

Methodological Issues in Treatment Adherence Studies

Dear Editor,

We read the article titled "Medication Adherence and Its Determinants Among Patients on Concomitant Tuberculosis and Antiretroviral Therapy in South West Ethiopia," published in *North American Journal of Medical Sciences* 2012, Vol. 4, Issue 2, page 67-71, with immense interest.^[1] The article gives an insight into the adherence pattern to medications in patients suffering from HIV/ AIDS and TB comorbidity. However, we have quite a few comments and observations regarding the methodology adopted in the study.

The authors have talked of "optimal adherence," but there is no mention about the operational definition of adherence that was employed in the study. Moreover, adherence documented was "self-reported." This might have led to misclassification and an underestimation of the nonadherence to treatment. An assessment of both self-reported adherence and observation of blister packs/ medicine foils should have been done. This might have also helped to see if the two correlated well. Further, 24 seems so small a number for much meaningful analyses. The researchers should have calculated the required sample size *a priori*.

It would also have been better if the researchers had looked into the adherence levels taking into account the "time since initial diagnosis," as has been done previously in other studies.^[2] The association between the phase of the TB drug treatment (intensive or continuation) and adherence is another important aspect, which the authors have missed in this study.^[3] Going by the finding that 75% of the participants were aware of the fact that missing the doses can lead to treatment failures, it would have been much appreciated if the researchers had analyzed whether the adherence to treatment differed between

those who had awareness and those who did not have. Also, social desirability bias is possible while determining the relation with physician. Since the question was asked by the service provider, the patients were probably more likely to answer positively to such question.

We would like to conclude with the statement that more methodologically rigorous studies should be carried out to document the magnitude of the problem of nonadherence to medication and urgent evidence-based interventions need to be implemented to combat this issue.

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