

“Integrated Disease Surveillance Response Practice and Associated Factors Among Health Professionals Working in Public Hospitals in West Hararghe Zone, Eastern Oromia, Ethiopia: Multi-Center Cross-Sectional Study” by Yusuf et al [Letter]

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Dear editor

I read with great attention and like to say congratulation to the authors for article entitled “Integrated Disease Surveillance Response Practice and Associated Factors Among Health Professionals Working in Public Hospitals in West Hararghe Zone, Eastern Oromia, Ethiopia: Multi-Center Cross-Sectional Study” written by Yusuf et al.¹

This study has a single outcome (dependent) variable, which is IDSR Practice. The authors have interchangeably used the statistical terms “bivariate binary logistic regression analysis” for “bivariable binary logistic analysis” and “multivariate binary logistic regression analysis” for “multivariable binary logistic analysis” in this article.

However, the evidence revealed that “multivariable” are not the same as “multivariate”.² These statistical terms have different concepts and they could not be used interchangeable. Multivariable model is used for the analysis with one outcome and multiple independent variables. Whereas, multivariate is used for the analysis with more than one outcome and multiple independent variables.²⁻⁶ The “multivariable analysis” is a statistical tool used to test the unique contributions of numerous factors to a single outcome variable.⁷

I think it is significant for the readers to have clear insight up on the incorrect interchangeably used terms in this article. Since they have used it wrongly, it would lead misunderstanding among the readers. Therefore, as far as these statistical terms are not used with optimal precision, the authors need to make an erratum correction to this document for the readers to have common understanding and keep the consistency of these statistical terms utilization in the research. As a recommendation, the authors should replace; “bivariate binary logistic regression analysis” with “bivariable binary logistic analysis regression”, and “multivariate binary logistic regression analysis” with “multivariable binary logistic regression analysis” considering a single outcome variable addressed in this article.

Disclosure

The author declares that there is no conflict of interest regarding this communication.

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