

広島統計談話会
Hiroshima Statistics Study Group

第 306 回談話会を下記のように開催致しますので
御参集下さいますようご案内申し上げます。

You are cordially invited to the 306th meeting as scheduled below.

日 時 : 2017 年 9 月 29 日 (金) 15:00 –
Date : September 29th, 2017 (Fri) 15:00 –

場 所 : 放射線影響研究所 講堂
Place : RERF Auditorium

演 者 : 三角 宗近 (放射線影響研究所 統計部 研究員)
Speaker : Munechika Misumi, Ph.D.
Research Scientist
Department of Statistics, RERF

演 題 : 「原爆被爆者研究における測定誤差：統計的方法論の概要」
Title : “Measurement error problems in atomic bomb survivors study: an overview on the statistical methodology”

要 約 :

Summary:

In observational studies, the exposure received by an individual often cannot be precisely observed. It is well-known that regression analysis using variables with measured with errors can cause systematic bias, loss of efficiency, and distortion of the exposure-disease relationship. The impact of measurement error is an important issue in radiation risk regression because radiation dose to which individuals were exposed is estimated based on self-reported factors potentially measured with error. Studies of atomic bomb survivors conducted at the Radiation Effects Research Foundation have used a regression calibration and other statistical methodologies were recently proposed, such as Wang et al. (2017) and Misumi et al. (2017). In this presentation, recent measurement error methodologies will be reviewed and I will present some preliminary results that take more realistic conditions into consideration.

Reference

Wang et al. Joint non-parametric correction estimator for excess relative risk regression in survival analysis with exposure measurement error, Journal of the Royal Statistical Society: Series B, 2017 [ONLINE AHEAD OF PRINT]

Misumi et al. Simulation–extrapolation for bias correction with exposure uncertainty in radiation risk analysis utilizing grouped data, Journal of the Royal Statistical Society: Series C, 2017 [ONLINE AHEAD OF PRINT]