NYSPI Biostatistics Seminar Series[1]

Strategies for analyzing within-subject change in clinical trials and in observational studies

Panel Discussion

Division of Biostatistics, Department of Psychiatry
CUMC / NYSPI

Tuesday, October 7, 2014

3:00-4:00pm, New PI 6th Floor Multipurpose Room (6602)
Light refreshments provided

Abstract

In the case of treatment studies and longitudinal data from observational studies in mental health research, interest often focuses on the comparison of within-subject change between two groups of subjects. Despite the fact that there is a large literature on the statistical methodology for this kind of data, myths and misunderstandings are ubiquitous (and old habits die hard). Should one use change score analysis, end point analysis, or mixed effect regression models? In this workshop, statisticians from the Division of Biostatistics will present four case studies from their recent collaborations with NYSPI clinicians and then open up a discussion with the audience on the merits and pitfalls of such strategies as applied to the data at hand. We welcome everybody who has worked or is working on a project with longitudinal data to attend and contribute to the discussion. This workshop is part of our ongoing series of panel discussions about statistical issues of common interest for all PI researchers and we hope to see you there.

Panelists:

Dr. Hanga Galfalvy, Ph.D.

Dr. Hanga Galfalvy graduated in 2000 with a PhD in Statistics from the University of Illinois at Urbana-Champaign. After one year postdoctoral experience in the area of machine learning research, she worked as a Postdoctoral Research Fellow and then an Assistant Professor of Clinical Neurobiology in the Department of Psychiatry at Columbia University and New York State Psychiatric Institute. From June 2013 she is an Assistant Professor of Clinical Biostatistics (in Psychiatry). She was the recipient of an NIMH K25 award for the study of statistical methodology for predicting suicide attempts, and has worked as a co-investigator or statistician on many observational and treatment studies of suicidal behavior.

[1] The PI Biostatistics Seminar Series is held on Tuesdays at New York State Psychiatric Institute. If you are interested in receiving regular announcements for our seminars in the future, or if you need further information, please contact Jina James (jamesji@nyspi.columbia.edu, (646)774-7929.

Her methodological interests include censored regression models, longitudinal data analysis, methodology for the analysis of high-dimensional genetic data, and building predictive models for suicide and suicide attempts.

Dr. Seonjoo Lee, Ph.D

Dr. Seonjoo Lee received her B.S. and M.S. degrees in Statistics from the Seoul National University, South Korea. She completed her Ph.D. in Statistics and Operations Research from the University of North Carolina at Chapel Hill in 2011. Her thesis focused on the development of independent component analysis with biomedical applications. After completion of her degree she joined the Center for Neuroscience and Regenerative Medicine at National Institution of Health and Uniform Service University and is currently working on the development of statistical methodology for high-dimensional longitudinal data. She also interested in multimodal data analysis and latent variable modeling.

Andrew Glass, MS

Andrew Glass has a M.S. in Biostatistics from the University of California, Los Angeles in 2011 and a M.A. in Probability and Statistics from The City College of New York in 2009. Andrew started his career as a Biostatistician at Columbia University working for the division on substance abuse and is currently a Biostatistician in the division of Biostatistics in Psychiatry. His research interests include clinical trial analysis and design, missing data techniques, and longitudinal data analysis. Currently, Mr. Glass serves as lead data analyst for substance abuse clinical trials.

Jean Choi, MS

Jean Choi earned her master's degree in biostatistics at the University of Pittsburgh, Graduate School of Public Health and her BS in psychology and statistics at Carnegie Mellon University. She has collaborated as the primary data analyst with Dr. Richard Sloan in Behavioral Medicine working on several clinical trials examining the effects on cardiovascular responses due to aerobic conditioning as well as varying emotions. Jean has been involved in ongoing development of new statistical methods for relating high dimensional cardiac monitoring data to the momentary assessment of emotions.