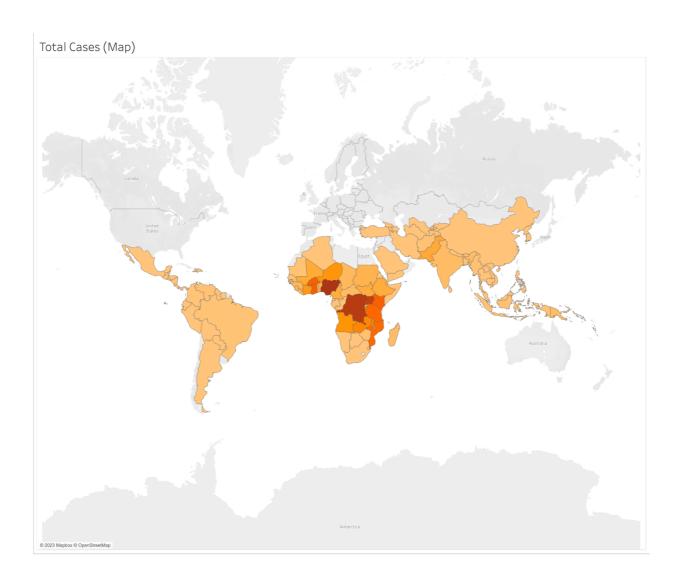
Epidemic Preparedness and Response (PREPARE)

Malaria Report Task

Wilson Lim



Background

Globally, Malaria remains a major public health concern in many parts of the world, particularly in the region of Africa. It is an ongoing fight to try to keep Malaria at bay in mostly underdeveloped regions of the world. The findings below will be focusing mainly on the African region.

Executive Summary

Content

- Dataset/Tableau analysis
- Findings
- Conclusion

Dataset/Tableau Analysis

No.	Dataset	Description
1.	TOTAL_CASES	Number of malaria cases
2.	EST_INCIDENCE	Estimated malaria incidence (per 1000 population at risk)
3.	EST_MORTALITY	Estimated malaria mortality rate (per 100,000 population)
5.	ITN_COVERAGE	Population with access to an insecticide-treated bed net
		(ITN) for malaria protection (%)

Tableau link – Malaria Analysis

Findings

■ Finding 1 – African region has the highest number of Malaria cases

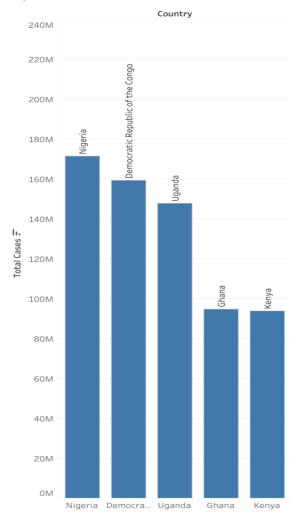
The African region accounts for the highest number of malaria cases, with the top three countries with the highest number of cases located in Africa.

The top 3 African nations, ranked in their respective positions, are:

- 1. Nigeria
- 2. Democratic Republic of Congo
- 3. Uganda

Figure 1 – Top 5 countries total cases

Top 5 Countries Total Cases



Finding 2 – Mortality rate had significantly decreased in the African region since 2010

Based on 2010 to 2020 mortality rate data, the mortality rate in the African region shows a significant downwards trend since 2010, even with an increase in total cases from 2015 onwards, mortality rate remains resiliency. It can be attributed to several factors, including increased access of insecticide-treated bed nets (ITNs) for malaria prevention, and improvements in health infrastructure and disease surveillance.

Figure 2 – Nigeria Mortality Rate

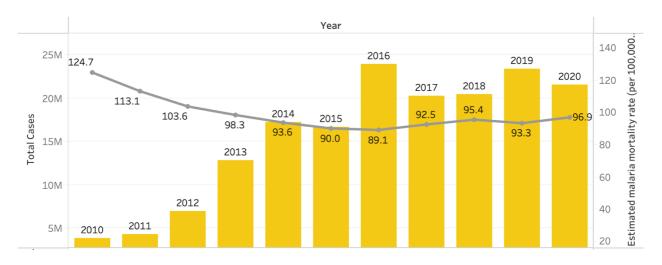


Figure 3 – Democratic Republic of Congo Mortality Rate

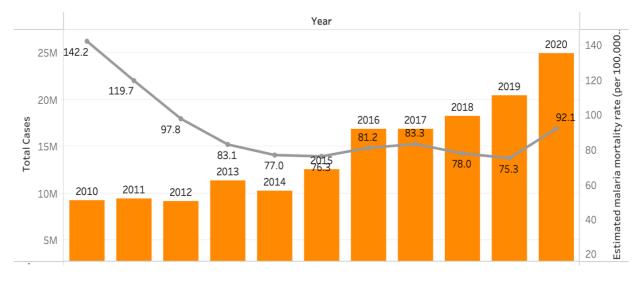
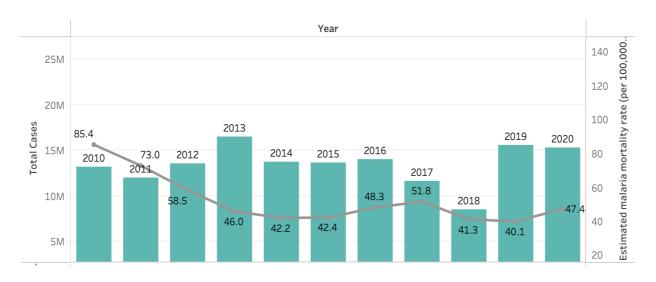


Figure 4 – Uganda Mortality Rate



■ Finding 3 – ITN plays a major role in keeping the estimated malaria incidence (per 1000 population at risk) at lower figures

African nations, including Kenya and Ghana, have a relatively high percentage of their population with access to insecticide-treated bed nets, which is associated with lower estimated incidence rates of malaria (per 1000 population at risk).

Figure 5 – Ghana ITN coverage (%)

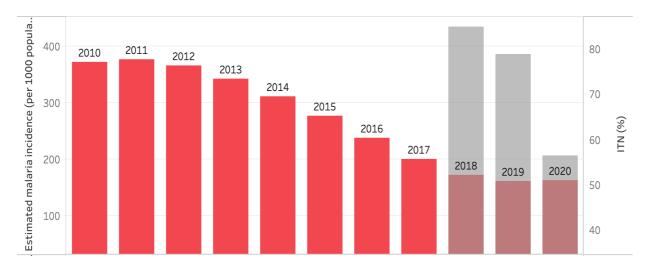
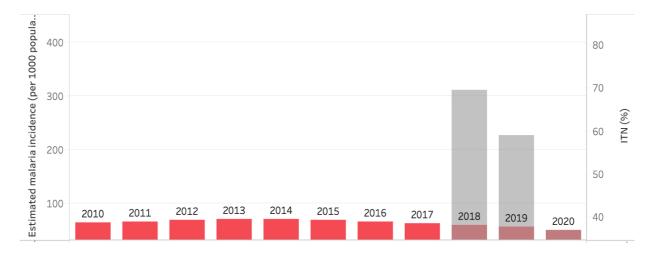


Figure 6 – Kenya ITN coverage (%)



Conclusion

The provided dataset suggests that underdeveloped nations, particularly the African region, continue to face significant challenges in controlling malaria, with a notable increase in total cases since 2015. Although the data shows that insecticide-treated bed nets are effective in preventing malaria, more data is needed to further demonstrate their effectiveness, given the limited data period of 2018 to 2020.