Doctoral Dissertation Defense Announcement

Olaitan Joel Akinboboye, MD, MPH

“Understanding the Contribution of Social Determinants of Health to Glycemic Control in African Americans with Criminal Legal Involvement and Type 2 Diabetes”

Candidate for Doctor of Philosophy in Public and Community Health Division of Epidemiology and Social Sciences, Institute for Health and Equity School of Graduate Studies Medical College of Wisconsin

Committee in Charge:
Rebekah J. Walker, PhD (Chair)
Leonard E. Egede, MD, MS
Joni S. Williams, MD, MPH
Laura C. Hawks, MD, MPH
Jennifer A. Campbell, PhD, MPH

Date: Friday, April 12, 2024
Time: 12:00 PM (CST)

Defense Location: Conference Rooms 1 & 2 at Research Park Center

Public viewing to be held virtually at: https://mcw-edu.zoom.us/j/91233448978?pwd=WS9wajhVWmtsUGUrNm0rSmFpTmpS2Z09

Meeting ID: 912 3344 8978  Passcode: c0tH019L
Graduate Studies:

Introduction to Epidemiology
Community Health Improvement I
Intro to Statistical Analysis
Qualitative and Mixed Methods
Regression Analysis
Qualitative Data Analysis
Community Health Improvement II
Community Health Improvement III
Community Health Improvement IV
Survey Research Methods
Infectious Disease Epidemiology
Health and Forced Migration
Health and Medical Geography
Doctoral Seminar
Ethics & Integrity in Science
Reading and Research
Research Ethics Discussion Series
“Understanding the Contribution of Social Determinants of Health to Glycemic Control in African Americans with Criminal Legal Involvement and Type 2 Diabetes”

Approximately 38.4 million people, or 11.6% of the US population, live with diabetes. Social determinants of health (SDOH) are conditions in the environment where people are born, live, work, play, and age that affect a wide range of health, functioning, and quality of life. Criminal legal involvement, defined as being legally convicted of a crime, extends beyond the confines of the justice system, affecting various aspects of individuals’ lives and their health outcomes for conditions such as type 2 diabetes. The layered effect of a high burden of criminal legal involvement and diabetes may predispose individuals to poor diabetes outcomes. The collateral effects of criminal legal involvement, including limited access to healthcare, food insecurity, housing instability, and poor social ties, can adversely affect glycemic control in adults with diabetes. Aside from the documented direct effect of criminal legal involvement on health outcomes, limited literature has explored the role of SDOH on health outcomes in individuals with a history of criminal legal involvement and non-communicable chronic diseases such as type 2 diabetes. This cross-sectional study sought to explore the contributions of SDOH on glycemic control among a sample of 171 African American adults with a history of criminal legal involvement and type 2 diabetes living in Southeastern Wisconsin. A comprehensive set of validated survey measures was used to collect information on SDOH during pre-incarceration (locus of control, adverse childhood experiences), incarceration (length of sentence, type of conviction, quality of correctional care), and post-release (social support, perceived discrimination, perceived stress, serious psychological distress, health literacy, health care access, food insecurity, housing insecurity, neighborhood safety, social cohesion). A blood specimen was collected from participants and sent to the laboratory for processing each participant’s hemoglobin A1c, the marker to assess glycemic control, on average, over the prior 3 months. A stepwise linear regression with forward selection model was run to explore the association between SDOH and glycemic control during pre-incarceration, incarceration, and post-release. This study showed no relationship between SDOH and glycemic control during pre-incarceration, incarceration, or post-release for African American adults with type 2 diabetes in this sample. However, there was an association between sociodemographic, clinical, and criminal justice factors by age, insurance status, comorbidity, type of medication, and drug crime. In conclusion, the results of this study will provide guidance for designing future research aimed at improving glycemic control among African American adults with a history of criminal legal involvement and type 2 diabetes.
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EDUCATION:

- 4/2024 (anticipated) PhD, Public and Community Health  
  Medical College of Wisconsin, Milwaukee, WI  
  Dissertation Title: “Understanding the Contribution of Social Determinants of Health to Glycemic Control in African American Adults with Criminal Legal Involvement and Type 2 diabetes Mellitus”  
  Dissertation Advisor: Rebekah Walker, PhD

- 05/2029 MPH, Epidemiology  
  Zilber School of Public Health, University of Wisconsin-Milwaukee, WI

- 08/2012 MD  
  Obafemi Awolowo University Ile-Ife, Osun state, Nigeria

POSTGRADUATE MEDICAL TRAINING:

- 06/2023 – Present Resident Physician, Western Michigan University Homer Stryker MD School of Medicine, Kalamazoo, MI

RESEARCH EXPERIENCE:

- 2018 - 2023 Graduate Research Assistant  
  Center for Advancing Population Science, Milwaukee, WI, United States of America

WORK EXPERIENCE:

- 2013 – 2014 Intern Medical Officer, Ekiti State University Teaching Hospital, Ado Ekiti, Nigeria

- 2014 – 2015 Medical Officer, Ikire General Hospital, Osun State, Nigeria

- 2015 – 2017 Medical Officer, Welfare Hospital, Ibadan, Oyo State, Nigeria

PROFESSIONAL AFFILIATIONS

- 2012 – Present Nigerian Medical Association (NMA)

- 2018 – Present American Public Health Association (APHA)

- 2018 – Present Wisconsin Public Health Association (WPHA)

- 2022 – Present American College of Physician (ACP)

- 2023 – Present American Medical Association (AMA)
PROFESSIONAL/VOLUNTEER SERVICE

2023  Reviewer, *BMJ Open*
2022  Reviewer, *American Journal of Medicine Open*
2022  Reviewer, *PLOS ONE*
2022  Reviewer, *Journal of Racial and Ethnic Health Disparities*
2021  Reviewer, *Journal of BMC Endocrine Disorders*
2020  Reviewer, *Scientific Reports Journal*

PEER-REVIEWED PUBLICATIONS

1. **Akinboboye O**, Egede, LE, Thogerson A, Williams JS. Gender differences in the relationship between financial barriers and emergency department visits due to diabetes. *Diabetes*, 71(Supplement_1), 2022;607-P.


10. Akinboboye O, Williams JS, Olukotun O, Egede LE. The Associations between Neighborhood factors and Quality of Life among Adults with Type 2 Diabetes Mellitus (under review).


PRESENTATIONS:


2019  Akinboboye, O., Garracci, E., Williams, J. S., Egede, L. E. Relationship between C-Reactive Protein and Mortality in Adults with Diabetes: Influences of Demographic Characteristics, Lifestyle Behaviors and Medications. Presentation: March 2019, 5th Department of Medicine Research Day Symposium, Medical College of Wisconsin, Milwaukee, Wisconsin.