Disparities in Dilated Eye Exams among Adults With Diabetes

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Presenter Disclosures

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(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

"No relationships to disclose"

Overview

- Problem Statement
- Research Questions
- Theoretical Framework
- Hypotheses
- Methodology
- Analytical Design
- Implications of Research
- Questions

Problem Statement

 Despite medical advances, health disparities still exist.

What factors might be linked to persistent health disparities?

Literature Review

- Health Disparity
 - Additional mortality, morbidity, and quality of life issues

- Health Care Disparity
 - Difference in quality, concentration, and completeness

Literature Review

- Factors Linked to Health Disparities
 - Race/ethnicity
 - Gender
 - Age
 - Socioeconomic Status/Class

Research Question

Are diabetic adults in a marginalized group less likely to get a dilated eye exam than diabetic adults who do not belong to a marginalized group?

Theoretical Framework

Intersectionality Theory

- Theory purpose explains how gender, race, SES/social class, and age simultaneously create/shape health status
- Interconnecting structures of power relationships enhance understanding of hierarchical disparity and its existence

Research Hypotheses

Hypotheses 1

 Non-diabetic adults are less likely to obtain a dilated eye exam than diabetic adults.

Hypotheses 2

 Minority diabetic adults are less likely than non-minority diabetic adults to obtain a dilated eye exam.

Research Hypotheses

Hypothesis 3

 Lower class diabetic adults are less likely than upper class diabetic adults to obtain a dilated eye exam.

Hypothesis 4

 Adult diabetic men are less likely than adult diabetic women to obtain a dilated eye exam.

Hypothesis 5

 Elderly diabetic adults are less likely than younger diabetic adults to obtain a dilated eye exam.

Data

- 2008 Behavioral Risk Factor Surveillance System (BRFSS)
- National, state-based survey
 - Health risk behaviors, preventive health, health care access for adult population (18 yrs and older)
- Collaboration between Centers for Disease
 Control and Prevention (CDC) and U.S. states

- Sample Size
 - Over 350,000 adults interviewed yearly (414,509)
- Sampling
 - Probability sample of all households with telephones in the state
 - 53 states used computer-assisted telephone interviewing (CATI)
 - Telephone interviewing conducted each month; calls made 7 days/wk, during day and evening
 - Respondents were selected through a random sample of individuals

- Variables
 - Two-Stage Dependent Variable
 - Have you had an eye exam where pupils were dilated (diabetics)
 - o 0=No, 1=Yes
 - When was your last eye exam where pupils were dilated (diabetics)
 - 0 0=Never
 - 1=2 or more yrs ago
 - 2=within past 2 yrs
 - 3=w/in past yr
 - 4=w/in past month

- Primary Independent Variables
 - Health plan coverage
 - Regular health provider
 - General health
 - Co-morbidities such as heart disease

- Primary Control Variables
 - Race
 - Age
 - Gender
 - Education

Analytical Design

Descriptive Analysis

Binary Logistic Regression Analysis

Limitations

- Selection Bias
 - Phone coverage by landline varies by state and subpopulation
 - Cell phone coverage not included as part of the regular BRFSS sample in 2008
- Cross Sectional Analysis
 - Single point in time

Research Contribution

- Expansion of literature on existence of health disparities
 - Explore receipt of dilated eye exams among the diabetic population
 - Build on existing literature as to why individuals who belong to a marginalized group continue to delay preventive health
 - Propose alternative health policies that will target individuals who belong to a marginalized group

Questions/Comments

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