



A Study of Malaria in Manipur State

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Author's contribution

The sole author designed, analyzed, interpreted and prepared the manuscript.

Short Communication

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ABSTRACT

Background: Malaria still occurs in Manipur which is a state in the north-eastern part of India.
Materials and Methods: For the present study, Manipur's Malaria incidence and its strategic elimination program was taken into consideration based on all the available online data.
Results: The Annual Parasite Incidence (API) of Malaria for Manipur had been observed to be decreasing from 2012 till 2018 when it reached 0.00.
Conclusions: Although Manipur did not reach zero Malaria cases in 2018, it is a good candidate for being the first state or union territory in the country to be able to achieve near-elimination goals since no other state or union territory achieved zero API in 2018.

Keywords: Malaria; annual parasite incidence; health policy administration.

1. INTRODUCTION

Manipur is in the northeastern part of India. It is bordered by Myanmar on the east and south-east and Assam, Mizoram and Nagaland in the west, south-west and north respectively.

2. MATERIALS AND METHODS

The study design included analysis of the annual report of the Malaria Division of the National

Centre for Vector-Borne Diseases Control (NCVBDC) for 2018 and a study of the website of the National Health Mission, Manipur.

3. RESULTS

According to the most recent data available on the NCVBDC website (data for 2018), the Annual Parasite Incidence (API) for Manipur was 0.00 [2]. It would be useful to see where Manipur stood in comparison to the rest of India Table 1.

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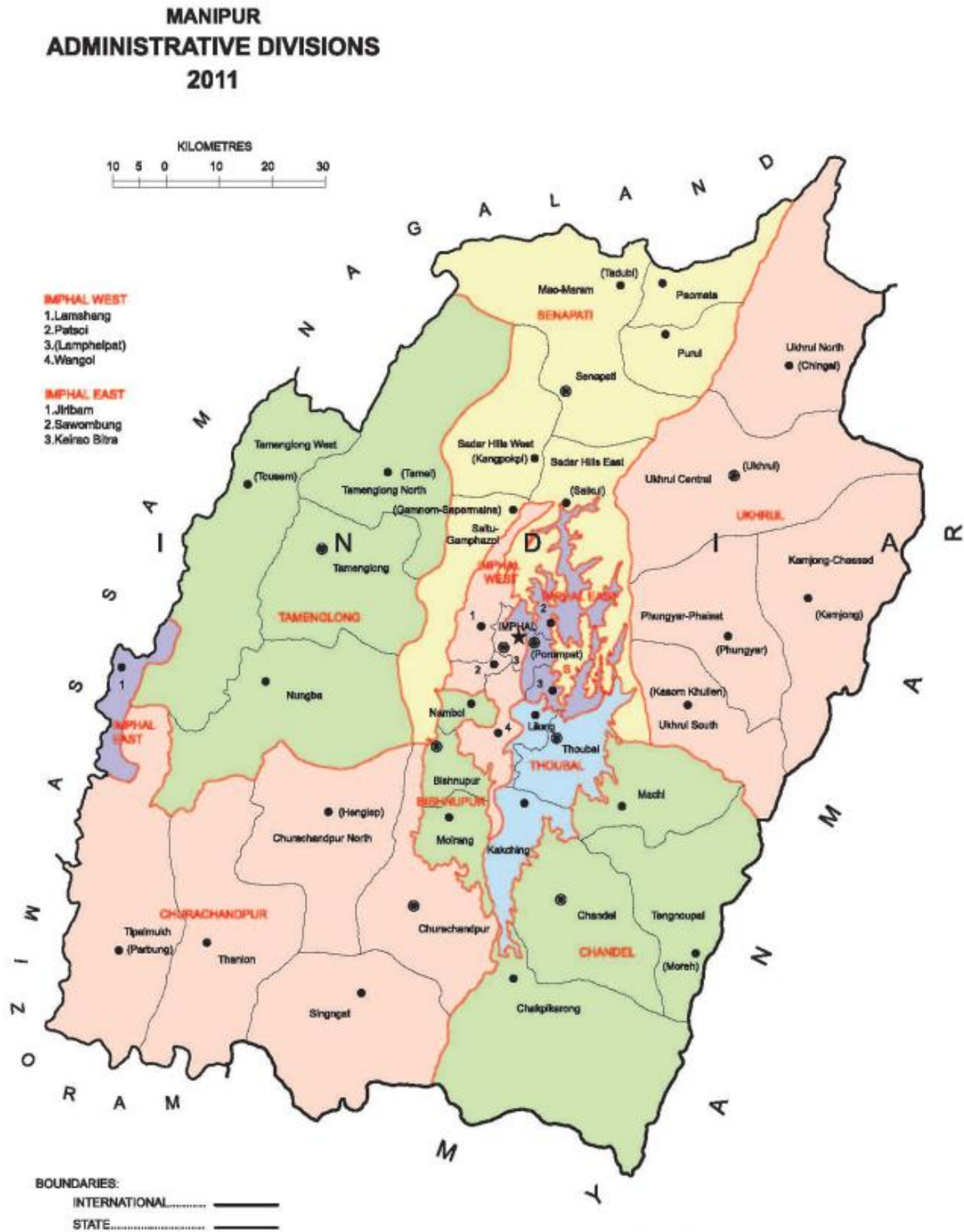


Fig. 1. Map of Manipur
(Source: [1])

Table 1. API of States and U.T., 2018 (in decreasing order)

S. No.	State/U.T.	API
1	Mizoram	3.58
2	Tripura	3.23
3	Chhattisgarh	2.63
4	Meghalaya	1.83
5	Jharkhand	1.48
6	Odisha	1.48
7	A & N Islands	0.56
8	Dadra & Nagar Haveli	0.46
9	Arunachal Pr.	0.39
10	Uttar Pr.	0.38
11	Gujarat	0.33
12	Madhya Pr.	0.27
13	W. Bengal	0.27
14	Goa	0.24
15	Andhra Pradesh	0.12
16	Assam	0.11
17	Haryana	0.11
18	Maharashtra	0.09
19	Karnataka	0.08
20	Lakshadweep Islands	0.08
21	Rajasthan	0.07
22	Daman & Diu	0.07
23	Nagaland	0.06
24	Tamil Nadu	0.05
25	Telangana	0.05
26	Uttarakhand	0.04
27	Chandigarh	0.04
28	Puducherry	0.04

Table 2. API of States and U.T., 2018 (contd.)

S. No.	State / U.T.	API
29	Jammu & Kashmir	0.03
30	Kerala	0.03
31	Sikkim	0.03
32	Himachal Pradesh	0.02
33	Punjab	0.02
34	Delhi	0.02
35	Bihar	0.01
36	Manipur	0.00

(Source: [2])

Table 3. API of the Districts of Manipur State, 2018

S. No.	District	API
1	Bishnupur	0.00
2	Chandel	0.00
3	Moreh	0.06
4	Churchandpur	0.03
5	Imphal East	0.00
6	Jiribam S/D	0.02
7	Imphal West	0.00
8	Imphal Urban	0.00
9	Kangpokpi S/D	0.00

S. No.	District	API
10	Senapati	0.00
11	Tamenglong	0.00
12	Thoubal	0.00
13	Ukhul	0.00
STATE	MANIPUR	0.00

(Source: [2])

Table 4. API of Manipur, 2012 to 2017

State	Year					
	2012	2013	2014	2015	2016	2017
Manipur	0.10	0.05	0.05	0.07	0.04	0.03

(Source: [2 and 3])

So, it is seen that out of the thirty-six states and union territories of India, the API of Malaria was the lowest in Manipur during 2018.

By reviewing the data for Manipur state, it is seen that Malaria is not absent from all the districts; there are some districts where a few cases of Malaria do occur as can be seen from the following information [2] Table 3.

So, it is seen that out of the thirteen districts, Malaria is present in a small proportion in Moreh, Churchandpur and Jiribam S/D districts.

It may be further useful to study what was the trend of the APIs in Manipur over the years. For this, the website of the National Health Mission, Manipur was referred to and the following findings were observed Table 4.

4. DISCUSSION

It is observed that there has been a decrease in API over the years between 2012 and 2017 with a small increase in 2015 before coming down to 0.00 in 2018. Whether this trend continued into 2019, 2020 and 2021 is unknown because the APIs for 2019 to 2021 have not been published yet by the National Health Mission, Manipur.

The Government of India, in 2016, adopted a framework for Malaria Elimination in India covering the period 2016 – 2030 [4]. This was based on WHO’s Global Technical Strategy for Malaria, covering the same period, adopted in 2015 and updated in 2021 [5].

The aim is to reach zero Malaria cases by 2027 and then wait for three years before WHO can grant Malaria-free status certification. It is already

the beginning of 2023 and India is about to reach the halfway mark of this period from 2016 to 2027.

However, in June 2020, 3 persons in Manipur (1 from Churchandpur district and 2 from Noney district) died from Malaria while 12 more (7 from Churchandpur district and 5 from Noney district) were reported to be having the disease [6].

In October 2022, 3 persons in Tamenglong district of Manipur died from suspected Malaria. Many more were sick and suspected to be suffering from the disease [7].

5. CONCLUSION

Although Manipur did not reach zero Malaria cases in 2018, it did reach zero API that year. Therefore, it is a good candidate for being the first state or union territory in the country close to being able to achieve near-elimination goals since no other state or union territory achieved zero API in 2018.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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