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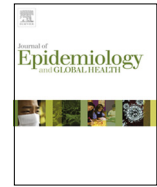
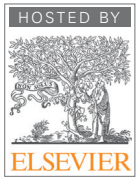
A commentary of the article “Prevalence of Lebanese stroke survivors: A comparative pilot study” by N. Lahoud, P. Salameh, N. Saleh and H. Hosseini, published in the Journal of Epidemiology and Global Health on October 24th 2015

Josué A. Lily Vidal

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LETTER TO THE EDITOR

A commentary of the article ‘‘Prevalence of Lebanese stroke survivors: A comparative pilot study’’ by N. Lahoud, P. Salameh, N. Saleh and H. Hosseini, published in the Journal of Epidemiology and Global Health on October 24th 2015



Josué A. Lily Vidal

Community Health and Humanities Division, Faculty of Medicine, Memorial University, Newfoundland & Labrador, Canada

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The article by Lahoud et al. [1] attempts to describe the prevalence of stroke in Lebanon, with the purpose of contributing to the understanding of the burden of stroke. For this, a multistage sampling method was used to obtain stroke prevalence data that accurately represented the population demographics at national level. However, the use of landline telephone directories as the source of study participants may have introduced selection bias.

Lahoud et al. [1] claim that past research has demonstrated the validity of using landline telephone surveys to ensure random data collection. The studies used to support this sampling method may not resemble Lebanon’s current communications trend, and demographic and socioeconomic

situation. Firstly, one study addressed the validity of using telephone interviews for obtaining study participants in 1999 [2]. These assumptions may no longer hold true in ensuring the random collection of data in current times due to the recent rapid spread of cellular phones. In fact, cellphone subscription in Lebanon has increased significantly in recent years. By 2010, there were three times as many cellphone subscriptions as there were landline subscriptions [3]. Also, the studies were performed in more developed regions of the world. These regions may not resemble socioeconomic characteristics of Lebanese landline owners.

Secondly, the use of landline telephone directories may have also introduced selection bias in terms of inadvertently having sampled households headed by older individuals. The authors have identified this potential source of bias; however, its potential influence on the accuracy of the results

E-mail address: jlily@mun.ca

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has been diminished. This source of bias should be given more attention because age has been identified as an important confounding variable. This could have resulted in an overestimation of the prevalence of stroke in older age groups, despite the attempt to stratify the data in terms of age.

Thirdly, the chosen data collection method may have also resulted in the accidental recruitment of higher income study participants. The authors describe a method used to assess participants' socioeconomic status based on "crowding index". Nonetheless, the fact that owning a landline subscription was the first criterion for selection may have resulted in excluding individuals from lower socioeconomic statuses. In fact, owning a landline in Lebanon is significantly more expensive than owning a cellular phone [4].

Perhaps the multistage sampling of study participants could have been based on patient lists from a diversified array of family physicians. This would allow for the inclusion of individuals representing the different socioeconomic groups and geographic areas of Lebanon, while also ensuring the recruitment of positive diagnosed cases of stroke.

Moreover, although the authors describe a valid method to identify true positive cases of stroke, the questionnaires used failed to gather information on stroke risk factors. This could have been advantageous in identifying other potential confounders and effect measure modifiers. An alternative for complementing this information could involve requesting access to the clinical history of the identified stroke survivors.

References

- [1] Lahoud N, Salameh P, Salah N, Hosseini H. Prevalence of Lebanese stroke survivors: a comparative study. *J Epidemiol Glob Health* 2016;6:169–76.
- [2] Grande ED, Fullerton S, Taylor AW. Reliability of self-reported health risk factors and chronic conditions questions collected using the telephone in South Australia, Australia. *BMC Med Res Methodol* 2012;12:108.
- [3] World Bank. Lebanon country meta data. Available at: <<http://data.worldbank.org/country/lebanon>>; 2012 [Accessed 02/08/2016].
- [4] Ziyad M, Ghandour L, Ghandour B, Mokdad AH, Sibai AM. Cell phone and face-to-face interview responses in population-based surveys: how do they compare? *Field Methods* 2015;27:39–54.