

# Asymptomatic Malaria During Pregnancy: Prevalence, Influence on Anemia and Associated Factors in West Guji Zone, Ethiopia – A Community-Based Study [Letter]

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## Dear editor

The original article with the title “Asymptomatic Malaria During Pregnancy: Prevalence, Influence on Anemia and Associated Factors in West Guji Zone, Ethiopia – A Community-Based Study” really attracted our attention because it focuses on risk factors for the incidence of asymptomatic malaria in pregnant women, which can be used as a basis for building early awareness, so that possible complications such as anemia, abortion and premature birth can be prevented. In this case, researchers found 5 significant risk factors, namely living near stagnant water, history of plasmodium infection, not using indoor residual spray, no outdoor vector control and not using insecticide-treated nets; and 2 factors that are not significant, namely residence and mosquito repellent.<sup>1</sup>

In this study, researchers used regression analysis so that the hypothesis assumed that the seven factors had a direct effect on the incidence of asymptomatic malaria. From another point of view, logically and technically we can also analyze the possibility of indirect effects of several factors on the incidence of asymptomatic malaria through intermediate variables. For example, in regression analysis, residence is not proven to be a direct risk factor, so we can confirm whether residence has an indirect effect through intermediate variables, such as “outdoor vector control” or “living near stagnant water”. So that schematically we can determine the effect pathways, namely: “residence → outdoor vector control → malaria” or “residence → living near stagnant water → malaria”. Next, an analysis is carried out according to the effect pathways depicted in the scheme. In this case, “path analysis” is one method that can be chosen.<sup>2,3</sup>

Therefore, to obtain information about the direct and indirect effects of these factors, we recommend that further analysis be carried out by first drawing a diagram of the effect paths between factors, then carrying out path analysis based on that diagram. It is hoped that the results of this further analysis will add more in-depth information, so that efforts to control risk factors for malaria in pregnant women become more accurate, which in the end can reduce the number of complications due to malaria in pregnant women.

## Disclosure

The authors report no conflicts of interest in this communication.

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