COMMENT ON PALMAS ET AL.

Results of the Northern Manhattan Diabetes Community Outreach Project: A Randomized Trial Studying a Community Health Worker Intervention to Improve Diabetes Care in Hispanic Adults. Diabetes Care 2014;37:963–969

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Palmas et al. (1) described the results of the Northern Manhattan Diabetes Community Outreach Project (NOCHOP), which was a randomized trial to study a community health worker intervention for patients with poorly controlled diabetes among underserved urban Hispanics in New York. The intervention was comprised of individual and group contact and phone calls over a period of 1 year and evaluated primarily the change in glycosylated hemoglobin and secondarily the change in systolic and diastolic blood pressures and LDL cholesterol. The study found that the intervention produced no significant change in any of the outcomes. We read the article with great interest as it has widespread implications for programs to control diabetes.

However, the study has some notable limitations. Sample size calculations have been detailed in a supplement, and keeping α at 0.05 and power of 80% to detect a 0.51 unit change in HbA1c, and accounting for an attrition rate of 30%, sample size was calculated to be 180 participants per arm. Using the values and formula as stated, the sample size actually equals 355 per arm. This is a very considerable difference and could be mainly responsible for the insignificant results obtained.

The intervention is based on the Small Steps, Big Rewards program, which has been advocated for prevention of diabetes in high-risk groups, and not for patients with poorly controlled diabetes. Over 40% of participants were on disability allowance. This may affect the external validity of the study. Intervention fidelity is also an issue. Of the 181 participants in the intervention arm, 93 participants only received a phone-based intervention. Interestingly, the authors have also analyzed results stratified by baseline HbA1c levels (≥7 or <7%), but the study was inadequate to comment on a subgroup analysis as the study included only patients with poorly controlled diabetes (HbA1c >8%).

Given the discrepancies in the study, the results must be interpreted with great caution and viewed in the light of other similar studies. A systematic review of community health worker interventions for diabetes demonstrated improved participant knowledge and physiological measures and positive changes in lifestyle and self-care (2). Better designed studies can generate valuable evidence that will form the basis of diabetes prevention and control programs.

Duality of Interest. No potential conflicts of interest relevant to this article were reported.

References


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