Title; Five years malaria surveillance data analysis in Kaffa Zone, South West Ethiopia, 2024

AUTHOR; Abel A. Alemu

Corresponding author address, GMAIL; abelabate@gmail.com, Cell phone; +251910354768

INSTITUTE: 1Ethiopia FieldEpidemiology Training Program, School of Public Health

Hawassa University College of Medicine and Health Sciences

CO-AUTHORS: T. Gari

# Abstract

**Background:** Malaria is a life-threatening parasitic infection caused by *plasmodium* specious. Several strategies and programs were developed and implemented to control and eliminate malaria at global and national level. Ongoing surveillance data analysis is required to monitor and evaluate the intervention measures; that helps to achieve national malaria elimination target. The study was aimed to assess trend and distribution of malaria cases by person, place and time in Kaffa zone.

**Methods and Materials**: Malaria surveillance data analysis was conducted in Kaffa zone from July 8 to Aug 10, 2024. Five years (January 2019 to December 2023) malaria data were retrieved from Public Health Emergency Management data base. Frequencies, percentages and proportions were computed to describe the distribution of case.

**Result:** A total of 149,560 malaria cases were reported from January 2019 to December 2023 in Kaffa zone. Of these, 144,296(96.5%) diagnosed parasitological and 5264(3.5%) clinically. Among the confirmed cases *Plasmodium falciparum* accounted for 87,716(61%) and *Plasmodium vivax* shared 56,580(39%). Across districts case distribution varies from 17-384/10,000 population. The annual parasite incidence increased from 5.1/1000 in 2019 to 6/1000 in 2020, 8.94/1000 in 2021, 25.29/1000 in 2022 and 71.3/1000 in 2023. Malaria transmission in the zone reached to its maximum peak during summer (July-Aug) season and followed by spring (Sep-Nov) season. The zonal malaria case fatality rate was 41/100,000cases.

**Conclusion:** In Kaffa zone the incidence of malaria varies across district with consistently increasing trend of reported cases. *Plasmodium falciparum* was the dominant type of malaria specious in the area. Therefore, prevention and control strategies to avert increasing trends of malaria in Kaffa zone should focus on districts with high incidence rate especially during summer and spring seasons.

**Key words**: Kaffa, Malaria, *Plasmodium falciparum*, surveillance