

Rural Hispanics over 65 with Hypertension: A Nurse-Led Approach

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METHODS

A literature review was conducted from 2015-2020, exploring the social determinants of health (SDOHs) among rural Hispanics, and two SDOHs applicable to the community of interest were identified. An evidence-based practice guideline to address hypertension was selected and analyzed for appropriateness. Next, the impact of personal bias was explored, and the Covid-19 response of Burleson County was compared to another Texas county. Finally, a possible evidence-based program was selected and studied to address hypertension, and community and policy experts' response to the program were obtained.

BACKGROUND

Population, health issue, assets:

- The purpose of this population health assignment was to explore social determinants of health (SDOH) among rural Hispanic persons 65 years and older with HTN in Burleson County, Texas, and propose an EBP solution
- The population is primarily rural with 21% Hispanic and 20% over 65 with a population of 18,389 (University of Wisconsin Public Health Institute, 2020)
- There is a nurse-led clinic in the county

SDOHs:

- AHS-3: Increase the proportion of persons with a usual primary care provider
- SDOH-3: Proportion of persons living in poverty (Office of Disease Prevention and Health Promotion, n.d.)

EVIDENCE BASED PRACTICE GUIDELINES

Community Preventive Services Task Force [CPSTF] (2017)

- Evidence supports an interactive digital intervention for self-management of blood pressure
- Does not require an HCP to directly interact with patients

EVIDENCE REGARDING HTN

Centers for Disease Control and Prevention [CDC] (n.d.)

- Hispanics in Burleson County over 65 years die of heart disease and stroke at a higher rate than the state rate

Chamber et al. (2019)

- Urban Hispanic/Latinos renting in high foreclosure risk areas had a higher prevalence of hypertension

Liang (2018)

- Research related to epigenetic mechanisms and HTN is growing, and a tiered model for examining epigenetic regulation evidence in HTN might be useful

Martino et al. (2019)

- Nationally, Hispanic Medicare beneficiaries report a worse experience related to access to care

Vahidy et al. (2020)

- Texans who tested positive for SARS-Cov-2 were more likely to be black, Hispanic, male and 41% of positive patients were 51-75 years old



IMPACT OF BIAS

- Haider et al. (2015) explored bias among RNs and discovered implicit bias toward white race and upper social class that did not correlate with clinical decision making
- Exploration of how implicit bias impacts primary care delivered by NPs in rural areas is needed
- Authors completed Healthy Self version of the Implicit Bias Association Test (IAT) through Project Implicit (2020). Not surprised by findings that revealed a strong implicit association between self and healthy
- Authors grew up in Burleson County and concerned about personal biases and regaining entrée

COVID-19 RESPONSE

- Burleson County reported eight deaths and a total of 629 Covid-19 cases as of November 26, 2020 (Burleson County Tribune, 2020)
- Compared to Travis County, Burleson County moved back to in-person classrooms in October whereas, most students remained virtual in Travis County
- The Covid-19 outbreak could increase the risk of complications and death in older Hispanics in Burleson County with HTN

COMMUNITY AND POLICY EXPERTS

- Dr. Shirley Smith, owner JLyle Medical Clinic, believes a self-monitoring blood pressure program could work with the older Hispanics she cares for. There would need to be a dedicated staff member and training to help participants (personal communication, November 17, 2020).
- Joel Gross, Senior Program Director, It's Time Texas, shared it's a challenge for community health coalitions and collaboratives to get past the planning stage and it's also essential for the community to get behind making health a shared value (personal communication, November 23, 2020).

POSSIBLE EVIDENCE BASED PROGRAM TO ADDRESS HTN

- Check. Change. Control® from the American Heart Association® is an evidence-based self-monitoring blood pressure program. It has well-developed learning materials in multiple modes and languages (American Heart Association, n.d.).
- The program would be implemented over four months. Costs include training a community health worker [CHW]/Promotora and the purchase of blood pressure devices. Dr. Jane Bolin, Deputy Director, Southwest Rural Health Research Center, TAMHSC, mentioned using CHWs from the National CHW Training Center at Texas A&M HSC (Texas A&M University, n.d.) who need hours to maintain certification (personal communication, November 18, 2020). Cost would be approximately \$700 for 20 BP cuffs.
- The use of CHWs/Promotoras for HTN management in ethnically diverse communities is beneficial (Texas Cardiovascular Disease and Stroke Partnership, n.d.). The nurse-led clinic could pilot the program and then act as a champion to spread it within the community.
- Outcomes-Enroll 20% of patients, number of participants logging their BP at least twice per month and number of participants that reduce their SBP.
- Ethical issues related to implementing the program — autonomy in giving people the right not to enroll in the program if they don't want to and justice. The program would be shared with any patient who wants to join, not just Hispanics.

REFERENCES

- American Heart Association. (n.d.). *Check. Change. Control. Historical program overview*. Retrieved November 21, 2020 from https://www.heart.org/-/media/data-import/downloadables/e/3/3/ccc-historical-program-overview-ucm_489643.pdf
- Burleson County Tribune. (2020, November 26, 2020). Covid-19 cases in Burleson County. *Burleson County Tribune*.
- Centers for Disease Control. (n.d.). *CDC interactive atlas of heart disease and stroke. County profile for Burleson County, TX*. Retrieved November 21, 2020 from <https://nccd.cdc.gov/DHDSAtlas/?state=County>
- Chambers, E. C., Hanna, D. B., Hua, S., Duncan, D. T., Camacho-Rivera, M., Zenk, S. N., McCurley, J. L., Perreira, K., Gellman, M. D., & Gallo, L. C. (2019, Jan 17). Relationship between area mortgage foreclosures, homeownership, and cardiovascular disease risk factors: The Hispanic Community Health Study/Study of Latinos. *BMC Public Health*, 19(1), 77. <https://doi.org/10.1186/s12889-019-6412-2>
- Haider, A. H., Schneider, E. B., Sriram, N., Scott, V. K., Swoboda, S. M., Zogg, C. K., Dhiman, N., Haut, E. R., Efron, D. T., Pronovost, P. J., Freischlag, J. A., Lipssett, P. A., Cornwell, E. E., 3rd, MacKenzie, E. J., & Cooper, L. A. (2015, Jun). Unconscious race and class biases among registered nurses: Vignette-based study using implicit association testing. *Journal of the American Colleges of Surgeons*, 220(6), 1077-1086 e1073. <https://doi.org/10.1016/j.jamcollsurg.2015.01.065>
- Liang, M. (2018, Dec). Epigenetic mechanisms and hypertension. *Hypertension*, 72(6), 1244-1254. <https://doi.org/10.1161/HYPERTENSIONAHA.118.11171>
- Martino, S. C., Mathews, M., Agniel, D., Orr, N., Wilson-Frederick, S., Ng, J. H., Ormson, A. E., & Elliott, M. N. (2019, Feb). National racial/ethnic and geographic disparities in experiences with health care among adult Medicaid beneficiaries. *Health Services Research*, 54 Suppl 1, 287-296. <https://doi.org/10.1111/1475-6773.13106>
- Office of Disease Prevention and Health Promotion. (n.d.). *Healthy People 2020—Access to health services*. <https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services/objectives#3970>
- Office of Disease Prevention and Health Promotion. (n.d.). *Healthy People 2020—Social Determinants of Health: Economic stability*. <https://www.healthypeople.gov/2020/topics-objectives/topic/Social-Determinants-of-Health/objectives#5249>
- Project Implicit. (2020). *Project Implicit Health. Healthy self version*. <https://implicit.harvard.edu/implicit/user/pih/pih/selectatest.html>
- Texas A&M Health Science Center. (n.d.). *About the Center. National Community Health Worker Training Center*. Retrieved November 21, 2020 from <https://nchwtc.tamhsc.edu/>
- Texas Cardiovascular Disease and Stroke Partnership. (n.d.). *Community health workers: A partner in hypertension control*. https://dshs.texas.gov/heart/pdf/CHWs_Whitepaper.pdf
- University of Wisconsin Population Health Institute. (2020). *Burleson County (BUS)-County Health Rankings & Roadmaps*. Retrieved October 12, 2020 from <https://www.countyhealthrankings.org/app/texas/2020/rankings/burleson/county/outcomes/overall/snapshot>