

Cross sectional sampling, bias and dependence

Yosi Rinott

The Hebrew University of Jerusalem

We consider a population such as hospital patients, which subjects enter and leave according to certain discrete processes. The population is sampled at a given time (or times), and the sample includes all those that are present at sampling time. This type of sampling results in complicated data: a random sample size, biased observations on the duration of stay (lifetime) in the populations, and dependent observations. The goal is to estimate the distribution of lifetime in the population. We propose various models and methods, parametric and non-parametric, to overcome these complications, and compare them.

Joint unfinished work with Micha Mandel