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Peer Mentoring and Financial Incentives to Improve Glucose Control in African American Veterans

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PUBLICATION TYPE: Peer-Reviewed Journal Article

KEYWORDS: African American veterans, diabetes management, peer mentoring, financial incentives

RESEARCH HIGHLIGHTS:

- Despite current available information on diabetes control and prevention, African Americans tend to have a higher occurrence of diabetes. In this study, researchers explored whether peer mentoring and financial incentives help older African American veterans with diabetes improve their glucose control.
- Veterans who were part of the peer mentoring group had larger differences in their hemoglobin A1c (HbA1c) levels, which are measures of blood sugar, compared to the veterans in the financial incentive group and the control group (On average, HbA1c levels decreased by 1.1% in the peer mentoring group, versus 0.1% for the control group and 0.6% for the financial incentive group).
- Peer mentoring programs appear to be effective, even without face-to-face interactions. Several factors might have contributed to the success of the peer mentoring program, including the camaraderie between participants, the education provided on glucose management, and the sharing of life experiences by mentors.

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ABSTRACT:

“Background: Compared with white persons, African Americans have a greater incidence of diabetes, decreased control, and higher rates of microvascular complications. A peer mentorship model could be a scalable approach to improving control in this population and reducing disparities in diabetic outcomes. *Objective:* To determine whether peer mentors or financial incentives are superior to usual care in helping African American veterans decrease their hemoglobin A1c (HbA1c) levels. *Design:* A 6-month randomized, controlled trial. (ClinicalTrials.gov registration number: NCT01125956) *Setting:* Philadelphia Veterans Affairs Medical Center. *Patients:* African American veterans aged 50 to 70 years with persistently poor diabetes control. *Intervention:* 118 patients were randomly assigned to 1 of 3 groups: usual care, a peer mentoring group, and a financial incentives group. Usual care patients were notified of their starting HbA1c level and recommended goals for HbA1c. Those in the peer mentoring group were assigned a mentor who formerly had poor glycemic control but now had good control (HbA1c level $\leq 7.5\%$). The mentor was asked to talk with the patient at least once per week. Peer mentors were matched by race, sex, and age. Patients in the financial incentive group could earn \$100 by decreasing their HbA1c level by 1% and \$200 by decreasing it by 2% or to an HbA1c level of 6.5%. *Measurements:* Change in HbA1c level at 6 months. *Results:* Mentors and mentees talked the most in the first month (mean calls, 4; range, 0 to 30), but calls decreased to a mean of 2 calls (range, 0 to 10) by the sixth month. Levels of HbA1c decreased from 9.9% to 9.8% in the control group, from 9.8% to 8.7% in the peer mentor group, and from 9.5% to 9.1% in the financial incentive group. Mean change in HbA1c level from baseline to 6 months relative to control was -1.07% (95% CI, -1.84% to -0.31%) in the peer mentor group and -0.45% (CI, -1.23% to 0.32%) in the financial incentive group. *Limitation:* The study included only veterans and lasted only 6 months. *Conclusion:* Peer mentorship improved glucose control in a cohort of African American veterans with diabetes.”

Implications

FOR PRACTICE

Veterans with uncontrolled diabetes should consider forming or joining peer mentorship programs with other veterans who have learned how to control their diabetes. These veterans should consult with their physician before joining a peer mentorship program in order to devise safe goals for reducing their glucose levels. Veterans with diabetes should remember that diabetes is a serious condition that often times requires a team of health care professionals. Physicians should consider encouraging veterans with uncontrolled diabetes to join networks of support to aid in the controlling of their glucose levels. Physicians might consider offering or referring veterans with uncontrolled diabetes to group counseling sessions or peer mentoring programs. Family members and friends of veterans with uncontrolled diabetes should consider creating a network of support for their veteran(s).

FOR POLICY

Some respondents in this study cited the wealth of information provided in peer mentoring as one of the most helpful aspects of the program. Because of this, the Veterans Health Administration (VHA) might consider instituting peer mentoring and/or group counseling sessions for veterans with diabetes in their facilities, as well as allocating funds to create peer mentoring programs in areas where there is no Department of Veterans Affairs (VA) facility in close vicinity. Establishing educational sessions on diabetes management for veterans and assigning social workers to assist veterans struggling with diabetes could be significantly beneficial for veteran populations as well. Currently, members of both houses of Congress have introduced bills that would ensure that diabetes health professionals receive adequate training on patient self-management of diabetes after being discharged from a medical facility. Policy makers might also consider extending peer mentorship funding to the civilian population through the introduction of a bill, or consider allocating physical spaces for peer mentoring and group counseling to take place.

FOR FUTURE RESEARCH

Future studies should include a larger, more diverse sample drawn from multiple settings, as the sample used in this study was limited to one VA medical center. Researchers should also further examine the long-term effects of peer mentoring and financial incentives in disease management, as well as other chronic disease interventions. Prior studies have shown that peer mentoring is effective in the management of many illnesses, including post-traumatic stress disorder. Thus, future researchers should investigate the mechanisms through which peer mentoring programs operate most successfully, especially when considering a variety of populations, including women veterans, younger populations, multiple races/ethnicities, and persons living in rural locations. This study does not explore the methods which participating veterans used to lower their glucose levels while being mentored. Also, because previous studies have shown the positive impacts of diet and exercise on glucose levels and other chronic conditions, researchers should examine the impact of these factors in combination with peer mentoring, including how peer mentoring may increase frequency of exercise. These factors may also be important in programs focused on improving diabetes management in civilian populations.

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