Assessing the Association of Various Characteristics with Perceived Level of Confidence Managing Diabetes Among United States Adults with Diabetes

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Background

- Adequate glycemic control is crucial in reducing the risk of complications from type 1 and 2 diabetes. [1]
- Evidence suggests that patients' characteristics and self-care behaviors, including maintenance of glycemic control, may be driven by their health beliefs or illness perceptions of their diabetes. [2]
- Patients who report higher confidence in diabetes management experience fewer difficulties in self-care, better understanding of self-care methods, and greater social support. [3]
- This study assessed characteristics associated with perceived level of confidence managing diabetes in United States adults with diabetes.

Methods

- This retrospective cross-sectional study used Medical Expenditure Panel Survey (MEPS) data and included individuals who were aged ≥18 years, alive throughout 2020, diagnosed with diabetes
- The characteristics of individuals who were very confident/confident managing diabetes were compared to those who were somewhat confident/not confident managing diabetes using a chi-square test.
- An adjusted logistic regression model was used to identify variables that had statistically significant associations with perceived level of confidence among US adults with diabetes (very confident/confident versus somewhat confident/not confident).
- Analysis was weighted and accounted for the complex survey design.

Table 1. Selected characteristics of study participants

Variables	Very confident/ confident N=1,157 Weighted % (95% CI)	Somewhat/not confident N=359 Weighted % (95% CI)	P-value
Demographic Characteristics			
Age 18-64 years	52.2 (48.7-55.7)	56.9 (50.6-63.2)	0.2118
Male	51.3 (48.1-54.5)	47.8 (42.1-53.5)	0.2958
White	71.3 (67.5-75.2)	79.8 (74.4-85.2)	0.0105
Married	56.5 (52.5-60.5)	52.3 (45.1-59.4)	0.3000
More than high school	52.9 (49.4-56.3)	52.3 (45.7-58.8)	0.8790
Health Status Characteristics			
≥2 conditions	81.9 (79.0-84.8)	81.3 (76.1-86.6)	0.8587
Good perceived health	73.9 (70.9-76.9)	56.8 (50.5-63.2)	<.0001
Good perceived mental health	88.1 (85.3-90.8)	77.5 (72.4-82.6)	0.0002
Exercise ≥5 times/week	42.7 (39.0-46.5)	31.6 (25.6-37.6)	0.0021
Healthcare utilization Characteristics			
No annual emergency room visits	81.0 (78.4-83.6)	75.7 (70.0-81.4)	0.0604
No annual inpatient visits	86.4 (84.2-88.7)	86.8 (82.0-91.6)	0.8918
≥1 annual office-based visits	91.3 (89.0-93.6)	93.2 (90.6-95.9)	0.2656

Table 2. Association of confidence managing diabetes

Variables	Adjusted Odds Ratio (95% CI)
Health Status Characteristics	
Good vs. poor perceived health	2.3 (1.3-3.9)
Yes vs. no exercise ≥5 times/week	1.6 (1.0-2.6)
Healthcare Utilization Characteristics	
0 vs. ≥1 inpatient visits	3.5 (1.5-8.1)
0 vs. ≥1 emergency room visits	2.0 (1.1-3.3)
Access to Care Characteristics	
Not at all vs. very difficult to contact care provider by phone	3.3 (1.4-7.8)

*Only statistically significant characteristics were reported in this table

Conclusion

- This study showed various characteristics were significantly associated with patients' perceived confidence managing diabetes.
- Further research is required to determine other characteristics associated with perceived level of confidence in managing diabetes among US adults with diabetes.

References

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