Hudson College of Public Health
Department of Biostatistics and Epidemiology
OSCTR BERD Clinical Epidemiology Unit

2-SESSION WORKSHOP SERIES

PROPENSITY SCORE ANALYSIS IN EPIDEMIOLOGIC RESEARCH: AN INTRODUCTION

AGENDA

Workshop Faculty:

Tabitha Garwe, PhD, MPH
Associate Professor of Epidemiology
Co-Director, Clinical Epidemiology Unit, OSCTR BERD
Director, Surgical Outcomes Research, OUHSC Department of Surgery
University of Oklahoma Health Sciences Center
Tabitha-garwe@ouhsc.edu

Schedule:

Dates/Times:
Wednesday 5/18 1 – 2:30pm: Didactic lecture and propensity score generation and diagnostics
Wednesday 5/25 1 – 2:30pm: Propensity score integration - regression, stratification and matching.

Location: Hudson College of Public Health Auditorium (CHB 150) and Virtual through Zoom. Online registration required. Please register here: Workshop Registration if you plan to attend.

Format:

The format includes a didactic lecture and software demonstration. It is highly recommended that you bring a laptop loaded with the SAS software system for the demonstration. The session will be recorded and posted after the end of the workshop.

Course materials should be downloaded or printed for personal use prior to attendance from the following website.

Website: http://osctr.ouhsc.edu/short-course

Abstract and Topics:

When there are large differences in important prognostic or selection factors between study groups, adjusting for these differences using traditional multivariable techniques may be inadequate and the residual bias may result in biased causal estimates. Use of a propensity score, described as the conditional probability of assignment to a particular treatment given a vector of observed covariates (Rosenbaum & Rubin, 1983), may better adjust covariates between the groups and reduce bias.

This 2-session workshop will provide a brief overview of propensity score analysis, generation and integration of the propensity score into an analysis, assessment of its effectiveness in removing differences between groups as well as limitations of this analytic approach. An example will be used to illustrate various concepts using the SAS statistical software.

Pre-requisite requirements:

Attendees are expected to have completed at least one introductory undergraduate or graduate course in biostatistics or statistics.

Materials for the Session:

Background material, PowerPoint slides and sample SAS code will be provided prior to session.

Sponsor Acknowledgement:

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Workshop Faculty Biographical Summary:

Dr. Tabitha Garwe is an Associate Professor of Epidemiology at OUHSC and the Co-director of the Biostatistics, Epidemiology, and Research Design Core of the Oklahoma Shared Clinical and Translational Resources (OSCTR), Clinical Epidemiology Unit. She is also the Director of Surgical Outcomes Research in the Department of Surgery (OUHSC). Prior to joining OUHSC, Dr. Garwe worked as the Lead Trauma Epidemiologist at the Oklahoma State Department of Health. Dr. Garwe teaches clinical epidemiology and other epidemiology methods classes in the Department of Biostatistics and Epidemiology. Her independent research interests include trauma systems and outcomes.