

Abstract

Coverage bias in telephone surveys among the population in Palestine was studied depending on a random sample of 4448 households from the survey of Information and Communication Technology, 2011, conducted by PCBS. Telephone status (landline only, mobile only, landline and mobile, no telephone services) of each sampled individuals was matched with his or her demographic characteristics obtained from the data. This facilitated estimation of the coverage properties of the landline telephone sampling frame, and identification of sub-populations under-covered in telephone surveys. Individuals with schooling years six and less, attending to school and left, have elementary and less educational achievement, and they have elementary occupation proved systematically under-represented in a telephone surveys based on telephone sampling frame.

Bias due to the exclusion of mobile phone-only individuals from the sampling list was also tested, and implication for sampling list selection are discussed.

The result of this study showed that the application of weighting methods, SPS and MPS, lead to significant reduction in the coverage bias. MPS method gave better results for most of the indicators than the SPS method.