Outliers (age std mort rate by infectious disease) - Guyana(2010-2015), Seychelles (2013 -2014, 2016), St Vincent and Grenadines (2010, 2012-14, 2016), and Thailand (2010-2014)

**Guyana (2010-2015)**

From what I’ve seen across sources, Guyana had a HUGE increase in malaria deaths 2010-2012; then it just dropped off in 2013 (from 35 per 100k to 14…and after this, the country seems to have pretty stable rates). So extrapolating, malaria outbreak in those early years would have impeded healthcare in the country overall. Not sure why the drop in infections in 2013…

Another covariant that stands out in general for Guyana it its horrendous child (and maternal) mortality and malnutrition rates across pretty much all years. Compared to the rest of the continent, it is the highest in both regards. Not sure exactly how this fits in to our IDC-codes used for infectious diseases but it is definitely something to note as cause for whacky data, and wouldn’t show up so much in our age standardized mortality rates.

On the expenditures sides, I see that the govt majorly ramped up its spending as %GDP during this period, especially huge jump in 2013…

Simple takeaway is that outlying data is not because of lack of reporting/accessing health data for the country during this time.

Guyana country profile of analytics: <https://apps.who.int/nha/database/country_profile/Index/en>

**Seychelles (2013 -2014, 2016)**

Basically, Seychelles has a major problem with rat-spreading diseases. There was huge outbreak of leptospirosis total positive cases over a one-year period (1st December 2014 to 30th November 2015). There was another huge outbreak in 2016. Similarly, Dengue fever (very terminal if not treated) had outbreaks around the same times. (The two diseases can coexist even). So a lot of the mortality data is going to fluctuate depending on the year and whether there was an outbreak (it’s a small island …..)

With it being a tropical island, feeling the impact of climate change, in 2013 there was a huge flood. “Past events, such as the 2013 flood at Point Laure, resulted in a total estimated loss of 0.77 percent of GDP. Infrastructure damages accounted for the largest share of losses, followed by losses to the productive and social sectors.[2](https://www.elibrary.imf.org/view/journals/002/2023/235/article-A002-en.xml#A002fn02)” So, island was at a stand-still, and mortality rates were definitely affected from dirty water etc etc.

I believe there might also have been an ebola outbreak around this time … need to look that up

VIZ ideas

Countries with increasing avg mortality rates over all years

Countries with increasing CHE and/or HK rates over the years

-for both, could find regional averages, can code 0/1 and present maps of each region (there’s six of them in our database)

Scatter plot: CHE% of GDP (x-axis); plotted against