Biostatistical Analysis in Epidemiological Researches Using SPSS

Date:
Organizer: Dr. Adel Mohammad Ibrahim
Course Description

The course provides knowledge and skills to basic methods for basic biostatistical analysis in epidemiological studies. The course covers both the theoretical background and practical training on using SPSS for conducting basic statistical analysis in epidemiological studies.

Course Objectives

On completion of this course, candidates will be able to do the following:

- Develop a design for a research or evaluation project
- Understand the data collection, data analysis, data interpretation, and data dissemination processes.

More specifically, after completing all aspects of the course candidates will be able to:

- Describe the essential steps of the scientific method
- Understand what are common study designs in epidemiological researches.
- Define the types of variables.
- Know how to choose the appropriate statistical analysis
- Analyze qualitative and quantitative variables and be familiar with SPSS program
- Understand the process of interpreting analyzed data and disseminating results through presentation and publication

Recommendations: This course will be fast-paced. Candidates are expected to work hard to keep up with all the assignments and readings.

Learning strategies:
The methods used to assist you to learn the contents and skills inherent in the course include:

- Lectures.
- Practical sessions**.**
- Group discussion.
- assignments.

Recommended textbook:

- Designing and Conducting Health system Research Projects: Volume 1Proposal Development and Fieldwork. Corlien M. Varkevisser, Indra Pathmanathan, and Ann Brownlee
- Designing Clinical Research;Stephen B. Hulley, Stephen R. Cumming.
- Interpretation and Uses of Medical Statistics; Leslie E.Daly,Geoffery J.
- Statistics for health, life and social science. Denis Anthony.

Academic Integrity

Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty and are unacceptable. Academic misconduct could result in disciplinary action that may include, but is not limited to suspension or dismissal.

Biostatistical Analysis in Epidemiological Studies Using SPSS

Day One:

Time	Topic
0800 - 0830	Registration
0830 - 0900	Introduction to Research
0900 - 1000	Introduction of biostatistics.
1000 - 1030	Coffee Break
1030 - 1100	Types of variables
1100 - 1200	Types of epidemiological research designs
1200 - 1300	Lunch Break
1300 - 1400	Parametric and Non parametric statistics

Day Two:

Time	Topic
0800 - 0830	Registration
08:30 - -09:30	Introduction to SPSS
0930 – 1000	Summarization of data
1000 – 1030	Coffee Break
1030 - 1200	Choosing appropriate statistical analysis
1200 - 1300	Lunch Break
1300 - 1400	Practical training on data entry and summarization of data

Day Three:

Time	Topic
0800 - 0830	Registration
0830 - 0930	Univariate analysis
0930 - 1030	Bivariate analysis 1
1030 - 1100	Coffee Break
1100 - 1200	Bivariate analysis II
1200 - 1300	Lunch Break
1300 - 1500	SPSS Workshop

Day Four:

Time	Topic
0800 - 0830	Registration
0830 - 0930	Multivariate analysis I
0930 - 1030	Multivariate analysis 1I
1030 - 1100	Coffee Break
1100 - 1200	Correlation
1200 - 1300	Lunch Break
1300 - 1500	SPSS Workshop

Day Five:

Time	Topic
0800 - 0830	Registration
0830 - 0930	Regression I
0930 - 1030	Regression II
1030 - 1100	Coffee Break
1100 - 1200	Regression III
1200 - 1300	Lunch Break
1300 - 1500	SPSS Workshop