees (>=18 years of age) at sites San Antonio Refugee Health Clinic and Center for Refugee Services between 7/1/2019 and 8/31/2020 (extended to 12/31/20 due to COVID19)
- **Data tools:** demographics and two HL assessment instruments: the Brief Health Literacy Screening Tool (BRIEF) and the Short-Test of Functional Health Literacy in Adults (STOFHLA).
- Both tools were translated into Arabic, Pashto, and Burmese besides English and French.



Linear regression analyses

	N (%)		N (%)
Age		1	4 (4.4%)
18-24	8 (8.8%)	2	3 (3.3%)
25-44	69 (75.8%)	3-5	36 (39.6%)
45-64	14 (15.4%)	6-7	30 (32.9%)
65+	0 (0.0%)	8-9	12 (13.2%)
Gender		No Answer	0 (0.0%)
Male	42 (46.2%)	None	38 (41.7%)
Female	49 (53.8%)	Primary	17 (18.7%)
Race		Secondary	25 (27.5%)
White Alone	5 (5.5%)	University or Graduate	11 (12.1%)
Black or African Alone	5 (5.5%)	Employed	39 (42.9%)
Asian Alone	62 (68.1%)	Not Employed	52 (57.1%)
Two or More Races	0 (0.0%)	No Answer	10 (11.0%)
Nationality		Under \$5000.00	49 (53.9%)
Afghani	49 (53.8%)	\$5000.00-\$24,999.99	19 (20.8%)
Burmese	27 (29.7%)	\$25,000.00-\$44,999.99	10 (11.0%)
Congolese	1 (1.1%)	\$45,000-\$64,999.99	3 (3.3%)
Iraqi	5 (5.5%)	\$65,000+	0 (0.0%)
Other	9 (9.9%)	Personal Vehicle	59 (64.8%)
Native language		Public Transportation	14 (15.4%)
Arabic	9 (9.9%)	Share Ride	4 (4.4%)
French	5 (5.5%)	Other	14 (15.4%)
Pashto	49 (53.8%)	Insurance	32 (35.2%)
Burmese	27 (29.7%)	Yes	
English	1 (1.1%)		
Marital status			
Married	77 (84.6%)		
Single	12 (13.2%)		
Widowed	1 (1.1%)		
Other	1 (1.1%)		

Education, income and ability to read and write English (p< 0.01) predicts HL in both BRIEF and STOFHLA models

CONTACT INFORMATION

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BACKGROUND

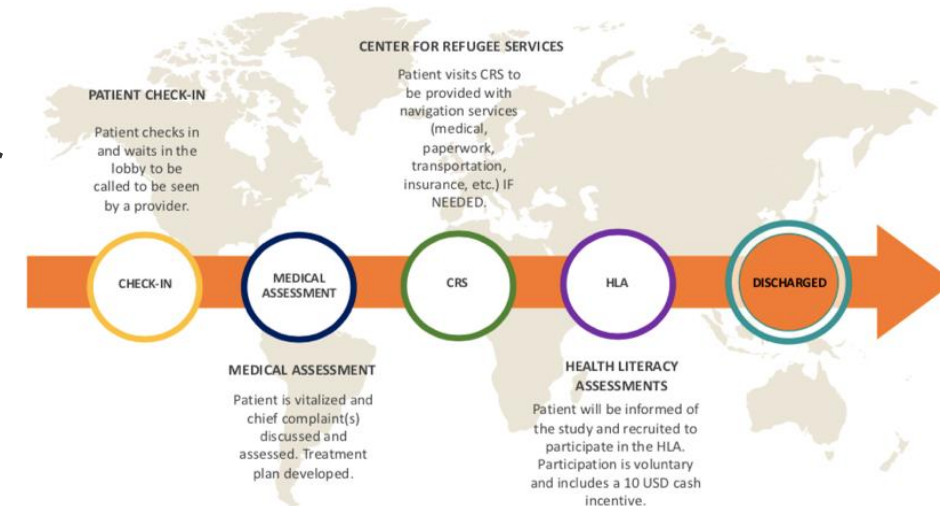
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San Antonio Refugee Health Clinic (SARHC)



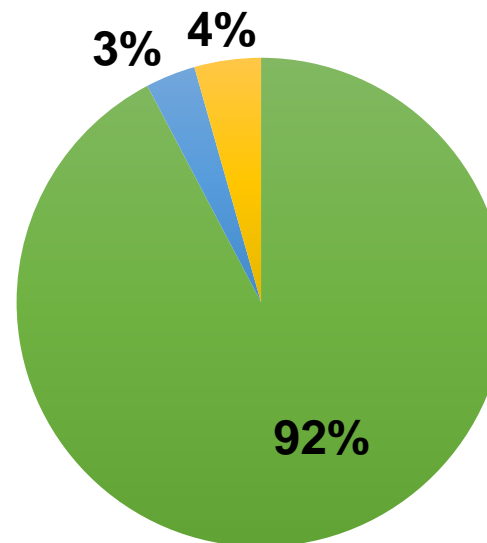
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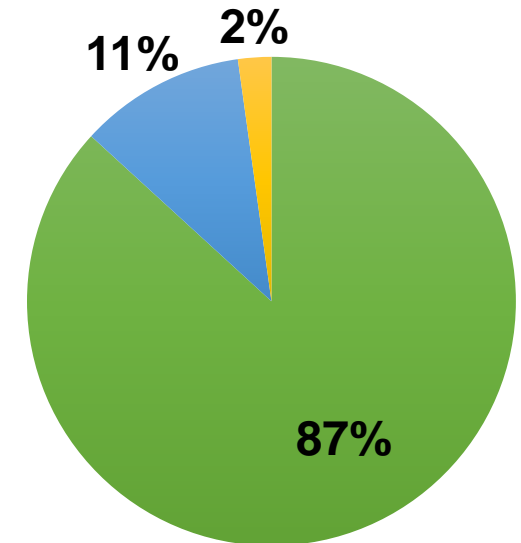
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HL assessed using STOFHLA



HL assessed using BRIEF



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		N (%)
Family Size	1	4 (4.4%)
	2	3 (3.3%)
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Employment	University or Graduate	11 (12.1%)
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	Not Employed	52 (57.1%)
Income (annual)	No Answer	10 (11.0%)
	Under \$5000.00	49 (53.9%)
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