



Trend and Burden of Malaria in Ethiopia

Background

- Malaria is a global public health problem. Globally, among 87 malaria endemic countries, there were an estimated 229 million malaria cases during the year 2019 in, declining from 238 million in 2000 across 108 countries..
- Although, recently the burden of malaria was reduced remarkably, it still remains one of the top ten high burden diseases in Ethiopia at national and subnational level with an estimated 5,225,210 cases in 2019.
- Hence, measuring the burden of the disease and assessing the trend is very important for monitoring the extent and changes over a period of time.
- This study aimed to assess the burden of malaria at national and subnational level in terms of death and Disability-Adjusted Life Years lost (DALY) between the years 2000 and 2019 using Global Burden of Disease study (GBD 2019).

Key Findings

- The population at risk increased from 59,637,819 to 74,272,598 between the years 2010 and 2018 with an estimated 5,225,210 new malaria cases in Ethiopia.
- However, the number of Malaria cases has declined by 69.1% while death due to malaria declined by 41.3% between the years 2010 and 2018.
- The trend on age standardized death rate (ASDR) between male and female population from 2000-2019 shows that there is a significant decline over a year at national and subnational level while there is no significant difference on male and female population.

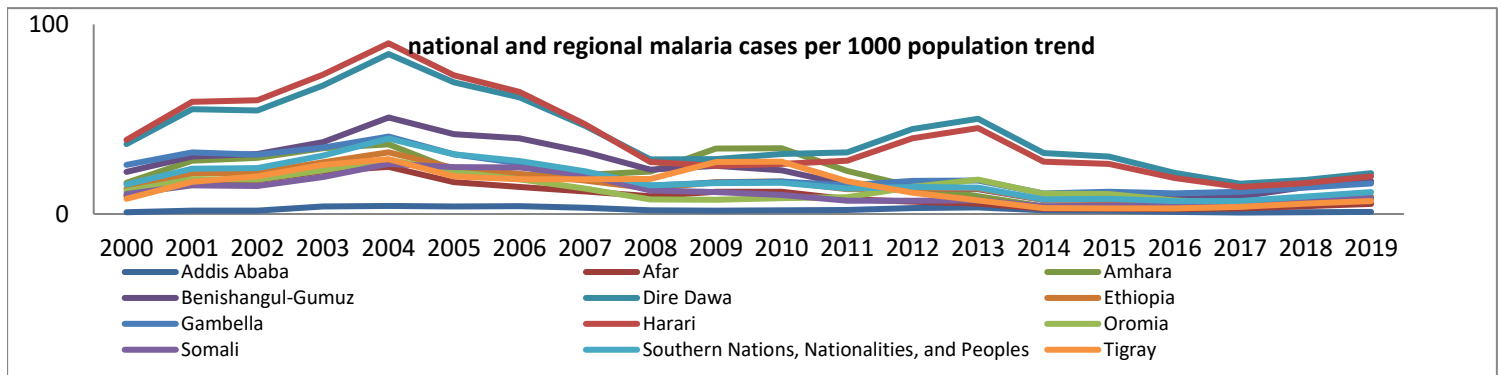


Figure 1-trend of malaria death rate in Ethiopian Region

- The national malaria ASDR in 2019 was 9.1.
- It ranges from ASDR of 1.2 in Addis Ababa to 21.5 at Dire Dawa across the subnational states.
- The age standardized death rate among six regions is below the national estimate (figure 2).
- Malaria contributed for 3% of the total DALY due to all causes in Ethiopia.
- DALY was highest among children under the age of nine; 1,044,771/1,154,085 (90.5%) of the total malaria related disability adjusted life years were recorded.

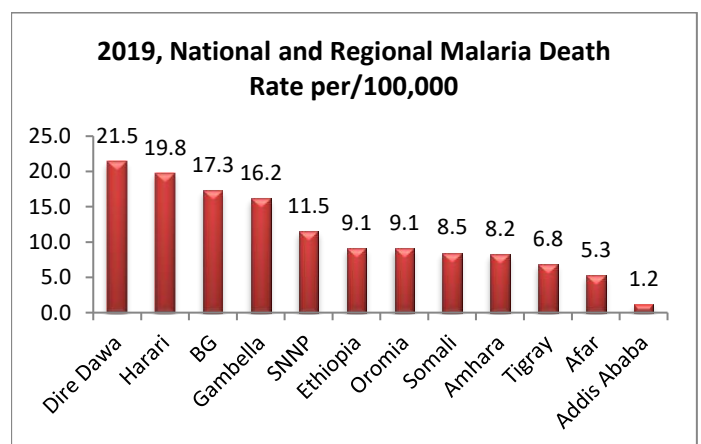


Figure 2. Malaria death rate in Ethiopian subnational states, 2019

July 18, 2022



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- DALY due to malaria shows a declining trend between the years 2000 and 2019 at a national and sub national levels.
- The DALY due to malaria was 738.9 years (745.2 years among male and 738.2 years among females) in Ethiopia by the year 2019.
- By the same year, it contributed for 1.8% of the total DALY due to all causes in Ethiopia.
- DALY lost due to malaria was highest in Dire Dawa (1637) and lowest in Addis Ababa (96.4) (figure 3).
- It was found that the burden of malaria, malaria related mortality rate and disability adjusted life years lost due to malaria have been declining in relation to the interventions taken at the millennium development goal (MDGs).
- Programs implemented to achieve the MDGs have brought major changes in the fight against malaria include: the usage of insecticide treated bed net (ITN) distribution, drainage of stagnant water, indoor residual spray (IRS), improved health care seeking behavior for fever, prevention and control of malaria among pregnant women by using intermittent preventive therapy (IPT), and improved accessibility to Artemisinin-based combination therapy (ACT).

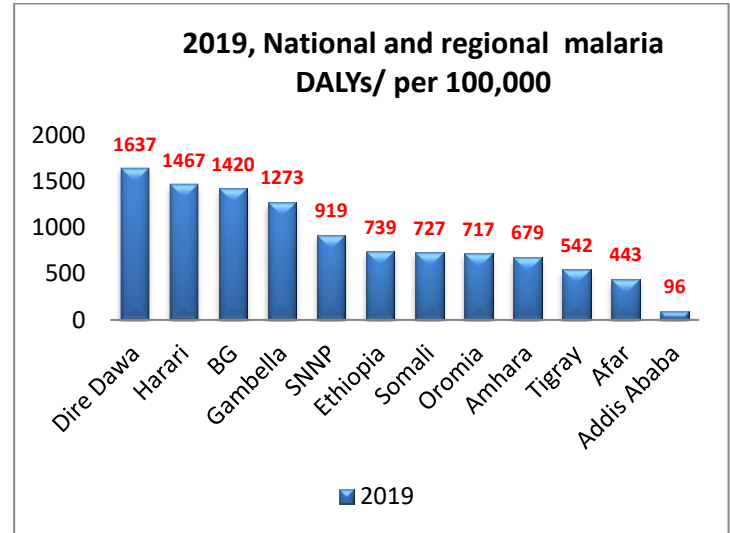


Figure 3-national and subnational malaria DALYs 2019

Conclusion and Recommendation

- The prevalence of malaria differs significantly among the subnational states of Ethiopia and its burden is remarkably declining in the last two decades.
- However, with a higher level of mortality and DALY, malaria still remains one of the public health problems in Ethiopia.
- Therefore, control and elimination strategies should be strengthened to further reduce the incidence and burden of malaria.
- This must be practical on the highly affected age groups and highly affected regions during the implementation periods of sustainable development goal (SDG) and malaria elimination program that are being undertaken by the government.

Acknowledgment

This evidence is generated by the National Data Management Center for health at EPHI in collaboration with the Global Burden of Diseases study group at the Institute for Health Metrics and Evaluation at the University of Washington.

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