



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	International Journal of TROPICAL DISEASE & Health
Manuscript Number:	2013_IJTDH_7951
Title of the Manuscript:	Seroprevalence of HBsAg among female patients seeking healthcare service in Bo Government Hospital, Sierra Leone: 14-months database study

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
The authors should replace the present figure 1 with the corresponding figure of the previous manuscript, which was much more informative. The English is overall good, but there are still some mistakes to be amended. With a low sensitivity, a test one should, if any, underestimate the prevalence of HBsAg-positivity. A low specificity, on the other hand, may in fact overestimate it. It seems unlikely, however, that 99% specificity may greatly overestimate the prevalence. The discussion section is now too long, and should be shortened. Overall, this manuscript conveys some useful information for the public health of the geographic area that is addressed in the study	Authors decided to use present Table 1 instead of previous Table 1 since the present manuscript doesn't include relative risk any longer. Our study objective was edited and only determines and later compares HBsAg seroprevalence among the various categories of study subjects to similar HBsAg seroprevalence studies conducted in Freetown-Sierra Leone's capital in the past-check title of manuscript above Comment on sensitivity and specificity: The entire portion relating to sensitivity and specificity edited thus: The Rapid HBsAg determine diagnostic test used in this study has low sensitivity but high specificity A test with a high specificity is useful for 'ruling in' a disease if a person tests positive. A Rapid HBsAg Determine test with low sensitivity means that the test is unable to detect as positive cases persons who actually have HBsAg while a low specificity implies that such test is unable to pick out as negative cases persons who are HBsAg negative. Our high HBsAg seropositivity may have included a high proportion of false positive because of the following reasons; the presence of other acute viral and bacterial infections, prior vaccination pregnancy and drug addition. It thus implies that the sensitivity and specificity of a test though very useful in diagnosing an infection may not be accurate on their part alone if used to estimate the probability of the presence of HBsAg. The two parameters could however be combined into the likelihood ratio to enhance their application and importance. Some editing done on the Discussion section to shorten it: e.g 1. Sierra Leone is recorded as an HBV. The screening for HBsAg is not included at the national level in the routine antenatal check for pregnant women except through private medical care or in cases of high suspicion of HIV infection, HBV infection or coinfection with both. 2. Rapid Determine HBsAg diagnostic test was widely accepted for use in the diagnosis and screening of infectious diseases in both developing and developed countries in past years. 3. The Bo Government Hospital serves all the other peri-urban areas and rural villages in the south. 4. Assay sensitivity is the main criterion considered during HBsAg testing of blood donors or donations in developing countries with high HBV seroprevalence. Assay test specificity is also important. Assay test specificity picks out the proportion of patients without the disease and who are really negative for the disease. 5. This study recommends a gold standard diagnosis of all HBsAg seropositive patients by other specific diagnostic kits other than the Rapid Determine HBsAg immunoassay alone.