



Home Base Care Approach to Reduce Disparity in Diabetes Care in Zuni Indians

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Eun Hee Choi , *University of New Mexico Health Sciences Center*

Donica Ghahate , *University of New Mexico Health Sciences Center*

Jeannette Bobelu , *University of New Mexico Health Sciences Center*

See next page for additional authors

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Home Base Care Approach to Reduce Disparity in Diabetes Care in Zuni Indians

Abstract

Purpose/Background: We conducted a randomized clinical intervention trial of a home-based kidney care program to examine its efficacy in adult Zuni Indians with Chronic Kidney Disease (CKD). We evaluated the results of the study in the subset of participants with type 2 diabetes (T2DM) to determine the degree to which this intervention influenced the engagement of those with T2DM in the management of their own health circumstances.

Materials & Methods: We randomized participants by household to receive usual care or home-based care. After initial lifestyle coaching, the intervention group received frequent additional reinforcement by community health representatives (CHRs) about adherence to medicines, diet and exercise, self-monitoring, and coping strategies for living with stress. We identified a sizable subset of study participants with T2DM, and performed analyses comparing outcomes between study groups using linear models with generalized estimating equations and adjusting for baseline values of the measurements. The primary outcome was the change in patient activation measure (PAM), which assesses a participant's knowledge, skill, and confidence in managing his/her own health and health care.

Results: Of 125 randomized individuals (63 intervention and 62 usual care), 72 had been diagnosed with T2DM (57.6%). In the subgroup with T2DM, 56 (78%, 24 intervention, 32 usual care) completed the 12-month study. The average PAM score after 12 months was 16.0 (95% confidence interval, 8.8 to 23.1) points higher in the intervention group than in the usual care group (Figure 1). Body mass index declined by 1.2 kg/m² (P=0.02) and high-sensitivity C-reactive protein declined by 2.7-fold (P<0.001) in the intervention group compared to usual care. Hemoglobin A1c declined by 0.8 % (P=0.14) in the intervention group relative to usual care (NS).

Discussion/Conclusion: A home-based intervention designed for kidney care improves the activation in their own health care of participants with diabetes, and does so at least as well as it does for all participants with CKD. It appears that it may also reduce risk factors for poor diabetic outcomes in a rural disadvantaged population.

Keywords

Home Base Care; Diabetes; Zuni Indians

Authors

Eun Hee Choi, Donica Ghahate, Jeannette Bobelu, Vernon Pankratz, and Vallabh Shah



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School of Public Health
University of Nevada, Las Vegas

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Eun Hee Choi, University of New Mexico Health Sciences Center
Donica Ghahate, University of New Mexico Health Sciences Center
Jeanette Bobelu, University of New Mexico Health Sciences Center
Vernon Pankratz, University of New Mexico Health Sciences Center
Vallabh Shah, University of New Mexico Health Sciences Center
Corresponding Author: Vallabh Shah, vshah@salud.unm.edu

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Patient Activation Measure

