

INTRO:

- There is a dearth of literature on health outcomes for Black people identifying as deaf or hard of hearing (DHH).
- Previous studies regarding cancer screening within the DHH community revealed a need to increase participation for age-appropriate screenings.
- Black DHH individuals generally experience at least two types of oppression, racism and audism, necessitating further documentation of health and cancer outcomes within the Black DHH population.
- Objective: To understand the prevalence of lifetime cancer diagnosis in a sample of Black DHH adults and compare this to a Black hearing sample.

METHODS

1. The NIH/NCI's Health Information National Trends Survey was translated and administered in American Sign Language (HINTS-ASL).
2. Questions included lifetime cancer diagnosis (as diagnosed by healthcare providers), demographics, and patient centered communication (PCC).
3. Purposive sampling was done via snowball sampling, flyers, social media, and advertising on deaf-centered organization websites and e-newsletters.
4. Descriptive statistical analyses, chi-square analyses, and multiple logistic regression analyses were used to analyze the results.

RESULTS

- 204 Black DHH ASL users and 531 Black hearing English speakers answered the survey questions.
- Compared to hearing Black adults, DHH Black adults rated their physicians as having lower PCC skills.
- Odds of having cancer (OR=3.52, 95% CI = 1.61, 7.71; p<0.01) and comorbidity (OR=2.91, 95% CI = 1.77, 4.81; p<0.001) are significantly higher for Black DHH compared to hearing participants.
- Despite similar rates of health insurance, only 58% of Black DHH participants regularly see their doctors compared to 70% of Black hearing participants.

Black and Deaf: Left behind in cancer screening



Compared to Black hearing Americans,
Black deaf/hard of hearing Americans
are **3.5x more likely** to report a lifetime
diagnosis of cancer.

Variable		Black Deaf ASL users		Black Hearing English speakers		X ² (p-value)
		N=204	%	N=531	%	
Have Cancer	Yes	12	6.3	50	9.4	1.84 (.175)
	No	180	93.8	479	90.2	
Age	18-34	85	41.7	61	11.5	87.19 (.001)
	35-49	51	25.0	142	26.7	
	50-64	50	24.5	214	40.3	
	65-74	13	6.4	70	13.2	
	75+	5	2.5	33	6.2	
Gender	Male	75	37.1	166	32.7	1.24 (.266)
	Female	127	62.9	341	67.3	

*p<0.05
**p<0.01
***p<0.001
Note: some numbers are uneven due to missing data

Summary of multiple binary logistic regression analyses predicting the association between hearing status, cancer, and comorbidity

	Cancer	Comorbidity
	aOR (95% CI)	aOR (95% CI)
Hearing status^c	3.52**	2.91***
	(1.61, 7.71)	(1.77, 4.81)
Age^b	1.06***	1.08***
	(1.03, 1.08)	(1.07, 1.10)
Male^c	1.96*	1.32
	(1.03, 3.71)	(0.92, 1.89)
Education^c	1.19	1.57*
	(0.67, 2.12)	(1.10, 2.25)
Health Status^c		
	Poor/Fair	5.46***
	(1.05, 5.30)	(3.38, 8.82)
	Good	1.94***
	(1.32, 5.33)	(1.32, 2.85)
Regular provider^c	0.55	0.57*
	(0.27, 1.11)	(0.39, 0.84)
Patient-centered communication^b	0.997	1.01*
	(0.99, 1.01)	(1.00, 1.01)

^aThe comparison groups are no medical outcome or no comorbidity.
^bAge and patient centered communication are continuous variables
^cReference groups: Hearing, female, college degree, and have a regular provider
*** = p<.001
** = p<.01
* = p<.05

KEY TAKEAWAYS

- Within the Black community, people who are DHH and use sign language are at increased risk for cancer, among other health disparities.
- Lower utilization of health care/primary care services by Black DHH means less opportunities to receive preventative cancer screenings.
- Efforts must be made to:
 - increase Black DHH patients' access to primary care services and cancer screening adherence,
 - improve patient-physician communication,
 - And develop actionable plans to address the cancer health disparity within the Black DHH community.