Background

- Prediabetes is an asymptomatic condition in which patients’ blood glucose levels are higher than normal but do not meet diagnostic criteria for type 2 diabetes mellitus (T2DM).
- Screening for T2DM with a hemoglobin A1c (HbA1c) test and providing brief information about prediabetes may provide a window of opportunity to increase patient engagement in behaviors to prevent T2DM.
- Engagement in behaviors to prevent T2DM may be influenced by key behavioral mediators.
- Perceived risk for T2DM.
- Motivation to prevent T2DM.
- Patient activation.
- The effects of screening for T2DM and providing brief information about prediabetes on potential mediators of engagement in preventive strategies is unknown.

Objective

- To determine the effects of a HbA1c test and brief information about prediabetes on potential mediators of patient engagement in behaviors to prevent T2DM.

Methods

- Randomized trial of 315 non-diabetic patients from the Ann Arbor Veterans Affairs Medical Center (AAVA).
- 1 or more major risk factors for T2DM.
- Upcoming AAVA Primary Care appointment.
- No HbA1c test in the last 12 months.
- Baseline survey.
- Brochure arm.
- 1 week survey.
- 12 month survey and weight.
- Brochure (n = 63).
- Prediabetes (n = 106).
- Normoglycemia (n = 134).

Results

- Perceived Risk of Developing T2DM in Next 3 Years.
- Prediabetes (n = 106).
- Diabetic patients from the Ann Arbor VA Center for Clinical Management Research.
- Prediabetes.
- Usual care (n = 63).
- HbA1c (n = 252).
- 3.6 (0.2)
- 1.3 (0.6)
- 0.5 (0.2)
- 0.4 (0.3)
- 1.5 (0.6)
- 0.8 (0.03)

Level of Patient Activation

- Using a screening HbA1c test to identify patients with prediabetes and providing brief standardized information about prediabetes increased patients’ motivation to prevent T2DM.
- Screening HbA1c tests and brief information about test results led to sustained change in risk perception only among patients with normoglycemia.
- Screening HbA1c tests followed by brief information about test results did not change patients’ level of activation.

Conclusions

- National campaigns are now aiming to identify more Americans with prediabetes and connect them to Diabetes Prevention Programs.
- The limited effects of screening tests and brief information alone highlight the need for strategies that can help patients with prediabetes translate motivation to prevent T2DM into sustained engagement in preventive behaviors.

Implications for Policy and Practice

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Funding

- Study was funded by US Department of Veterans Affairs Health Services Research & Development Career Development Award 13-267.
- Dr. Kullgren is a VA HSR&D Career Development awardee at the Ann Arbor VA Center for Clinical Management Research.