Hello,

I am trying to analyze the trend of the prevalence of diarrhea in each country over time using the dataset provided by STATcompiler. My goal is to pool the prevalences of the DHS surveys of countries every 5 years (for example, pooling the prevalence of diarrhea from 1985-1989, 1990-1994, etc.) and then plot it over time.

I used a meta-analysis approach with a random effect to pool the weighted prevalences per 5-year period for the countries. However, I have doubts regarding the pooled weighted prevalences: some countries need to be more represented since they have a larger population. Is it acceptable to leave the analysis as it is, or should I adjust it?

I've heard about weight denormalization, but this cannot be applied in my case since I am only working with STATcompiler data and do not have access to each survey. I have attached below the data i'm working with, extracted from STATcompiler. Below is the code I used for the analysis (in R) :

meta_analysis <- metaprop(event = data$Events, n = data$Total,
                sm = "PFT", title="Meta analysis per Year category",subgroup = data$`Year_Category`)

Any help would be greatly appreciated !

File Attachments
1) data STATcompiler.PNG, downloaded 299 times