Public Health Training Camp **2020** *(Autumn Session)*

Workshop on
"Epidemiology and Biostatistics"

👷 Facilitators

Stuart Gilmour, *Professor, St. Luke's International University, Tokyo, Japan*
Shahjahan Khan, *Professor, University of Southern Queensland, Australia*
Mizanur Rahman, *Assistant Professor, The University of Tokyo, Japan*
Ashraful Alam, *Assistant Professor, The University of Tokyo, Japan*
Shamima Akter, *Visiting Fellow, NCGM, Japan*
Sarah Krull Abe, *Staff Scientist, National Cancer Center, Japan*

Host: **Global Public Health Research Foundation, Bangladesh**
Teaching mode: *Online [Zoom]*
Duration: *5 days (16th, 17th, 23rd, 24th and 25th October 2020)*
Registration deadline: September 25, 2020
Online registration form: *https://forms.gle/QYcAs8XEjvYnRmMr9*

📋 Contents

Date & Time	Content	Facilitators
Day 1 *16th October, 2020* *(1) 10:00 -12:00* *(2) 14:00 -16:00* *GMT+6 time*	**Principles of Epidemiology** 1. Epidemiology: concepts and terminology [SG] 2. Overview of epidemiologic study designs [MR] 3. Sample size calculation [MR] **Practical-I:** Data analysis using Stata & R [MR & AA]	**Stuart Gilmour [SG];** **Mizanur Rahman [MR];** **Ashraful Alam [AA]**
Day 2 *17th October, 2020* *(1) 10:00-12:00* *(2) 14:00-16:00* *GMT+6 time*	**Descriptive Statistics and Statistical Test** 1. Basic concepts about data type and analysis 2. Statistical test: Chi-square, t-test, **Practical-II:** Data analysis using Stata & R [MR & AA]	**Shahjhan Khan [SK];** **Mizanur Rahman [MR]**
Day 3 *23rd October, 2020* *(1) 10:00-12:00* *(2) 14:00-16:00* *GMT+6 time*	**Common Statistical Models** 1. Model, ANOVA, ANCOVA 2. Simple and multiple linear regression 3. Logistic regression model **Practical-III:** Data analysis using Stata & R [MR & AA]	**Stuart Gilmour [SG];** **Mizanur Rahman [MR];** **Ashraful Alam [AA]**
Day 4 *24th October, 2020* *(1) 10:00-12:00* *(2) 14:00-16:00* *GMT+6 time*	**Survival Analysis** 1. Basic concepts about survival analysis 2. Kaplan-Meier model, Cox regression model, etc. **Practical-IV:** Data analysis using Stata & R [MR & AA]	**Mizanur Rahman [MR];** **Ashraful Alam [AA]**
Day 5 *25th October, 2020* *(1) 10:00-12:00* *(2) 14:00-16:00* *GMT+6 time*	**Clinical Data Analysis** 1. ROC curve, etc [SA] 2. How to write good public health paper? [SK] 3. Global Health Research presentation [MR] **Practical-V:** Data analysis using Stata & R [MR & AA]	**Sarah Krull Abe [SK];** **Shamima Akter [SA];** **Mizanur Rahman [MR];** **Ashraful Alam [AA]**

NB: Participants are required to install Stata version 11 or more/R 3.6.3 software.

📑 Description

This three (5) day course will introduce principles and methods of epidemiologic investigation of disease and other health states. The aim of the course is to provide knowledge on different types of study designs (including randomized trials, cohort, case-control studies, and cross-sectional study); measurement of exposures and outcomes; and risk estimation. The course will provide Stata/R techniques from basic epidemiology, interpreting findings, and drawing inferences; to a variety of commands to manipulate and format data to manage your own projects. The course content covers data management, programming concepts, procedural programming, various Stata/R commands and constructs, and project workflow. Participants will master advanced methods of data analysis including simple linear regression and multiple linear regression, simple and multiple logistic regression, Kaplan-Meier analysis, and Cox proportional hazard model. Application of cubic splines and receiver operating characteristic curves (ROC) will also be covered.

🎓 Course Fee

Course fee: **Bangladesh:** **BDT 1500** for students and **BDT 2500 f**or professionals.
International: **$80** for both students and professionals.

📨 Contact

GPHRF

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