



Special Diabetes Program for Indians

Healthy Heart Project

Publications 2011-2023

Special Diabetes Program for Indians: Retention in cardiovascular risk reduction (Manson, Jiang, Zhang, et al.) *The Gerontologist*, 2011, 51:S21-S32. <https://pubmed.ncbi.nlm.nih.gov/21565816/>

- Baseline participant characteristics - higher age, BMI, and greater physical activity - were associated with better retention at Year 1.
- Having more staff who are highly educated and having more balanced proportions of female and male staff were also associated with better retention at Year 1.

Special Diabetes Program for Indians: Reliability and validity of brief measures of print literacy and numeracy (Brega, Jiang, Beals, et al.) *Ethnicity and Disease*, 2012, 22:207-214. <https://www.jstor.org/stable/48667647>

- Health-related numeracy – the ability to understand and use quantitative information – and print literacy were strong predictors of disease knowledge in AI/AN adults with diabetes.
- These results support the value of the brief tests of numeracy and print literacy in AI/ANs, and represent the first examination of the performance of health literacy measures in this population.

Mechanisms underlying the relationship between health literacy and glycemic control in American Indians and Alaska Natives (Brega, Ang, Vega, et al.) *Patient Education and Counseling*, 2012, 88:61-68. <https://doi.org/10.1016/j.pec.2012.03.008>

- Diabetes-related knowledge was a key mediator of the relationship between health literacy and glycemic control.
- Educational interventions might enable individuals with limited health literacy to develop the knowledge needed to engage in self-management behavior.

Case management to reduce cardiovascular disease risk in American Indians and Alaska Natives with diabetes: Results from the SDPI-HH Demonstration Project (Moore, Jiang, Manson, et al.) *American Journal of Public Health*, 2014, 104:e158-64. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4202936/>

- HH Participants demonstrated improvements in multiple cardiovascular risk factors including A1c, blood pressure, and lipid control at Year 1.
- HH participants' average Framingham cardiovascular risk score declined significantly between baseline and Year 1.

- There were also improvements in smoking status, aspirin use, and prescribed medication use for cardiovascular risk factors between baseline and Year 1.
- After controlling for age, gender, and baseline cardiovascular risk factors, HH participants who had more case management visits also had significantly greater reductions in A1c and LDL cholesterol values at Year 1.

Serious psychological distress and diabetes management among American Indians and Alaska Natives (Huyser, Manson, Nelson, et al.) *Ethnicity and Disease*, 2015, 25:145-151.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4497797/>

- Serious psychological distress was significantly associated with higher A1c levels at baseline, even after adjusting for demographic and health characteristics.
- Change in serious psychological distress did not predict A1c levels at Year 1.
- No associations between BMI and serious psychological distress were observed after adjustment for demographic and health characteristics.

Assessing the Everyday Discrimination Scale among American Indians and Alaska Natives (Gonzales, Noonan, Goins, et al.) *Psychological Assessment*, 2016, 28:51-58.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4703564/>

- Perceived discrimination is related to poorer health outcomes, but many measures of discrimination have not been tested in American Indian and Alaska Native populations.
- The Everyday Discrimination Scale had high reliability of scale score measures and reasonable convergent and divergent validity in HH participants and has promise for assessing perceived discrimination in American Indian and Alaska Native populations.

Food choices and distress in reservation-based American Indians and Alaska Natives with Type 2 diabetes (Teufel-Shone, Jiang, Rockell, et al.) *Public Health Nutrition*, 2018, 21:2367-2375.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6542635/>

- Serious psychological distress was significantly associated with eating unhealthy foods, especially in men, in this population.

Recruitment and effectiveness by cohort in a case management intervention among American Indians and Alaska Natives with diabetes (Pratte, Beals, Johnson, et al.) *Translational Behavioral Medicine*, 2019, 9:749-758.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7184863/>

- There were several differences between the HH participants who were recruited in the first year of the project compared with participants who started the project in later years. The first participants tended to be older, had lived with diabetes longer, were less likely to be smokers, etc.
- These first participants were more likely to stay with the project and had more improvements in clinical measurements than later participants.

Change in physical activity, food choices and hemoglobin A1c among American Indians and Alaska Natives with type 2 diabetes (Camplain Teufel-Shone, Jiang et al.) *Preventive Medicine Reports*, 2022, 8;29:101945. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9502664/>

- HH participants that reported being physically active and having high healthy food scores had lower HbA1c compared to inactive participants with low healthy food scores.
- At three-year follow-up, participants who increased physical activity, consumption of healthy foods, or both had a larger decrease in HbA1c over the study period compared to participants with no improvement in physical activity or increase in consuming healthy foods. Notably, this association was significant among women but not among men.
- Although the decrease in HbA1c was small, physical activity and healthy food choices are important behaviors to incorporate into everyday life among AI/AN adults, particularly those with diabetes.