

HeLP: Health Literacy Promotion in COVID-19 pandemic

Alexis Ramos, MD, Yun Shi, MD, PhD, Dhillon Advano, BS, Daniel Orta, BS, Margaret Anderson, BS, Zainab Essaji, Sabeen Abdullah, Marie Emmanuel, MD, Eesha Navaid, Priya Guri, Maria Garcia, MD, Ariel Gomez MPH, Alvin Estacio, Paula Winkler, Med, Ludivina Hernandez, Jasmine Rodriguez, MPH, Robert Wood, DrPH, MPH, Liset Vasquez, RDN, LD, CHES, Bryan Bayles, PhD, MPH, Fozia Ali, MD

The University of Texas Health San Antonio

Introduction

The geographic segregation of social determinants of health (SDoH) in Bexar County has long been established. It is even more evident in light of the vulnerability of COVID-19 infection and vaccination rate. Communities with low SDHs and limited access to health care are also among those with the most inadequate health literacy.

Improving health literacy (HL)—that is, the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others as it is defined in the Healthy People 2030 project and, the key to the success of our regional and national health plan.

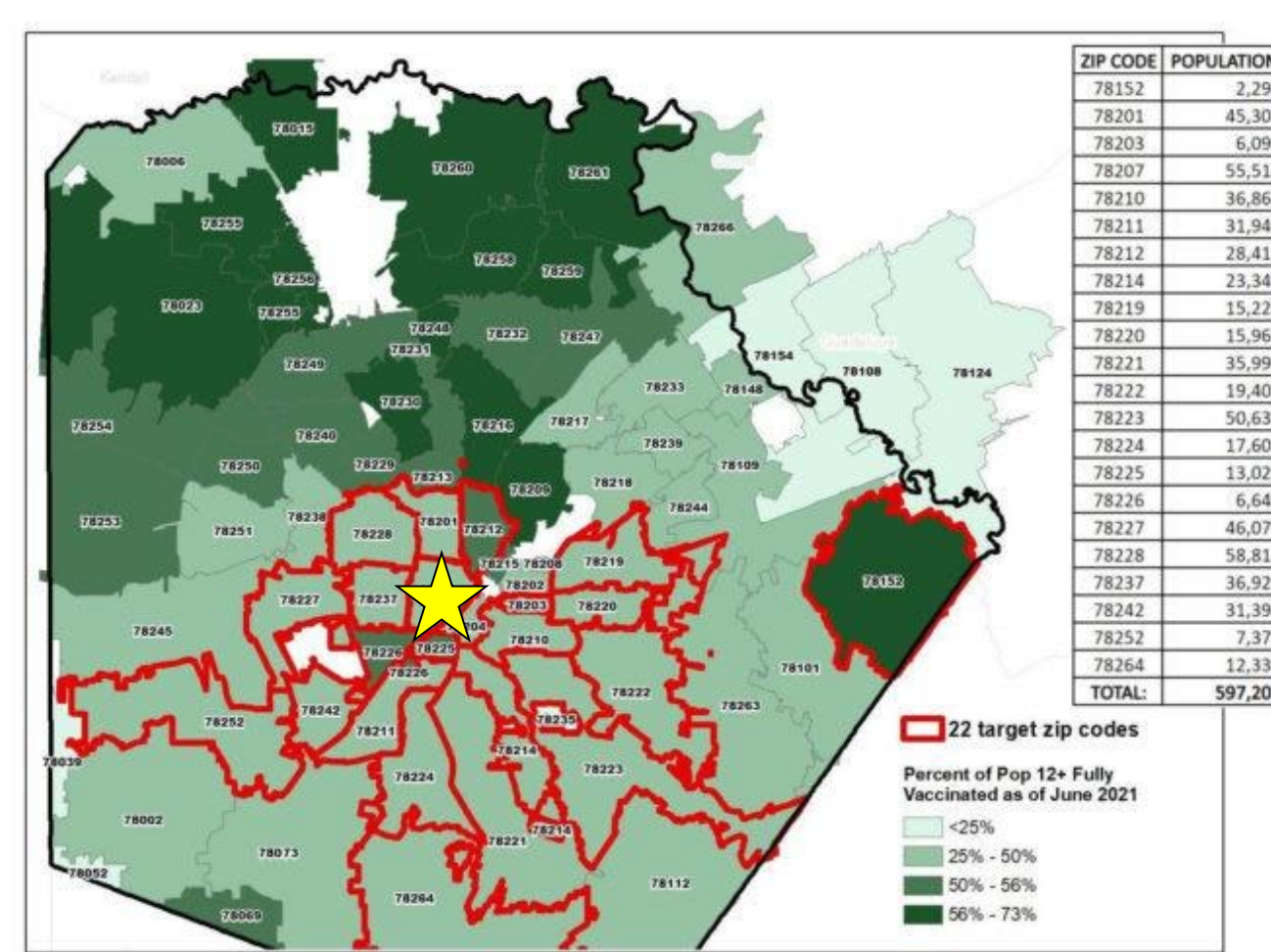


Fig 1. Map obtained from website of the Center for Medical Humanities & Ethics, UT Health San Antonio

Objectives

The project's ultimate objective is to increase the availability, acceptability, and use of COVID-19 health information and improve health literacy in communities among the hardest hit by COVID-19 on the west side of San Antonio metropolitan.

Methods

Surveys were collected from adult ages 18 and older who visited the Neighborhood Place who live in one of five zip codes (78228, 78237, 78201, 78207, 78227) between July and August 2022.

Survey questions include demographic information, general health literacy tool (BRIEF) and electronic health literacy using eHealth literacy scale (eHEALS), validated 8-question tool. Confidence of disease-specific health literacy, sources where individuals obtain health related information and health priorities were also assessed.

Recruitment signs and surveys were provided in both English and Spanish in consideration of the demographic makeup of these communities.



Fig 2. Participant recruitment flyer



Fig 3. Example of health literacy questions on survey

Results

Table 1. Participant Demographics

	N (%)		N (%)		
Age	18-39	29 (29%)	Never attended	0 (0%)	
	40-59	23 (23%)	Elementary or some elementary	2 (2%)	
	60+	22 (22%)	Some high school	6 (6%)	
	Unknown	25 (25%)	High school graduate/ GED	39 (39%)	
			Some college or technical school	31 (31%)	
Gender	Male	20 (29%)	College graduate	11 (11%)	
	Female	79 (79%)	Graduate degree	3 (3%)	
Race	White	62 (62%)	Unknown	7 (7%)	
	Black or African American	3 (3%)	1	10 (10%)	
	American Indian or Alaska Native	3 (3%)	2	27 (27%)	
	Asian	0 (0%)	3 to 5	45 (45%)	
	Native Hawaiian or Other Pacific Islander	0 (0%)	6 to 7	13 (13%)	
	Multiple Races	2 (2%)	8 to 9	3 (3%)	
	Other	22 (22%)	10+	0 (0%)	
	Unknown	7 (7%)	Unknown	1 (1%)	
	Hispanic, Latino or Spanish Origin	No	5 (5%)	Full-time	35 (35%)
		Mexican, Mexican American, Chicano	66 (66%)	Part-time	17 (17%)
Puerto Rican		1 (1%)	Unemployed	18 (18%)	
Cuban		0 (0%)	Student (full or part time)	3 (3%)	
Another Hispanic, Latino, or Spanish Origin		25 (25%)	Retired	16 (16%)	
Unknown		2 (2%)	Disabled	6 (6%)	
			Other	5 (5%)	
Primary Language	English	68 (68%)	Under \$5000	31 (31%)	
	Spanish	28 (28%)	\$5000 - \$24,999	32 (32%)	
	Other	3 (3%)	\$25,000 - \$44,999	19 (19%)	
			\$45,000 - \$64,999	5 (5%)	
Marital Status	Single	47 (47%)	\$65,000+	5 (5%)	
	Married	38 (38%)	Prefer not to answer	7 (7%)	
	Divorced	9 (9%)	Medicare	23 (23%)	
	Widowed	4 (4%)	Medicaid	18 (18%)	
	Other	0 (0%)	Commercial insurance	25 (25%)	
	Unknown	1 (1%)	Carelink	8 (8%)	
Zip	78228	30 (30%)	Other	26 (26%)	
	78237	23 (23%)	No	18 (18%)	
	78201	10 (10%)	Yes	79 (79%)	
	78207	24 (24%)	Unknown	2 (2%)	
Total COVID vaccine doses	0	18 (18%)	1	3 (3%)	
	1	3 (3%)	2	34 (34%)	
	2	34 (34%)	3	30 (30%)	
	3	30 (30%)	4	11 (11%)	
	4	11 (11%)	Unknown	3 (3%)	

Histogram of eHEALS score

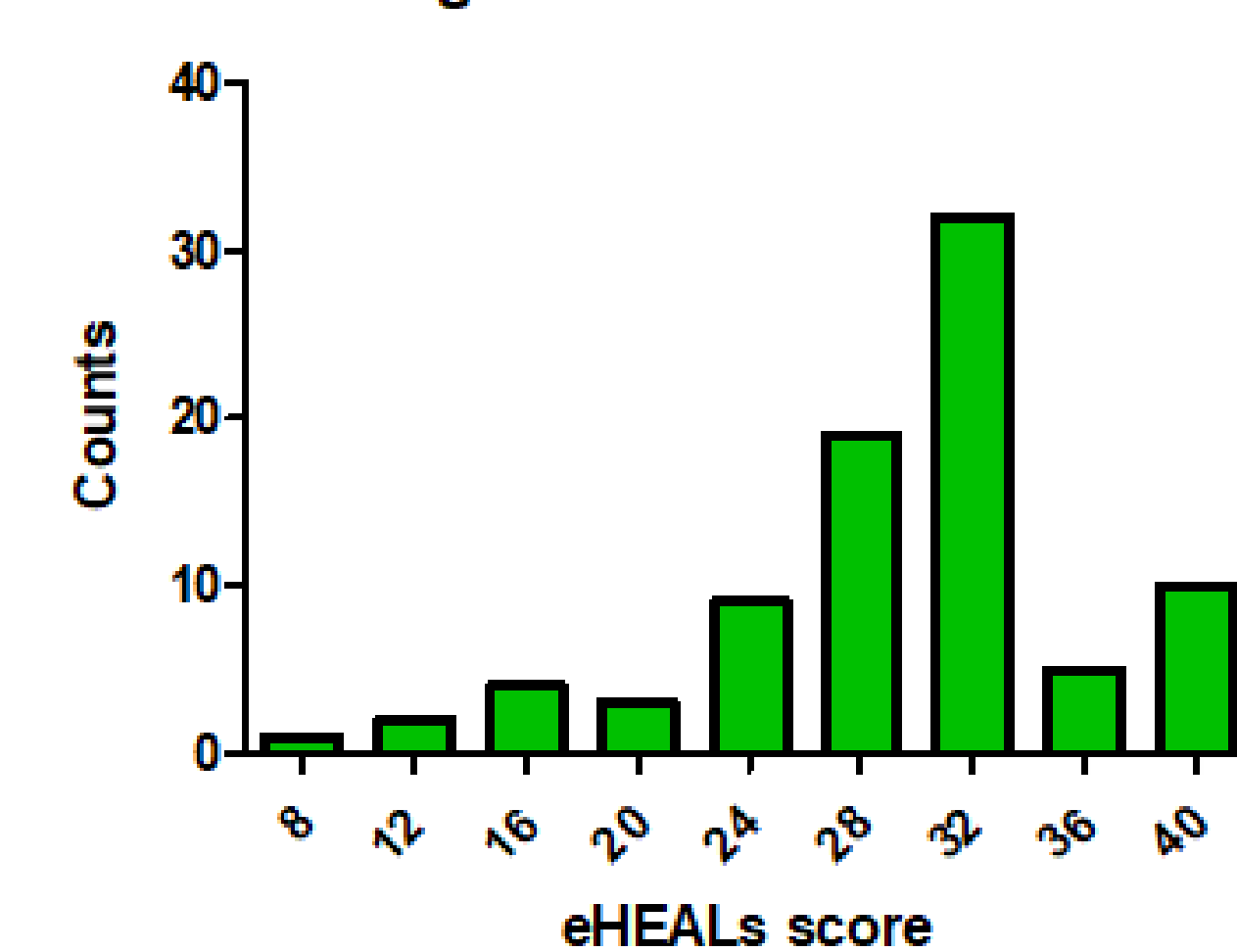


Fig 4. Breakdown of HL assessed by BRIEF and eHEALS score

HL assessed using BRIEF

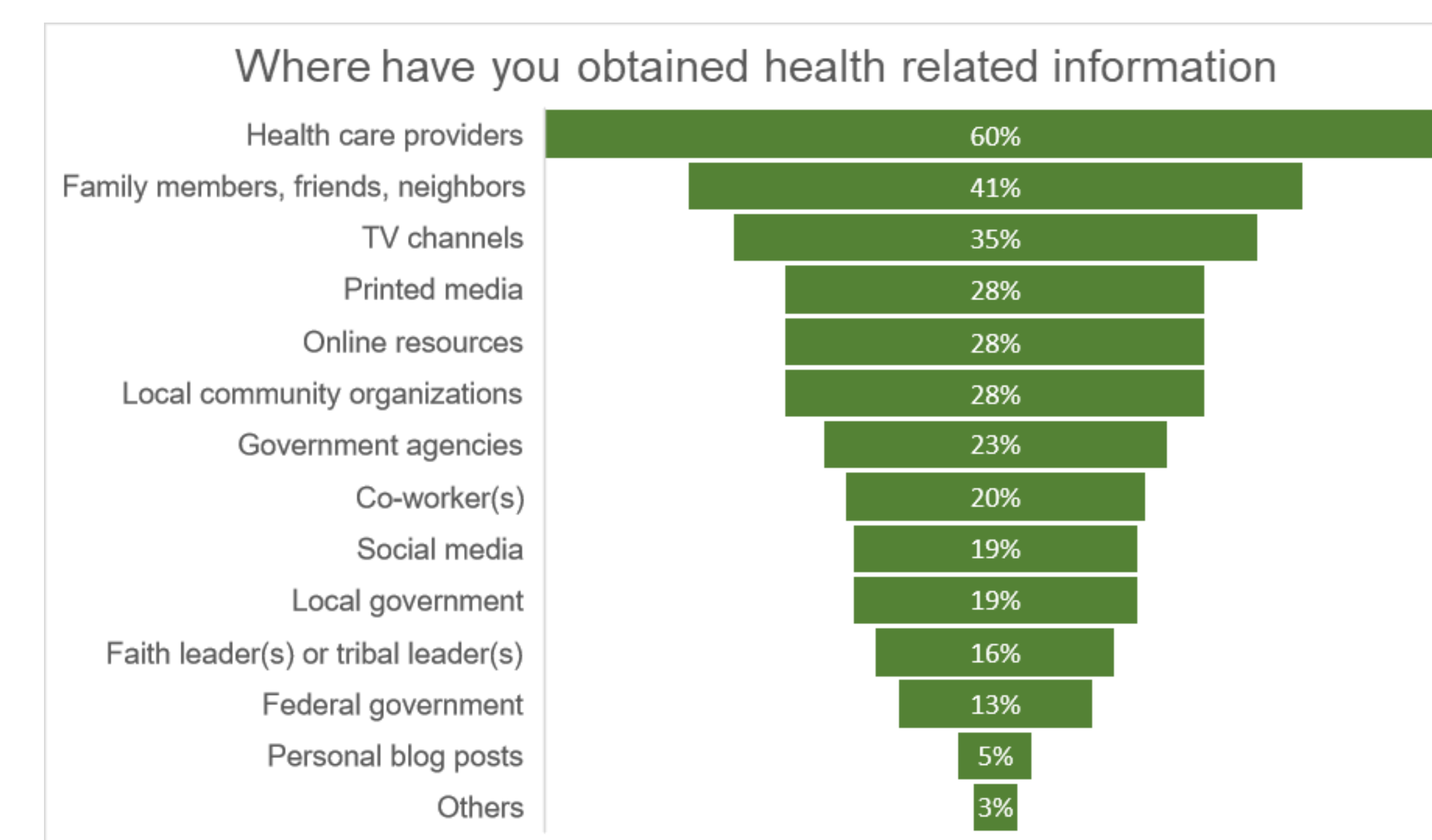
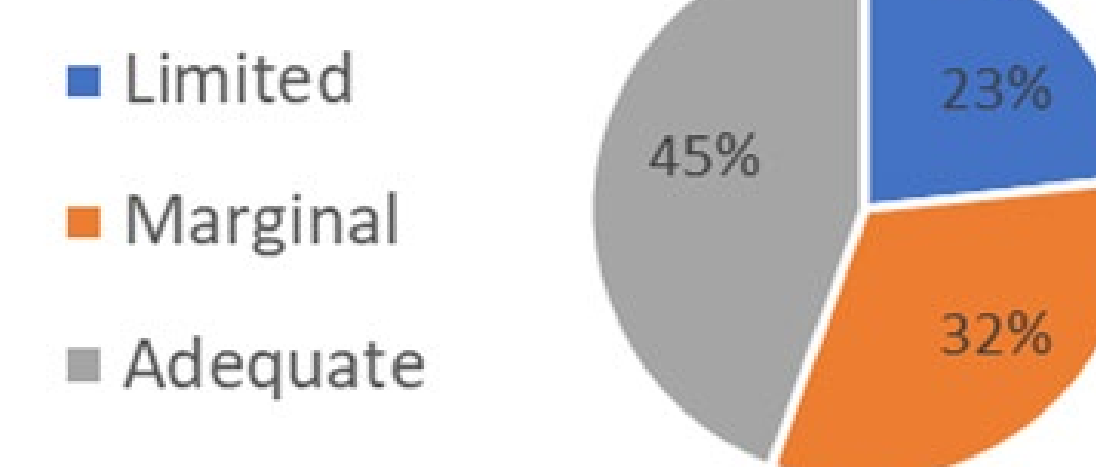


Fig 5. Breakdown of sources of health related information

Conclusions and Future Directions

Preliminary data shows that over 50% of survey participants exhibit less than adequate general health literacy, demonstrating a need to increase confidence in order to facilitate medical decision making. The average eHEALS score is 29 out of total score of 40, indicating moderate to high perceived electronic health literacy, which is somewhat inconsistent with electronic health literacy. In-depth data analyses are still on-going including correlation, cross tabulation and linear regression. Findings from this study will aid community health literacy in innovative and collaborative ways and expand resources available for health literacy promotion. Future directions include phase 2, which will incorporate focus group interviews to further evaluate barriers. Phase 3 will be collaborative interactive education sessions specifically tailored toward community needs and identified gaps in health literacy.

Acknowledgements and References

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- COVID case data by zip code are obtained from the City of San Antonio COVID-19 dashboard (<https://covid19.sanantonio.gov/Reports-Statistics/Dashboards-Data/Surveillance>)
- Texas Department of State Health Services- Texas Immunization Registry (ImmTrac2)
- NIH Community Engagement Alliance (CEAL) (<https://covid19community.nih.gov/>)