

The Analysis of Online Polls And Telephone Polls on Policies in Infectious Diseases Control by Taiwan Centers for Disease Control, 2015–2017

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Abstract

To catch up the latest opinion from the public, each governmental unit has implemented various channels to obtain information such as Director's emailing address, opinion poll and so on. Since the result of the opinion poll has better systemic and scientific evidence in comparison with other survey methods, it has been widely used in recent years. The Taiwan Centers for Disease Control (TCDC) has contracted with survey firms to conduct telephone polls for many years. Nevertheless, in consideration of high rate of internet users, the TCDC has set up a polling place on the website to obtain real time public opinion.

We analyzed the difference between online polls and telephone polls from August 2015 to June 2017. In this period, we conducted 24 online polls and 10 telephone polls. The sample sizes (person-times) of various topics from the online polls were between 1,229 and 3,559 in 2015, 308 and 4,019 in 2016, and 170 and 2,186 in 2017, respectively. With 95% confidence interval and the sampling error less than 3%, and the effective sample size for telephone poll was at least 1,068. In addition, we found significant differences between online polls and telephone polls with the same topic.

Online polls are not random sampling, and have limitations on self-selection as well as limited sample size and representativeness. Accordingly, conducting statistical inferences based on online polls needs to be careful. We recommend that conducting traditional telephone polls is preferable if precise results are needed. If the budget is enough, the government should combine various survey methods for raising coverage and accuracy in polling results.

Keywords: Infectious diseases control, online poll, telephone poll

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Received: Aug. 16, 2018
Accepted: Aug. 26, 2019
DOI: 10.6525/TEB.202002_36(3).0001