

CURRICULUM VITAE

Zekarias Berhane, Ph.D.

BUSINESS: Department of Epidemiology and Biostatistics
Drexel University, School of Public Health
1505 Race Street, Bellet-617 MS 1033
Philadelphia, PA 19102-1192
Tel: 215 762-6121
Fax: 215 762-1174
E-mail: zb26@drexel.edu

EDUCATION AND TRAINING:

- 1999 – 2003 University of Pittsburgh Pittsburgh, PA
Graduate School of Public Health, Department of Biostatistics
Doctor of Philosophy in Biostatistics (April 2003)
Dissertation Title: “Flexible Models for Recurrent Time to Event Data”
- 1997 – 1999 University of Pittsburgh Pittsburgh, PA
Graduate School of Public Health, Department of Biostatistics
MS in Biostatistics (August 1999)
Thesis Title: “Estimation of the Survival Function Based on the Additive Intensity Model”
- 1996 – 1997 Addis Ababa University Addis Ababa, Ethiopia
Faculty of Sciences, Department of Statistics
One Year Graduate Study in Statistics
- 1995 – 1996 Addis Ababa University Addis Ababa, Ethiopia
Faculty of Sciences, Department of Statistics
One Year Preliminary Undergrad Statistics Courses
- 1989 – 1993 Addis Ababa University Addis Ababa, Ethiopia
Faculty of Sciences, Department of Mathematics
B.Sc. in Mathematics (Oct. 1993)

APPOINTMENTS AND POSITIONS

- 7/04 – Assistant Professor: Drexel University, School of Public Health, Department of Epidemiology and Biostatistics.
- 9/04 – 6/09 Research Advisor, Mercy Health System.
- 4/03 – 6/04 Post Doctoral Associate: University of Pittsburgh, Graduate School of Public Health, Department of Biostatistics.
- 9/97 – 4/03 Graduate Student Researcher: University of Pittsburgh, Graduate School of Public Health, Department of Biostatistics.

MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETY

- 2000 – 2006 International Biometrics Society (ENAR)
- 1999 – American Statistical Association
- 2001 – 2006 Pennsylvania Public Health Association
- 2005 – American Public Health Association
- 1999 – Statistical Society of Ethiopians in North America

SCIENTIFIC JOURNAL REVIEWER

- 2005 – Circulation American Health Association

ACADEMIC COMMITTEES AT DREXEL UNIVERSITY

- 09/04 – 12/05 Member, Students Appeals Committee
- 12/04 – 04/05 Member, Faculty Search Committee
Department of Epidemiology and Biostatistics
- 02/05 – 06/08 Member, ASPH - Epidemiology/Biostatistics Council

PUBLICATIONS AND PRESENTATIONS

1. PUBLICATIONS

- S. Mazumdar, **Zekarias Berhane**, L. Weissfeld, A. Begley, M.A. Dew, P. R. Houck, C. F. Reynolds III: Survival Models With time-Varying Coefficients: A Flexible Approach to the Analysis of Psychiatric Survival Data. *Psychopharmacology Bulletin*, 2002. Autumn 2002, 36: 4

Amber E. Barnato, **Zekarias Berhane**, Lisa A. Weissfeld, Walter T. Linde-Zwirble, Chung-Chou H and Derek C. Angus: The Effect of Race and Ethnicity on Intensive Care Use at the End of Life. *Health Services Research*, doi, 1111/j. 1475-6773, 2006.00598.x

Perez HR, NJ Zimmerman, **Zekarias Berhane** (2006) Evaluation of culturable particle load on HVAC filters before and after remediation: a pilot study. *Indoor and Built Environment* 15(6):525-533

Teti, M., Bowleg, L., Rubinstein, S., Lloyd, L., **Berhane, Z.**, and Gold M. Present but not Accounted for: Exploring the Sexual Risk Practices and Intervention Needs of Non-Heterosexually Identified Women in a Prevention Program for Women with HIV/AIDS. *J LGBT Health Res.* 2007;3(4):37-51

Perez HR, **Z Berhane**, P Gurian, T Alexander, A Buchholz, M Chilton, V Bragg. An evaluation of the relationship between residential particulate and dust endotoxin exposures and five asthma specific functional outcome and quality of life indicators in inner-city asthmatic children *Proceedings of the 11th International Conference on Indoor Air Quality and Climate, August 2008, Copenhagen, Denmark* .

Role of Renin Angiotensin System (RAS) in Anemia Related to Chronic Kidney Disease (CKD). A. Palya, F. Noor, F. Fleszler, S. Shahabdeen, R. David, N. Modi, S. Shrestha, **Z. Berhane**, A. Kumar, DH Kim, B. Seamonds (*NKF Spring Clinical Meeting Abstracts, 2008*)

A Mixed Methods Evaluation of the Effect of the Protect and Respect Intervention on the Condom Use and Disclosure Practices of Women Living with HIV/AIDS. Teti M, Bowleg L, Cole R, Lloyd L, Rubinstein S, Spencer S, Aaron E, Ricksecker A, Berhane Z, Gold M. (*AIDS and Behavior, in press*)

Care Coordination for Children with Special Health Care Needs-Associations with Family-Provider Relations and Family/Child Outcomes. R. M. Turchi, **Z. Berhane**, C. Bethell, A. Pomponio, R. Antonelli, C. S. Minkovitz. (*Pediatrics, Accepted*)

Choitz, P., Johnson, M. P., **Berhane, Z.**, Lefever, G., Anderson, J. K., and Eiser, A. R. Urban Fitness Centers: Removing Barriers to Promote Exercise in African-American Communities (*Journal of Health Care for the Poor and Underserved, Accepted*)

Medical Home Finds Real Estate in a Children's Hospital. R. M. Turchi, M. Kondrad, F. X. McNesby, **Z. Berhane**, A. Giardino. (*Submitted to Pediatrics*)

Acculturation's Effects on Diet Quality among Chinese American Women. Amy Liu, Marilyn Tseng, Zekarias Berhane. (*Submitted to J Am Diet Assoc*)

External validation of prognostic model of one-year mortality in patients requiring prolonged mechanical ventilation. S. Jaiswal, K. Sadacharam, R. R. Shrestha, P. Bhatta, R. K Ghimire, A. Rimal, Z. Berhane, I. Mirza, M. Rather, A. R. Eiser, and S. Matchett. (*Submitted to Critical Care Journal*)

2. PRESENTATIONS

Proximal impact of the Pennsylvania Cancer Education Network on knowledge, attitudes, and intention to screen. L. Ulmer*, ... Z. Berhane, ... (*Accepted for presentation at the 137th APHA Annual Meeting, November 2009, Philadelphia, PA.*)

Using GEE to Investigate Variation in Outcomes of the Pennsylvania Cancer Education Network by Education Level of Participants. L. Ulmer*, ... Z. Berhane, ... (*APHA 2009*)

Care Coordination for Children with Special Health Care Needs-Associations with Family-Provider Relations and Family/Child Outcomes. R. M. Turchi*, Z. Berhane, C. Bethell, A. Pomponio, R. Antonelli, C. S. Minkovitz. (*Pediatric Academic Societies' Annual Meeting, May 2009, Baltimore, MD*)

An evaluation of the relationship between residential particulate and dust endotoxin exposures and five asthma specific functional outcome and quality of life indicators in inner-city asthmatic children. H.R. Perez*, **Z. Berhane**, P. Gurain, T. Alexander, M. Chilton. . (*11th International Conference on Indoor Air Quality and Climate, August 2008, Copenhagen, Denmark*)

An evaluation of airborne particle counts, dust endotoxin, and home characteristics on the physical health of asthmatic children. H.R. Perez*, **Z. Berhane**, P. Gurain, T. Alexander, and M. Chilton. . (*The American Industrial Hygiene Conference and Exposition, June, 2008 Minneapolis, MN*)

Use of Clinical Proportional Pulse Pressure for Estimating Cardiac Index in Heart Failure. (*National ACP meeting, May 08, Washington DC*).

Role of Impaired Erythropoietin Response in Diabetic (DM) Patients with Anemia. Aniruddha Palya*, Fazle Noor, Frederick Fleszler, Simi Shahabdeen, Racquel David, Niyati Modi, Sachin Shrestha, Zekarias Berhane, Ajay Kumar, Dae Hwan Kim, and Bette Seamonds. (*American Society of Nephrology 2007*)

Awais A Sheikh, Haythem Albizem, Zekarias Berhane, Arif Shaik, Harris M Usman, Amtul Farheen, Primal Kaur and Ajay Kumar: Use of Clinical Proportional Pulse Pressure for Estimating Hemodynamics in Heart Failure. (*The National ACP meeting, Washington DC May 2008*)

Present but not accounted for: Identifying and addressing the needs of non-heterosexually identified women with HIV in interventions targeted to women with HIV. Lisa Bowleg, Michelle Teti, Susan Rubinstein, **Zekarias Berhane**, and Marla Gold. *APHA 135th Annual Meeting, November 2007, Washington, D.C.*

Airborne Particle Counts, Dust Endotoxin and Activity Limitation in Inner-City Asthmatic Children. Perez HR, **Z. Berhane**, P Gurain, M Chilton. *APHA 135th Annual Meeting, November 2007, Washington, D.C.*[†]

Psuedospline Based Flexible Modeling of Survival Data. **Zekarias Berhane***, Lisa Weissfeld and Chung-Chou H. Chang. JSM Meeting, Salt Lake City, Utah, August 2007.

The Effect of Residential Endotoxin and Particulate Exposure on the Activity Levels of Asthmatic Children. Perez HR, **Z. Berhane**, P. Gurain, and M. Chilton. The American Industrial Hygiene Conference and Exposition, June 2007, Philadelphia, Pennsylvania

Impact of the Medical Home on severity of asthma in Children. Bob Hamberger; **Zekarias Berhane**, PhD; Renee M. Turchi, MD, MPH ... *American Academy of Pediatrics: Future of Pediatrics Conference, June 2007, Orlando, Florida.*[†]

The Protect and Respect program for women living with HIV: “Intermediate” outcomes. Teti, M.1, Rubinstein, S., Bowleg, L., Lloyd, L., Nkansa, M., Rorie, D., Ferguson, R., Aaron, E., Ricksecker, A., Spencer, S., Berhane, Z., & Gold, M. *Cross-Site Grantee Meeting, San Francisco, CA: May 2007*

At risk and invisible: Recognizing the experiences of the non-heterosexually identified women in the Protect and Respect program for women with HIV/AIDS. Teti, M., Bowleg, L., Rubinstein, S., **Berhane, Z.**, and Gold, M. *Drexel Sex and Gender Research Forum, Philadelphia, PA; January, 2006.*

Preliminary Assessment of the Protect and Respect Program for Women Living with HIV/AIDS. Marla Gold, Michelle Teti^{*}, Susan Rubinstein, **Zekarias Berhane**, Marcy Polansky, Erika Aaron, and Ann Ricksecker. *Ryan White CARE Act 2006 Conference, Washington, DC; August, 2006.*

Noise-Exposed Workers in a Railroad Tunnel – Predicting Hearing Loss from Noise Exposure. C. E. Cummings, R. T. Sataloff, **Z. Berhane**, and J. Sataloff. *APHA Boston, MA, 2006.*[†]

Predictors of Adverse Outcomes in Hospitalized Adult Patients with Sickle Cell Disease. Fahd Rahman^{*}, Roy N. Gayi, Samir K. Ballas, Juan C. Zubieta, **Zekarias Berhane**, Saad Rahman, M. N. Athar and N. Takawira. *American Society of Hematology, Atlanta, GA; December, 2005.*[†]

¹ Presenting author

^{*} Presenter

[†] Poster presentation

Substance Use and HIV/AIDS Disease Progression. M. A. Whipple, **Z. Berhane** and S. L. Rubinstein. *The College of Physicians of Philadelphia; Philadelphia, PA: May 2005.*[†]

Model Assessment and Diagnostics for a Pseudospline-based Survival Model. **Zekarias Berhane***, Chung-Chou H. Chang and Lisa Weissfeld. *ENAR Biometrics Society Meeting, Tampa bay, Florida, March 2003.*

Flexible Modeling of Recursive Multiple Event Survival Dataset Analogous to Anderson and Gill. **Zekarias Berhane*** and Lisa Weissfeld. ENAR Biometrics Society Meeting, Arlington, Virginia, March 2002.

Regression Diagnostics Using the Martingale Residuals for the Additive Hazards Model. **Zekarias Berhane*** and Lisa A. Weissfeld. ENAR Biometrics Society Meeting, Charlotte, North Carolina, March 2001.

A Comparison of Models for the Analysis of Depression Remission Data. Sati Mazumdar, **Zekarias Berhane***, Lisa A. Weissfeld, and Charles Reynolds. Joint Statistical Meeting, Indianapolis, Indiana, August 2000.

Estimation of the Survival Function Based on the Additive Intensity Model. **Zekarias Berhane*** and Lisa Weissfeld. International Biometrics Society, Eastern North American Region, Chicago, Illinois, March 2000.

STATISTICAL CONSULTING (08/04 – present)

- Drexel School of Public Health community
- Consultant to Educating Physicians in their Communities –Medical Home Initiative (EPIC-IC)
 - The goal is to provide statistical evaluation of data collected by EPIC IC in relation to children and youth with special health care needs (CYSHCN).
- Mercy Health System
 - Provide statistical consulting service for the Medical attendees and advise the residents on their research projects.

TEACHING (08/04 -)

- Intermediate Biostatistics I (MPH and DrPH students)
- Intermediate Biostatistics II (MPH and PhD students)
- Survival Data Analysis (MPH and PhD. students)
- Regression Methods (Second Year MPH students)

- Evidence Based Medicine with Focus on Biostatistics (Mercy Health System MD Residents).
- Intermediate Epidemiology and Biostatistics (DrNP Nursing School)
- Introduction to Survival Analysis (Community Health and Prevention Dr PH students, invited lecture)
- SAS statistical Package

RESEARCH SUPPORT

Ongoing:

PA Dept. of Health: Ulmer (PI) 04/01/06 – 07/31/08
 Participatory Statewide Evaluation of the Pennsylvania Cancer Education Network
 Role: Co-PI

DHHS-HRSA-MCHB Turch (PI) 09/01/06 – 08/31/08
 Sub to PA Chapter, AMERICAN ACADEMY OF PEDIATRICS
 Educating Physicians in their Communities –Medical Home Initiative (EPIC-IC)
 Role: Project Director as sub

Completed:

Director of Research, Mercy Health System 09/01/04 – 08/31/08
 Provide statistical consulting service for the community as needed, advise the residents on their research projects on evidence based medicine with focus on Biostatistics as part of the House Staff Core Curriculum.

Drexel Synergy Grant: Perez (PI) 02/01/06–12/31/06 & 1/1/07–6/30/07
 An Evaluation of the Combined Effects of Environmental Particulate Exposures and Dietary Deficiencies on Pediatric Asthma Severity in Inner City Philadelphia.
 Role: Co-Investigator

03048 Gold (PI) 01/01/06 – 09/30/07
 HRSA (SPNS Program)
 Protect and Respect Program for Women Living with HIV/AIDS, an intervention research study.
 Role: Co-Investigator

K25 – DK059928-04: Chang (PI) 11/01/04 – 07/31/06
 NIH
 A Generalized Model for Post-transplant Survival
 Role: Co-Investigator