

Author's Feedback

We deleted the comment:

The geology of the District is basically made of the middle Precambrian formation. Most parts of the District are underlain by lower Biriman rocks with few areas such as Bosomkese and Kwannisa underlain by granite. It must be noted that, the lower Birimian rocks formation in the District contain weathered phyllites and schist which account for the substantial deposits of red and white clay in areas such as Tanoso where ceramics, brick and tile and pottery industries are located.

We used the suggested title:

Modelling Hepatitis B in a high prevalence district in Ghana

We reframed the sentence to;

The goal of researchers was to work around $C_v < 1$ [14].

We deleted the sentence:

The derivation and analysis of the modified SIR mathematical model (SIR), enabled a better understanding of the dynamics of the spread of HBV within the Tano North district population.

We used excel to draw Figures 1 & 2.

We have deleted the sentence:

The herd immunity threshold shows that about 0.42% of the susceptible population of Tano North district should be immuned in order for the disease not to result in an epidemic.

From further analysis with a control measure such as vaccination, and having a vaccine efficacy of 95% about 0.44% of the susceptible population should be vaccinated in order to have HBV under total control in the Tano North district.

The conclusion that less than 1% of the susceptible population should be vaccinated to avoid an epidemic is simply erroneous as this value indicates the disease is not of any concern and could be eliminated/eradicated without too much ado.

Authors' stance

Even though there is no new mathematics we have been able to apply the existing mathematics in a particular scenario and that is also accepted in publishing.