	交絡調整の方法 Intermediate Biostatistics				Affiliated department, Job title,Name		me As	Graduate School of Medicine Professor, SATO TOSIYA Graduate School of Medicine Assistant Professor, YONEMOTO NAOHIRO Inistry of Health, Labour and Welfare HORI KAZUHIKO	
Target year Professional degree s		students	Number of cred		its	2	Course offered year/period		2018/Second semester
Day/period	Tue.2	Cla	ss style	Lecture	e			Language	Japanese

[Outline and Purpose of the Course]

Confounding leads to bias which interferes causal interpretation between exposure and outcome in observational studies.

This course is designed to provide statistical methods for adjustment of confounding. Stratified analysis and regression modeling are introduced. Related topics, such as survival analysis, missing data, etc., are included. For conducting an epidemiologic or clinical research, developing a study protocol and a statistical analysis plan is necessary. We provide an essence for developing them.

[Course Goals]

- Understand the concept of confounding
- Understand pros and cons of stratified analysis and regression modeling
- Understand importance for study protocol and statistical analysis plan

[Course Schedule and Contents]

- 1. October 2 Confounding and standardization
- 2. October 9 Estimation of common effect measures
- 3. October 16 Comparison of means
- 4. October 23 Introduction to regression modeling, Class exam 1
- 5. October 30 Generalized linear models
- 6. November 6 Survival analysis 1
- 7. November 13 Survival analysis 2
- 8. November 20 Handling missing data, Class exam 2
- 9. November 28 Data management and reporting
- 10. December 4 Study protocols
- 11. December 11 Statistical analysis plans
- 12. December 18 Review of pharmaceutical products and pharmacovigilance (13:00-14:30)
- 13. January 8 Variable selection, Class exam 3
- 14. January 15 Advanced methods for confounding adjustment
- 15. January 22 Discussion on statistical analysis plans

[Class requirement]

All students in the course were expected to take "Fundamentals of Biostatistics"

_____Continue to 交絡調整の方法(2)

交絡調整の方法 (2)
[Method, Point of view, and Attainment levels of Evaluation]
Class examinations - 3 times
[Textbook]
Distributed materials in "Fundamentals of Biostatistics"
[Reference books, etc.]
(Reference books) Rothman KJ, Greenland S, Lash TL. Modern Epidemiology, 3rd ed. (Lippincott Williams & Wilkins, 2008)
[Regarding studies out of class (preparation and review)]
Fundamentals of Biostatistics
(Others (office hour, etc.))