

Short Communication

A Study of Malaria in Maharashtra

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A B S T R A C T

Gadchiroli District and Mumbai together accounted for 96% of the Malaria cases in Maharashtra till September 2021, and the state reported 9289 cases of the disease during that year till that time. Large scale measures, such as mass drug treatment will need to be taken if it must achieve the target of zero cases of Malaria by the year 2027.

Keywords: Malaria, Maharashtra, API

Introduction

Maharashtra is in the western part of the India. The Arabian Sea lies to its west; to the north are Gujarat and Madhya Pradesh; in the east is Chhattisgarh, and in the south are Karnataka and Andhra Pradesh. The eastern part of the state which includes the Gadchiroli district is covered with forests. In 2011, Maharashtra has a population of 11, 23,72,972 and had a literacy rate of 82.9%.²

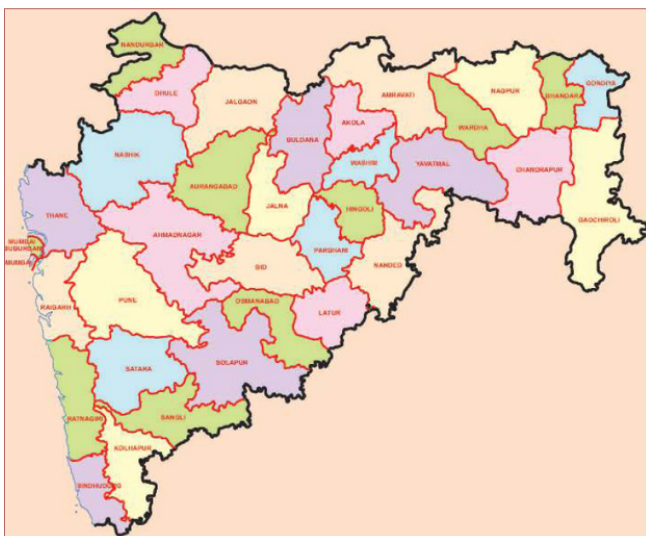


Figure 1. Map of Maharashtra

Source: (1)

Table 1. API of the Districts of Maharashtra State, 2018

S. No.	District	API
1.	Thane	0.15
2.	Palghar	0.05
3.	Raigad	0.13
4.	Ratnagiri	0.05
5.	Gr. Mumbai	0.39
6.	Nashik	0.00
7.	Dhule	0.01
8.	Nandurbar	0.03
9.	Jalgaon	0.00

Source: (3), Continued next Page

Methods

The annual reports of the Malaria Division of the National Centre for Vector-Borne Diseases Control (NCVBDC), pertaining to the years 2017 and 2018 were analyzed in this study. Also, a study was made of the website of the Public Health Department, Government of Maharashtra to look for the latest data on Malaria in the state.

Results

As per the most recent data available on the NCVBDC website (2018), the API for Maharashtra is 0.09.³ The

analysis of data shows that the extent and severity of the problem of malaria in Maharashtra is not the same in all its districts, as is seen in Table 2.

Table 2. API of the Districts of Maharashtra State, 2018 (contd.)

S. No.	District	API
1.	Ahmednagar	0.00
2.	Pune	0.01
3.	Solapur	0.00
4.	Satara	0.03
5.	Kolhapur	0.01
6.	Sangli	0.01
7.	Sindhudurg	0.07
8.	Aurangabad	0.00
9.	Jalna	0.00
10.	Parbhani	0.00
11.	Hingoli	0.00
12.	Latur	0.00
13.	Osmanabad	0.00
14.	Beed	0.00
15.	Nanded	0.00
16.	Akola	0.00
17.	Washim	0.01
18.	Amravati	0.02
19.	Yawatmal	0.00
20.	Buldhana	0.01
21.	Nagpur	0.01
22.	Wardha	0.00
23.	Bhandara	0.01
24.	Gondia	0.21
25.	Chandrapur	0.04
26.	Gadchiroli	2.25
State	Maharashtra	0.09

Source: (3)

Thus, it is clear that among the 35 districts shown in Table 2, cases of malaria were mainly found in Gadchiroli District, NCVBDC website was referred to analyze the trend of API in Gadchiroli in 2017 and 2018. Table 3, shows the results of this analysis.

A study of the website of the Public Health Department, Government. of Maharashtra, revealed that the most recent data on Malaria there pertained to the year 2013, so it was not of much use.⁵ A further web search revealed the

following data on Malaria in Maharashtra from 2019 to 2021.⁶

Out of the total Malaria cases, 56% were from Gadchiroli, 40% were from Mumbai and the remaining 4% were from the rest of the state.⁶

Table 3. API of Gadchiroli District, 2017 and 2018

District	Year	
	2017	2018
Gadchiroli	4.82	2.25

Table 4. Number of Malaria Cases in Maharashtra, 2019 to 2021

Year	No. of Malaria Cases
2019	8866
2020	15215
2021 (Till September)	9289

Discussion

WHO initiated a Global Technical Strategy in 2015, for the elimination of Malaria during 2016-2030. It was updated in the year 2021. On the basis of this, a framework was adopted by the Government of India in the year 2016, for malaria elimination in the country during 2016-2030.^{7,8}

This initiative is aimed at achieving the status of no Malaria cases by 2027. Three years after this, we may receive a Malaria-free certification from the WHO. The midpoint of this duration (2016-2027) has already been reached, and hopefully, this aim will accomplished in the specified time.

Conclusion

Although Maharashtra did not reach zero Malaria cases in 2021, it did reach an API of 0.09 in 2018. Therefore, it is a good standing for being a state in the country close to being able to achieve near-elimination goals provided it takes targeted action such as mass drug treatment. Chhattisgarh is making great efforts through its mass drug treatment program to achieve a lower API in it's high-endemic districts.⁹ A similar strategy has been proposed for Jharkhand also.¹⁰

Conflict of Interest: None

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