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"Deaf, DeafBlind, and Hard of Hearing adults show a lower colorectal cancer screening rate compared to hearing adults."

BACKGROUND:

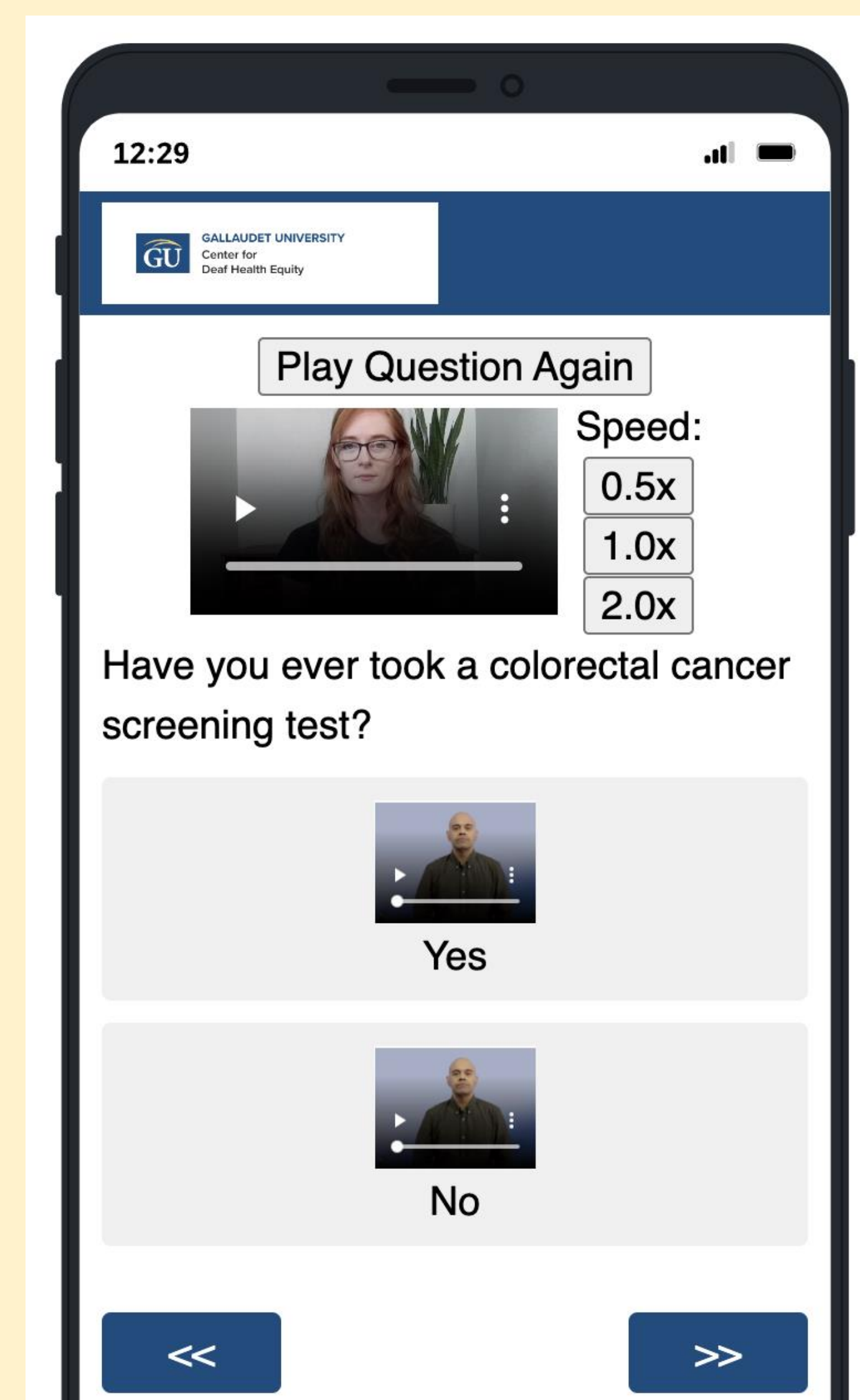
Colorectal cancer (CRC) is the 4th most common cancer diagnosis in the United States. Screening for CRC can lead to early detection and decreased morbidity and mortality. However, health insurance coverage, disability status, and racial disparities affect screening and treatment. For this study, we measured the CRC screening rates among deaf, deafblind, and hard of hearing (DDBHH) survey respondents in comparison to rates found in the hearing population.



METHODS:

N=402 DDBHH participants aged 45 to 75 years (based on USPSTF guidelines for CRC screening) answered the survey between July and November 2023. Cancer-related questions were taken from NCI HINTS and then translated into ASL, with English also available. Analysis was done using primary HINTS-ASL data and secondary NHIS data, for DDBHH and hearing respondents, respectively.

Less likely to adhere to CRC screening:



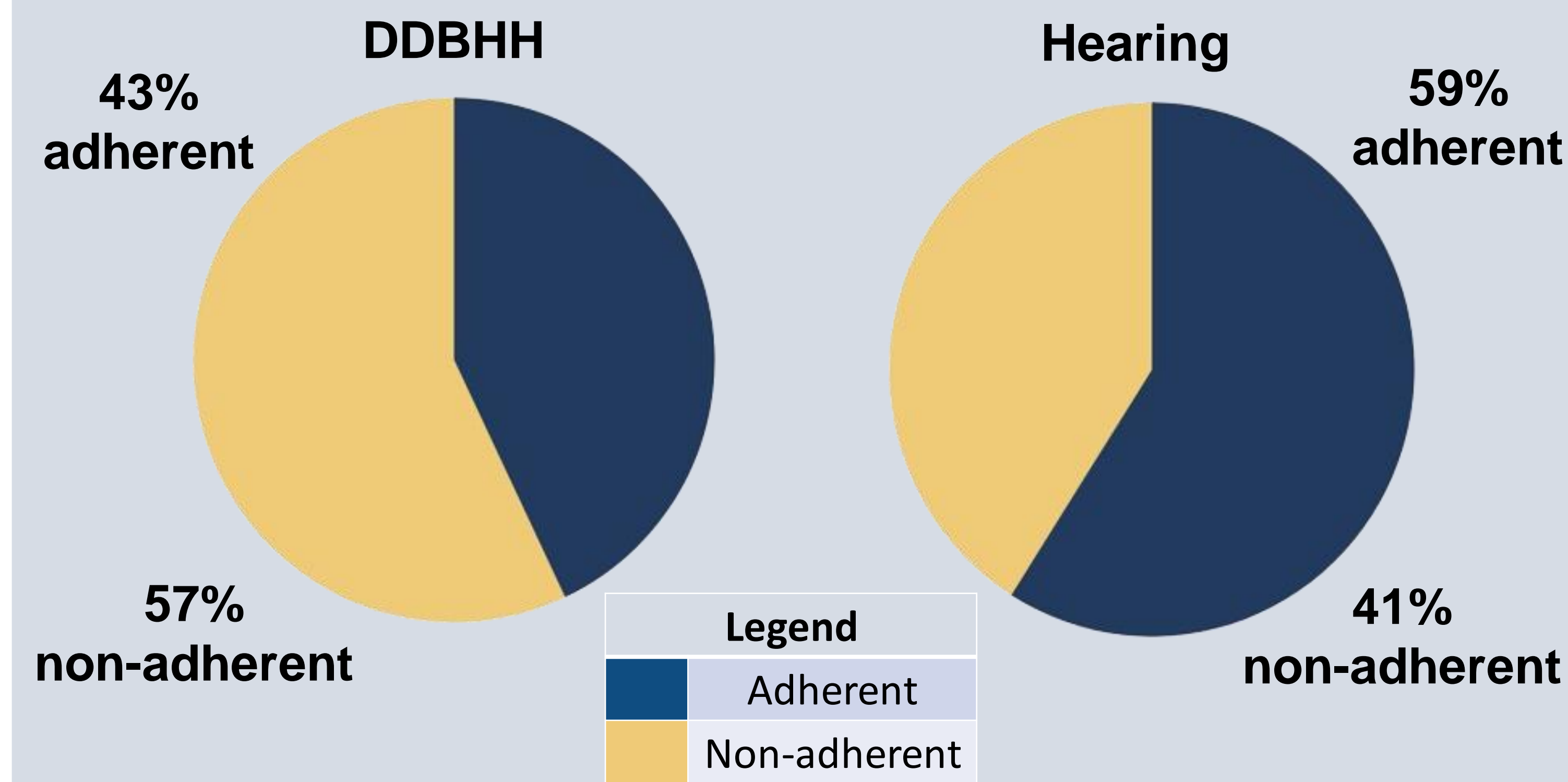
< College degree

Younger age

+ Disability

RESULTS:

In the DDBHH sample, 43% were adherent and 57% reported never having a colorectal cancer screening. In 2021, similarly-aged hearing adults reported 59% adherence and 41% nonadherence in an English version of the National Health Interview Survey (NHIS).



DISCUSSION:

DDBHH participants were less adherent to colorectal cancer screening than similarly aged hearing adults. Further studies are needed to identify factors that contribute to the disparities in colorectal cancer screening between DDBHH and hearing populations, in particular the subpopulations that have lower adherence to screening.

References
 • National Cancer Institute. (n.d.). *Cancer Stat Facts: Common Cancer Sites*. Surveillance, Epidemiology, and End Results Program. <https://seer.cancer.gov/statfacts/html/common.html>
 • American Cancer Society. (2020). *Colorectal cancer facts & figures 2020-2022*. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/colorectal-cancer-facts-and-figures/colorectal-cancer-facts-and-figures-2020-2022.pdf>
 • Steele, C. B., Townsend, J. S., Courtney-Long, E. A., & Young, M. (2017). Prevalence of Cancer Screening Among Adults With Disabilities, United States, 2013. *Preventing chronic disease*, 14, E09. <https://doi.org/10.5888/pcd14.160312>
 • Coughlin, S. (2020). Social determinants of colorectal cancer risk, stage, and survival: a systemic review. *International Journal of Colorectal Disease*, Epub 2020 Apr 21. DOI: 10.1007/s00384-020-03585-z

• Zavala, V. A., Bracci, P. M., Carethers, J. M., Carvajal-Carmona, L., Coggins, N. B., Cruz-Correa, M. R., Davis, M., de Smith, A. J., Dutil, J., Figueiredo, J. C., Fox, R., Graves, K. D., Gomez, S. L., Llera, A., Neuhausen, S. L., Newman, L., Nguyen, T., Palmer, J. R., Palmer, N. R., Pérez-Stable, E. J., ... Fejerman, L. (2021). Cancer health disparities in racial/ethnic minorities in the United States. *British journal of cancer*, 124(2), 315-332. <https://doi.org/10.1038/s41416-020-01038-6>
 • United States Preventive Services Taskforce. (n.d.). A & B recommendations. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation-topics/uspstf-a-and-b-recommendations>
 • Office of Disease Prevention and Health Promotion. (n.d.). *Cancer. Healthy People 2030*. U.S. Department of Health and Human Services. <https://health.gov/healthypeople/objectives-and-data/browse-objectives/cancer/increase-proportion-adults-who-get-screened-colorectal-cancer-c-07>
 • Kushalnagar, P., Harris, R., Paludneviciene, R., & Hoglind, T. (2017). Health Information National Trends Survey in American Sign Language (HINTS-ASL): Protocol for the Cultural Adaptation and Linguistic Validation of a National Survey. *JMIR research protocols*, 6(9), e172. <https://doi.org/10.2196/resprot.8067>