

Comment

Comments on Hynes *et al.* Prevalence of Marijuana Use among University Students in Bolivia, Colombia, Ecuador and Peru. *Int. J. Environ. Res. Public Health* 2015, 12, 5233–5240

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Abstract: We have read and analyzed the article entitled “Prevalence of marijuana use among university students in Bolivia, Colombia, Ecuador and Peru”. We propose some objective points which could enhance the internal validity of the study (*i.e.*, we suggest to report participation proportions).

Keywords: Cannabis; Latin America; epidemiology; prevalence proportion; participation rate

We have read the article entitled “Prevalence of marijuana use among university students in Bolivia, Colombia, Ecuador and Peru” with great interest [1]. In fact, we consider it to be of high importance to have estimated the drug use among students of the Andean Community and its evolution over time. We also want to highlight the commendable effort to collect the data from these four Latin

American countries. This study could be important to improve public health initiatives at the level of individual countries and also within the Andean Community.

There have been previous studies concerning the evolution of legal and illegal drug use in the United States [2,3] and other developed countries [4]. It is also necessary to have these statistics for Latin America analyzing use of these substances and changes over time. To do this, you may consider that in cross-sectional designs the number of participants is important, as well as the number of people invited to participate, which is especially important when you want to determine prevalence [5,6]. This participation proportion has not been presented in Hynes' study [1].

Therefore, we suggest the authors present the participation proportion of each of the surveys to assess the internal validity of the study, and thus evaluate the potential selection bias in relation to the population not involved in the study (*i.e.*, those who did not participate). We would also recommend presenting weighted and unweighted estimates [6].

Conclusions

We suggest reporting the participation proportion for each survey and to present weighted and unweighted estimates.

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Conflicts of Interest

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References

1. Hynes, M.; Demarco, M.; Araneda, J.; Cumsille, F. Prevalence of marijuana use among university students in Bolivia, Colombia, Ecuador, and Peru. *Int. J. Environ. Res. Public Health* **2015**, *12*, 5233–5240.
2. Keyes, K.M.; Schulenberg, J.E.; O'Malley, P.M.; Johnston, L.D.; Bachman, J.G.; Li, G.; Hasin, D. The social norms of birth cohorts and adolescent marijuana use in the United States, 1976–2007. *Addiction* **2011**, *106*, 1790–1800.
3. Keyes, K.M.; Schulenberg, J.E.; O'Malley, P.M.; Johnston, L.D.; Bachman, J.G.; Li, G.; Hasin, D. Birth cohort effects on adolescent alcohol use: The influence of social norms from 1976 to 2007. *Arch. Gen. Psychiat.* **2012**, *69*, 1304–1313.
4. Piontek, D.; Kraus, L.; Pabst, A.; Legleye, S. An age-period-cohort analysis of cannabis use prevalence and frequency in Germany, 1990–2009. *J. Epidemiol. Community Health* **2012**, *66*, 908–913.
5. Von Elm, E.; Altman, Douglas, G.; Egger, M.; Pocock, S.J.; Gøtzsche, Peter, C.; Vandenbroucke, J.P. Declaración de la iniciativa STROBE (Strengthening the Reporting of

Observational Studies in Epidemiology): Directrices para la Comunicación de Estudios Observacionales. *Rev. Esp. Salud Públ.* **2008**, *82*, 251–259.

6. Szklo, M.; Nieto, F.J. *Epidemiology: Beyond the Basics*; Aspen Publisher Inc.: Gaithersburg, MA, USA, 2000.

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