Dear Methods Core seminar participants,

Welcome to the first seminar of CAPS Quantitative Methods Core seminars for the academic year 2011/2012.

Topic: Comparing odds ratios across nested logistic regression

models

Presenter: <u>Steve Gregorich</u>, PhD

Professor of Medicine

UCSF DGIM

Time & Place: Friday, September 23, 10-11:30

McKusick Conference room 50 Beale Street, 13th floor San Francisco, CA 94105

Abstract: Investigators often wish to compare parameter estimates (or corresponding odds ratios) associated with some variable, X, across nested logistic regression models, e.g., comparing an 'unadjusted' odds ratio to a corresponding 'adjusted' odds ratio that conditions on covariates. Unfortunately, such comparisons are not straightforward; unlike the case with linear regression, as important explanatory variables are added to a logistic model, two--often opposing--forces operate to impact parameter estimates: (i) adjustment for confounders and (ii) increases in model-implied variation of latent outcome response (rescaling). The former typically operates to shrink parameter estimates toward zero, whereas the latter acts to expand parameter estimates away from zero. Investigators are usually unsure of the extent to which each force is in operation, which frustrates attempts to meaningfully compare the magnitudes of corresponding parameter estimates. I will describe the fundamentals of this problem, the corresponding difficulties that it raises for applied research, and a recent solution to the problem proposed by K. Karlson et al, University of Education, Denmark.

Steve Gregorich is an applied statistician with interest in models for clustered/dependent data; structural equations with latent variables; psychometrics, including tests of psychometric invariance across population groups; statistical power for complex sampling designs; missing data; and Monte Carlo simulation.

Hope to see many of you at this presentation, --Estie

+++++++++++++

CAPS address is 50 Beale Street, Suite 1300. The building is between Market and Mission. Directions to 50 Beale Street can be found at http://caps.ucsf.edu/about/directions-parking/

Please also note that our building has very tight security; in order to be provided with visitor passes, you will need to RSVP to me, preferably at least 2 days before the seminar. If you are even considering attending the seminar, please do RSVP, so your name will be left with the security stuff at the main building entrance.

RSVP to Dr. Estie Hudes

The CAPS Methods Core activity can now be checked directly on the website: http://caps.ucsf.edu/about/structure-cores/methods-core/

Handouts from recent seminars are put on the website. You can go directly to http://caps.ucsf.edu/about/structure-cores/methods-core/methods-core-seminars/

Estie Sid Hudes, PhD MPH
Specialist / Statistician
Center for AIDS Prevention Studies (CAPS) &
Department of Epidemiology & Biostatistics
University of California, San Francisco
50 Beale Street, Suite 1300
S.F., CA 94105-1823
Campus Mail: Box 0886, S.F. CA 94143-0886

Phone: 415.597.9126 Fax: 415.597.9213

email: Estie.Hudes@ucsf.edu

http://caps.ucsf.edu/personnel/ehudes/

CONFIDENTIALITY NOTICE: INFORMATION IN THIS MESSAGE, INCLUDING ALL ATTACHMENTS, IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE INTENDED RECIPIENT(S) NAMED ABOVE. If the reader of this message is not an intended recipient or an agent responsible for delivering it to an intended recipient, you are hereby notified that you have received this message in error, and that any review, dissemination, distribution, or copying of this message is strictly prohibited. If you received this message in error, please notify the sender immediately, and delete the message and any hard copy print-outs. Thank you.