

Response to the letter to the Editor

Methodological review: association study in gastroenterological surgery

Ledmar Vargas R.,¹ Milena Agudelo S.,¹ Roger Lizcano C.,¹ Melissa Martínez B.,¹ Leonardo Velandia B.,¹ Sergio Sánchez H.,¹ Óscar Jiménez P, ODN,² Marco Quintero, MD.³

¹ Medical student at the University of Boyacá in Tunja, Colombia

² Dentistry PhD, Chief of the Department of Public Health and Full Professor at the University of Boyacá in Tunja, Colombia

³ Intensive Care Specialist, General Surgeon, Fellow in Hepatic, Pancreatic and Biliary Surgery at the Regional Hospital of Sogamoso in Sogamoso, Colombia

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Respected editor:

In response to the letter to the editor entitled “Methodological Review: Association Study in Gastroenterological Surgery” in which several appreciations and corrections were made with respect to the article entitled “Factors Associated with Conversion of Laparoscopic Cholecystectomy to Open Cholecystectomy” which we authored and which was published in Volume 32 Issue No. 1 of 2017, we would like to explain each point mentioned in the letter.

As mentioned in the letter to the editor, relative risk (RR) is found among measures of association. It is defined as the quotient of two probabilities or two risks, so the concept of risk is equivalent to the epidemiological concept of *incidence* which is feasible only for prospective studies (which differ from the article in question). This is the reason it is restricted from use in randomized controlled trials and cohort studies. (1, 2) However, this concept was used in our study since we had two groups: one group which had been exposed to the aforementioned risk factor and the other group which had not been exposed. It should be mentioned that the association measure that best fits in this case, and whose use might have avoided the error, is a prevalence ratio (PR). This is defined as the ratio of the proportion of the persons with disease over the proportion with the exposure. (3)

As mentioned in the article, the odds ratio (OR) is improperly analyzed since, when a value is less than 1, it should be considered not as a risk factor but, to the contrary, as a protective factor. (4) This is in addition to the fact that this association measure should not have been used in our study (5).

For these reason, we apologize for the errors, accept the suggested corrections, and will take them into account in further development of our study. In addition, if the editor considers it convenient, we can send a revised version of the text originally sent.

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