

Matching in case control studies - A comment on the Revised National Tuberculosis Control Program regimens with and without directly observed treatment, short-course: A comparative study of the therapeutic cure rate and adverse reactions

Sir,
Went through an article entitled, 'Revised National Tuberculosis Control Program regimens with and without directly observed treatment, short-course: A comparative study of the therapeutic cure rate and adverse reactions,' published in Perspectives in Clinical Research (2014;5:16-9).^[1]

The authors have done a commendable job in comparing the therapeutic cure rate and adverse reactions in the Revised National Tuberculosis Control Program (RNTCP) treatment with and without the directly observed treatment, short-course (DOTS) regimens.

However, I have a few concerns in this study.

First, this study, which was planned to evaluate the effectiveness of the DOTS strategy versus non-DOTS strategy should have accounted for the social, behavioral, economic, and nutritional factors related to the patient.^[2] The authors have taken into account (by way of exclusion) comorbid conditions like diabetes mellitus, pregnant women, children below 11 years of age, patients infected with human immunodeficiency virus (HIV), patients with extrapulmonary tuberculosis (TB), and patients with bronchial asthma. The outcome of this study would have been useful for program implementers and clinicians if socioeconomic factors like age, education, treatment cost, behavioral factors like intake of alcohol or smoking, and nutritional factors like malnutrition^[2]

were incorporated in the study. This could have been achieved by matching these factors among cases or controls or accounting for them *post hoc* at the time of analysis.

Matching would have ensured that the controls were similar to the cases with regard to variables that could confound the outcome of the study, as discussed above.

Second, this study was conducted over eight months, between June 2003 and February 2006.^[1] It is not clear how these eight months of study were distributed over all these years from 2003 to 2006.

Furthermore, the readers would have been benefited had the study reflected on revised guidelines with regard to various categories under DOTS.

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REFERENCES

1. Sivaraj R, Umarani S, Parasuraman S, Muralidhar P. Revised National Tuberculosis Control Program regimens with and without directly observed treatment, short-course: A comparative study of therapeutic cure rate and adverse reactions. *Perspect Clin Res* 2014;5:16-9.
2. Adherence to long term therapies: Evidence for action, WHO 2003. Available from: www.who.int/chp/knowledge/publications/adherence_introduction.pdf. [Last accessed on 2014 Jan 17].

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