



Malaria in Punjab, State of India: A Brief Overview

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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: The current status of Malaria in Punjab state of India is not known.

Objectives: To find out the parameters of Malaria in Punjab state of India.

Methods: By examining reports prepared by the National Center for Vector Borne Diseases Control (NCVBDC) and an internet search.

Results: It was observed that the Annual Parasite Incidence (API) of Malaria in Punjab came down to low level of 0.02 in 2018 and that there were only 71 Malaria cases during 2021.

Conclusions: Punjab state of India is very close to achieving Malaria-elimination goals.

Keywords: Malaria; Punjab; API; NCVBDC; WHO.

1. INTRODUCTION

"Malaria is globally the largest vector-borne disease with over 200 million clinical cases occurring every year. Malaria has been associated with 0.6 million deaths among children and pregnant women annually. The world is currently not on track to achieve the milestones of the 2020 WHO Global Technical Strategy (GTS) of Malaria 2016–2030. The endemicity of Malaria varies in different

provinces and even in different cities having variable climates" [7]. "Punjab State has semi-urban areas, rich irrigated lands and good monsoon conditions that facilitate prolific growth of mosquitoes and transmission of Malaria, Dengue and Chikungunya. Due to growing population, unplanned urbanization, lack of awareness about the diseases and increasing number of slums in urban areas, the incidence of mosquito borne diseases is increasing simultaneously" [8].

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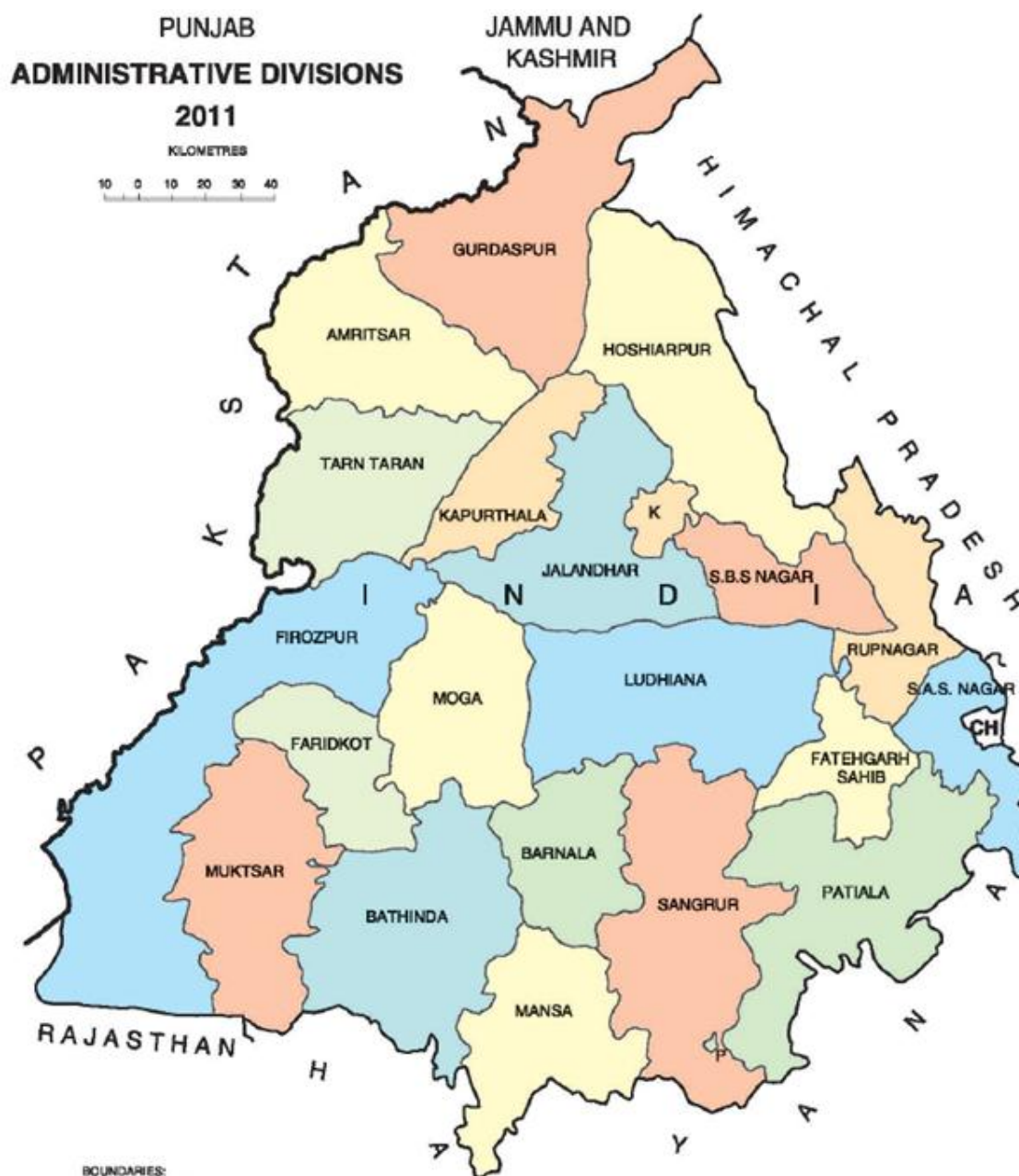


Fig. 1. Map of Punjab state of India [Source: (1)]

Punjab lies in the northern part of India. It is bounded by Jammu & Kashmir in the north, Rajasthan and Haryana in the south, Pakistan in the west and Himachal Pradesh and Chandigarh in the east (Fig. 1).

2. METHODOLOGY

This included examination of the reports of the NCVBDC and an internet search.

3. RESULTS

The API for Punjab in 2018 was 0.02 [2]. The API from 2017 can be seen from the following table (Table 1).

Thus, it is seen that the API in 2018 was slightly less than that seen in 2017.

Table 1. API of Punjab State of India, 2017 and 2018

State	Year	
	2017	2018
Punjab	.03	.02

[Sources:(2) and (3)]

In 2018, the API was not uniform throughout the state but varied between the districts:

Table 2. API of the Districts of Punjab State of India, 2018

Amritsar	.00
Barnala	.00
Bhatinda	.03
Faridkot	.03
Fatehgarh Sahib	.01
Fazilka	.01
Ferozepur	.01
Gurdaspur	.01
Hoshiarpur	.07
Jalandhar	.01
Kapurthala	.00
Ludhiana	.01
Mansa	.16
Moga	.00
Pathankot	.01
Patiala	.01
Rupnagar	.00
S.A.S. Nagar	.07
Nawanshahr (S.B.S. Nagar)	.01
Sangrur	.01
Muktsar	.04
Tarn Taran	.01

[Source:(2)]

Table 3. Data on Malaria Cases in Punjab State of India, 2019 to 2022

Reference Period	Number of Malaria Cases
2019	1140
2020	109
2021	71
2022 (until 25 th April)	0

[Source: (4)]

4. DISCUSSION

Beginning in 2017, there has been a decline in the incidence of Malaria in Punjab state of India.

In 2016, the Government of India adopted a framework for Malaria Elimination in India covering the period 2016 – 2030 [5]. This was based on WHO's Global Technical Strategy for Malaria covering the period 2016 – 2030 which was adopted in 2015 [6].

5. CONCLUSION

Punjab reached a figure of 71 cases during 2021 and stands a good chance to achieve Malaria elimination goals.

CONSENT AND ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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