Wondwosen Kassahun-Yimer

Curriculum Vitae

Education

2010–2014 PhD., Statistics, Hasselt University, Belgium.

Dissertation: Modeling Hierarchical Data Allowing for Overdispersion and Zero-inflation in

Particular Excess Zeros

Advisors: Professor Dr. Geert Molenberghs, Professor Dr. Christel Faes

2003–2004 M.Sc., Statistics, Addis Ababa University, Ethiopia.

1994–1998 B.Sc., Statistics, Addis Ababa University, Ethiopia.

Experience

May.2017– **Assistant Professor**, *Department of Data Science*, University of Mississippi Medical Present Center, USA.

Aug.2015— **Postdoctoral Fellow**, *Biostatistics and Bioinformatics Branch*, *Division of Intramural* Apr.2017 *Population Health Research*, National Institutes of Health (NIH), USA.

Research focus:

- Joint modeling of multivariate longitudinal data with replications for several outcomes including semicontinuous, binary, and counts

- Collaborative research to investigate changes in glycemic control and dietary intake among diabetic children receiving dietary intervention

Sept.2014— Associate Professor, College of Public Health and Medical Sciences, Jimma Univer-

Aug.2015 sity, Ethiopia.

Field: Biostatistics

2011–2014 **Assistant Professor**, *College of Public Health and Medical Sciences*, Jimma University, Ethiopia.

Field: Biostatistics

2005–2010 Lecturer, Public Health Faculty, Jimma University, Ethiopia.

Field: Biostatistics

2000–2004 Researcher II, Population and Housing Census Commission Office, Addis Ababa,

Ethiopia.

1998–2000 Researcher I, Central Statistical Authority, Addis Ababa, Ethiopia.

Major National Surveys

- Malaria Incidence in under 10 children near Gilgelgibe hydro electric dam, a case-control study.
- Home Based Malaria Management in Jimma Town, Ethiopia.
- Ethiopian Demographic and Health Survey (EDHS), 2000.
- Ethiopian Labour Force Survey (CSA), 1999.

List of Publications

- Alemseged, F., Tegegn, A., Haileamlak, A., and Kassahun, W. (2008). Caregivers' Knowledge about childhood malaria in Gilgel Gibe field research centre, south west Ethiopia. Ethiop. J. Health Dev., 22: 49–54.
- Begna, Z., Assegid, S., **Kassahun, W.**, and Gerbaba, M. (2013). Determinants of inter birth interval among married women living in rural Pastoral communities of southern Ethiopa: a case control study. *BMC Pregnancy and Childbirth*, **13**: 116.
- Belachew, T., Lindstrom, D., Hadley, C., Gebremariam, A., Kassahun, W., and Kolsteren P. (2013). Food insecurity and linear growth of adolescents in Jimma Zone, Southwest Ethiopia. *Nutrition Journal*, 12:55.
- Ewnetu, H., Kassahun, W., Hiko, D. (2014). Determinants of Diarrheal Disease among Adult People Living with HIV/AIDS Attending ART Clinics in Jimma Town, South-Western Ethiopia: A Case Control Study. *Journal of AIDS & Clinical Research*, DOI: 10.4172/2155-6113.1000380.
- Gebru, T., Taha, M., Kassahun, W. (2013). Prevalence of Diarrhea in Under-Five Children among Health Extension Model and Non-Model Households in Sheko District Rural Community, Southwest Ethiopia. *Science Journal of Public Health*, 1: 230–234.
- Gebru, T., Taha, M., Kassahun, W. (2013). Risk factors of Diarrheal diseases in under-five children among health extension model and non-Model households in Sheko District Rural Community, Southwest Ethiopia: comparative cross-sectional study. BMC Public Health, DOI: 10.1186/1471-2458-14-395.
- Gemechu, T., Nigussie, B., Wondafrash, M., Valy, Jan., Lemmens, J., Thijs, H., Kassahun, W., Kolsteren, P., Granitzer, M. (2016). Adaptation and standardization of a Western tool for assessing child development in non-Western low-income context. *BMC Public Health*, DOI: 10.1186/s12889-016-3288-2.
- Getachew, H., Ambaw, F., Abebe, L., Kassahun, W. (2011). Psychological distress and its predictors in AIDS orphan adolescents in Addis Ababa city: A comparative survey. Ethiop. J. Health Dev., 25(2):135-142.
- Kalema G., Molenberghs, G., **Kassahun, W.** (2015). Second-order generalized estimating equations for correlated count data. *Computational Statistics*, DOI: 10.1007/s00180-015-0599-1.
- Kassahun, W., Neyens, T., Molenberghs, G., Faes, C., and Verbeke, G. (2012).
 Modeling Overdispersed Longitudinal Binary Data Using a Combined Beta and Normal Random Effects Model. Archives of Public Health, DOI: 10.1186/0778-7367-70-7.
- Kassahun, W., Neyens, T., Molenberghs, G., Faes, C., and Verbeke, G. (2013). A Joint Model for Hierarchical Continuous and Zero-inflated Overdispersed Count Data. *Journal of Statistical Computation and Simulation*, DOI: 10.1080/00949655.2013.829058.
- Kassahun, W., Neyens, T., Molenberghs, G., Faes, C., and Verbeke, G. (2014).
 A Zero-Inflated Overdispersed Hierarchical Poisson Model. Statistical Modelling, 14: 1–18.

- Kassahun, W., Neyens, T., Molenberghs, G., Faes, C., and Verbeke, G. (2014). Marginalized Multilevel Hurdle and Zero-Inflated Models for Overdispersed and Correlated Count Data with Excess Zeros. *Statistics in Medicine*, DOI: 10.1002/sim.6237.
- Morankar, S., Tegene, A., Kassahun, W., Sulueiman, S., Alem, Y., Yazachew, M., and Pagnoni, F. (2011). Validity and reliability of RDT for diagnosis of malaria among febrile children in Jimma Town, southwest Ethiopia. *Ethiopian medical journal*, 49: 131–138.
- Mussema, Y., Deribew, A., and Kassahun, W. (2009). Does Insecticide Treated Mosquito Nets (ITNs) prevent Clinical Malaria in Children Aged Between 6 and 59 Months under program setting? *J. Community Health*, 34: 102–112.
- Negussie, A., Kassahun, W., Asseegid, S., and Hagen k., A. (2016). Factors associated with incomplete childhood immunization in Arbegona district, southern Ethiopia: a case-control study. *BMC Public Health*, DOI: 10.1186/s12889-015-2678-1.
- Teshome, T., Kassahun, W., Bati, T., and Abrha H. A. (2017). The prevalence and factors associated for anti-tuberculosis treatment non-adherence among pulmonary tuberculosis patients in public health care facilities in South Ethiopia: a crosssectional study. *BMC Public Health*, DOI: 10.1186/s12889-017-4188-19
- Tilahun, T., Coene, G., Luchters, S., **Kassahun, W.**, Leye, E., Temmerman, M., and Degomme, O. (2013). Family Planning Knowledge, Attitude and Practice among Married Couples in Jimma Zone, Ethiopia. *PLoS ONE*, **8**: e61335.
- Wondimu, T., W/Michael, K., **Kassahun, W.**, and Getachew, S. (2007). Delay in initiating tuberculosis treatment and factors associated among pulmonary tuberculosis patients in East Wollega, Western Ethiopia. *Ethiop.J.Health Dev.*, **21**: 148–156.
- Workicho, A., Kassahun, W., and Alemseged, F. (2017). Risk factors for multidrugresistent tuberculosis among tuberculosis patients: a case-control study. *Infection* and *Drug Resistance.*, 10: 91–96.
- Yewhalaw, D., Kassahun, W., W/Michael, K., Tushune, K., Sudhakar, M., Kaba, D., Deuchateau, L., Van Bortel, W., and Spybrocek, N. (2010). The influence of the Gilgel-gibe hydroelectric dam in Ethiopia on caregivers' knowledge, perceptions and health seeking behavior towards childhood malaria. *Malaria Journal*, 9:47.
- Yewhalaw, D., Getachew, Y., Tushune, K., W/Michael, K., Kassahun, W., Deuchateau, L., Van Bortel, W., and Spybrocek, N. (2013). The effect of dams and seasons on malaria incidence and anopheles abundance in Ethiopia. BMC Infectious Diseases, 13:161.
- Yirga, D., W/Michael, K., Wondafrash, M., **Kassahun, W.**, and Deribe, K. (2008). Knowledge and Belief about Cause and Prevention of Onchocerciasis in Bebeka, South west Ethiopia. *Journal of Health Sciences*, **18**: 65–69.

Seminar Presentations

- Joint Model for Multivariate Semicontinuous Data with Replications, Johns Hopkins University, USA, February 2016; Joint Statistical Meetings, August 2016.
- Zero-Inflated Overdispersed Hierarchical Poisson Model, Hasselt University, Belgium, March 2013.

Professional Service

- Editorial Board Member, Ethiopian Journal of Health Sciences, 2010–2015.
- Ethical Clearance Committee member, Public Health Faculty, Jimma University, Ethiopia, 2008–2010.

Professional Membership

- American Statistical Association

Computer skills

Statistical SAS, STATA, R, SPSS

Packages

LaTex Document Preparation System

Offices

Microsoft Word, Excel, Access, Powerpoint