

Prevalence and Predictors of Delayed Dental Care among US Adults with Diabetes: Evidence from the 2018 – 2019 Medical Expenditure Panel Survey

Marvellous Akinlotan, BDS, PhD, Liang Wei, MS, Gina Thornton-Evans, DDS, MPH, Shahdokht Boroumand, DMD, MPH, Susan Griffin, PhD

BACKGROUND

- About 15% of US adults have diabetes, the seventh leading cause of death.[1]
- Oral complications of diabetes include periodontitis, xerostomia, root caries, oral candidiasis, pulp necrosis, and periapical abscess.[1]
- American Diabetes Association and CDC recommend annual dental exams for adults with diabetes.[2,3]
- High financial burden of diabetes can be barrier to optimal management especially among socio-economically disadvantaged.[4]
- Delaying dental care among persons with diabetes may be associated with higher medical and dental spending and increased tooth loss.[5,6]

OBJECTIVES

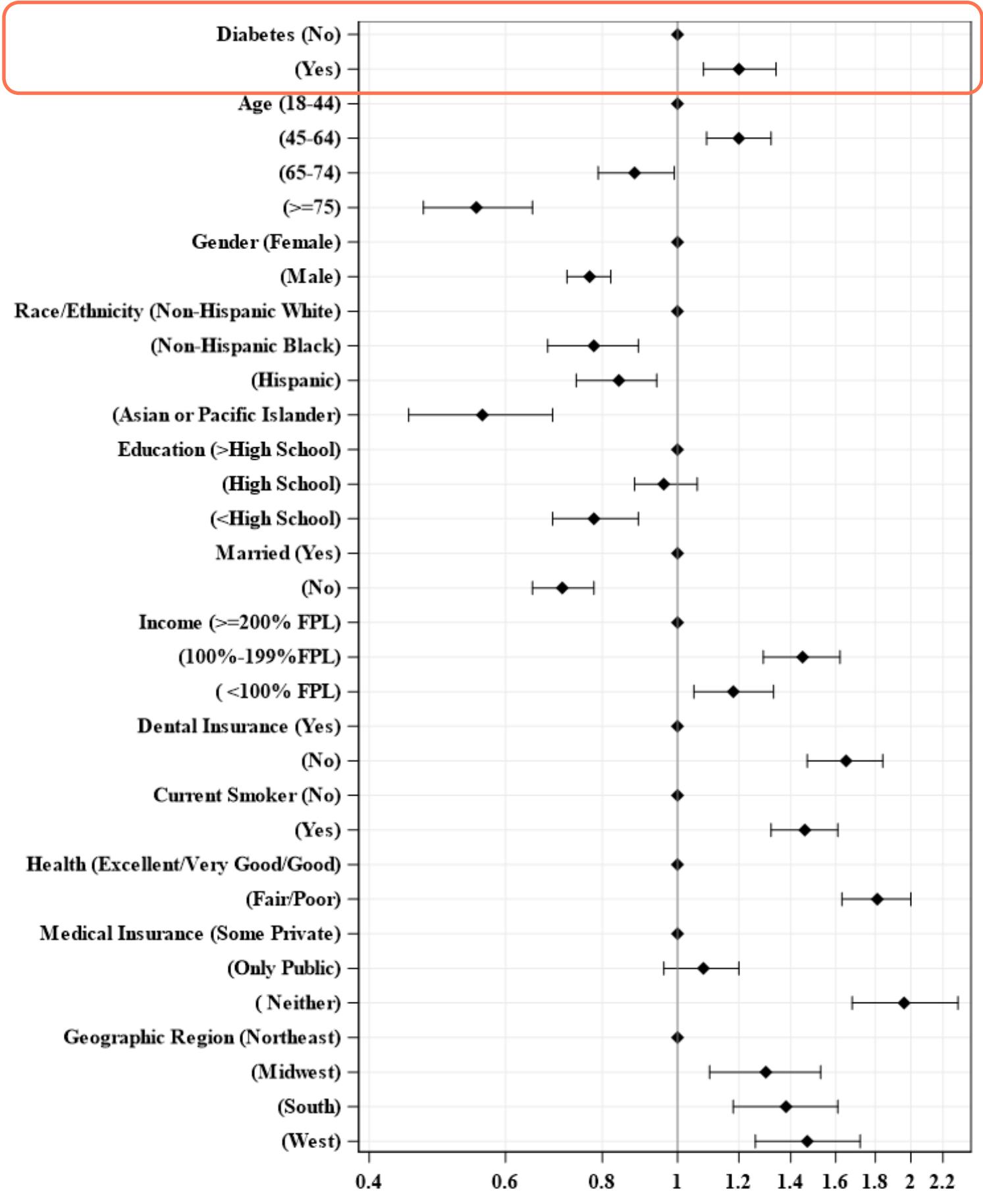
- To estimate prevalence of delayed dental care due to cost (DELAYED) among US adults 18 and above
- To identify predictors of DELAYED among adults with self-reported diabetes

METHODS

- Data source:** 2018-2019 Medical Expenditure Panel Survey (MEPS)
- Total study population:** 42,931 (unweighted) 249,838,227 (weighted)
- Population with self-reported diabetes:** 5,392 (unweighted), 26,545,342 (weighted)
- Outcome definition:** Delayed dental care is characterized as not seeking dental care in the past year due to cost, despite the perceived need for it.
- Statistical analyses**
 - Calculated adjusted prevalence odds ratio of DELAYED by select characteristics.
 - Obtained adjusted prevalence odds ratio of DELAYED among those with diabetes controlling for socio-demographic variables, insurance status, and perceived health status.
 - Conducted T-tests for crude estimates, multivariable logistic regression for adjusted estimates.
 - All analyses used MEPS population weights and accounted for complex survey design. All reported findings based on 5% level of significance.

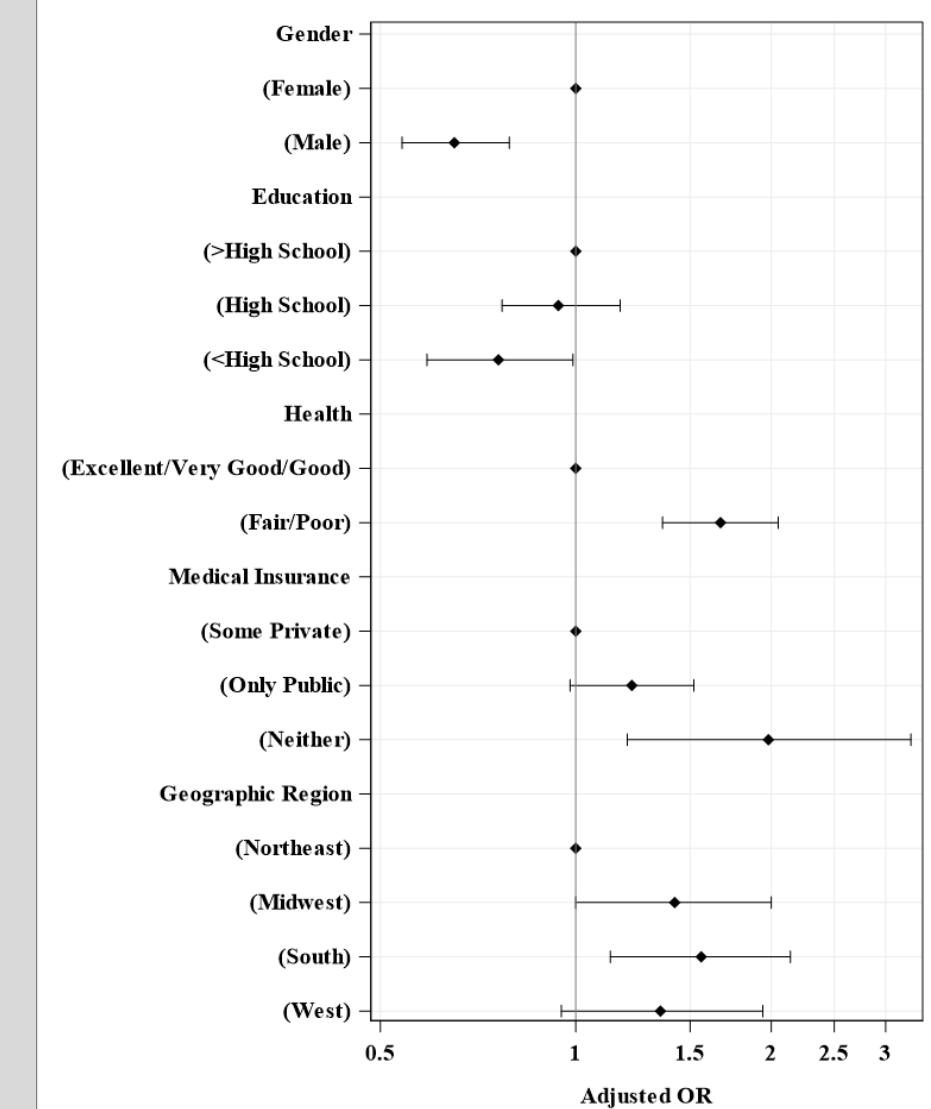
RESULTS

Figure 1: Association between diabetes status and delayed dental care due to cost among US adults



- About **13%** of the study population reported diabetes, and about **17%** reported DELAYED.
- Crude prevalence of DELAYED was significantly higher among adults reporting diabetes (**19.9%**) compared to adults not reporting diabetes (**15.4%**).
- After controlling for covariates, the difference in the prevalence of DELAYED between adults reporting diabetes (**18.6%**) and those not reporting (**16.3%**) remained significant.
- Adults lacking medical and dental insurance were **66%** and **34%** more likely to report DELAYED compared to similar adults with insurance, respectively.

Figure 2: Predictors of delayed dental care due to cost among US adults with diabetes



Footnote: OR = Odds Ratios. Delayed dental care is characterized as not seeking dental care in the past year due to cost, despite the perceived need for it. Adjusted for other covariates including age, race/ethnicity, marital status, income and dental insurance.

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CONCLUSION

Adults with diabetes face higher cost barriers to dental care.

Increasing access to medical and dental insurance among adults with diabetes could reduce delaying needed dental care due to cost.

CONTACT INFO

Marvellous Akinlotan
tqu8@cdc.gov

