

## Outbreak of Dengue and Malaria in Maharashtra, India and Globe

Ahirrao IS

S.S.V.P.S.L.K.Dr. P. R. Ghogrey Science College, Dhule-424001

Email: [drisahirrao2468@gmail.com](mailto:drisahirrao2468@gmail.com)

### Manuscript details:

Available online on  
<http://www.ijlsci.in>

ISSN: 2320-964X (Online)  
ISSN: 2320-7817 (Print)

**Editor: Dr. Arvind Chavhan**

### Cite this article as:

Ahirrao IS (2019) Outbreak of Dengue and Malaria in Maharashtra, India and Globe, *Int. J. of Life Sciences*, Special Issue, A13: 310-314.

**Copyright:** © Author, This is an open access article under the terms of the Creative Commons Attribution-Non-Commercial - No Derives License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

### ABSTRACT

Dengue is by transmitted by viruses through the bite of tiger – mosquitoes. Dengue is also known as Dandy-fever. In India Globe and all over Maharashtra. Its spreads through the bite of female anopheline *Aedes aegypti* mosquitoes. Malaria is also mosquito borne infectious in disease of humans and other animals caused by vector transmitting a micro organism *Plasmodium*, *P. vivax*, *P. ovale*, *P. Malariae*, *P. falciparum* all these species are fatal to the if malaria is spread on large scale while the zoonotic species *P. knowlesi*, is prevalent in South-East Asia, causes malaria in macaques but can also cause severe infections in humans. WHO (2010) estimated that there were 216 million documented cases of malaria. Around 655,000 people died from the disease near about 2000 per day. Mostly children in Africa number may be higher, as precise are unavailable in many rural areas which are undocumented. Malaria Action Programme – 1995 – Govt. of India Guidelines to Control Malaria. Ministry of Health – (M.S.) in Mumbai – About 39 cases were recorded 2 – were died. This is a Govt. Hospital figures Private is not recorded.

National Malaria Control Programme – 1953 – Govt. of India for malaria eradication. Communicable disease control programmes in India.” Dr. Atanu Sarkar, M.B.B.S., MCH (JNU), Doctor Fellow (JNU), Program Officer, Catholic Health Assn. of India 1<sup>st</sup> floor, NIIT centre, 7 Ansari Road, Daryaganj New – Delhi – 110002. Health – action – Vol. 13-12 Dec. 2000. District malaria Officer, Nandurbar, year 2003-04.

**Key words:** Dengue, Malaria, *Aedes aegypti*, Dhule and Nandurbar Districts.

### INTRODUCTION

Dengue is by transmitted by viruses through the bite of tiger – mosquitoes *Aedes aegypti*. Incubation period is 5-7 days and illness lasts about for 2-7 days. It causes fever, headache and muscle and joint pains in patients of dengue. *Anopheles stephensi* (Liston), *Aedes aegypti* (Lin) and *Culex quinquefasciatus* (Say) are vectors of Malaria (Diptera-Culicidae).

### Geographic Distribution :

This is found in India, Asian Countries, Colder Country Queensland, Georgia and many other countries of the world or globe.

### Symptoms of Dengue :-

1. Fever, headache and pain in muscles and joints.
2. Patient's may suffer swollen glands and rashes.
3. Acute dengue fever could be bleeding gums, eye pain, palms turning red.
4. The above symptoms with sign of circulatory failure, manifested by rapid and weak pulse and restlessness, could mean the patient is going into shock-syndrome.

### Symptoms of Malaria :-

1. Central nervous system – Headache
2. Systemic – Fever
3. Muscular – Fatigue and pain
4. Back – Pain
5. Skin – Chills and Sweating
6. Respiratory – Dry cough
7. Spleen – Enlargement
8. Stomach – Nausea and Vomiting

The signs and symptoms of malaria typically being 8-25 days following infection; [2] however, symptoms may occur later in those who have taken antimalarial medications as prevention. [3] Initial manifestations of the diseases – common to all malaria species – are similar to flu-like symptoms. [4] The presentation may include headache, fever, shivering, arthralgia (joint pain) vomiting, hemolytic anemia jaundice, hemoglobinuria, retinal damage, [5] and convulsions. Approximately 30% of people however will no longer have a fever upon presenting to a health care facility. [3]

### Preventive – measures :-

1. Keep mosquitoes away use mosquito nets.
2. Prevent mosquito – breeding, filling up of the ponds, lakes, puddles etc. with soil.
3. Avoid collection of dirty or fresh water.
4. Spray / fumigate the breeding places of mosquito with kerosene or with hydrogen cyanides.

### Medical prophylaxis :-

- 1) Do not take paracetamols to treat fever, visit a specialist.
- 2) Avoid going in for intravenous therapy before the patient shows signs of hemorrhage / bleeding.
- 3) Avoid blood transfusion unless the patient suffers severe bleeding.
- 4) Avoid using steroids.

**Health- education:** - to increase awareness among community of people. So as to enlist their active participation and co-operation for implementing control- activities, the health education activities were

intensified in school and colleges and society of peoples, municipal corporations, slum areas etc.

It is reported that the civic body has upped surveillance to tackle 56% increase in dengue cases as compared to last year. More than 300 people in and around city of Mumbai have been affected by dengue in month's time. Dengue claimed 3- lives in city after monsoon began. Health department and city Executive health officer Dr. Arun Bamne visiting the place areas like Prabhadevi, Kurla, Haji Ali and By culla, Yash Chopra's house and studio in Goregaon.

The civic body was aware of the rise in cases and was keeping a close watch. All private practitioners as well as hospitals have been told to inform the epidemiology cell of the Bombay Municipal Corporation, about any dengue case. For the current month, 143 confirmed dengue cases have been reported in August and September respectively.

Materials and Methods – Reports from various cities, the civic body said the machinery that, was used for malaria surveillance has been pressed to look into dengue situation as well. They have also given attention towards malaria. Only here diagnosis cannot be alone at our levels as it is different from malaria diagnosis.

In malarial cases, the civic body collects blood samples on glass slides and carries out tests in its own setup.

Physicians from across the city claimed they are treating at least 2 or 3 cases in a day and that it was definitely not restricted to island city wards. Intersivist Dr. Ganesh Menon from Andheri's criticare Hospital said that they have admitting at least four dengue patients at least four dengue patients everyday. We have been seeing more cases since the last 2-3 weeks and patienlarly after rains have stopped. Most of cases are from Versova and Santa Cruz said Dr. Menon.

A doctor attached to the civic run Cooper Hospital said they are treating quite a few dengue cases in the department. "We are seeing case quite regularly. But, not many of them have required admission so far". He said A doctor who runs a clinic in Andheri said he has treated over 40 cases in the last month and most of them has developed liner problems. Bamne however, said there was no need to panic as better surveillance is at the bottom of more cases being reported.

\*Only one private diagnostic lab has been included here. September - 2012:-

Dhule city and Tahsil - Reports :-

According to Government statistical data from Hospital, in city 13 cases were recorded while in rural areas 43 cases were recorded.

District civil Hospital and Primary health centers reports 5<sup>th</sup> September to 25<sup>th</sup> October 2012.

- 1) Dhule rural - PHC : Nane - 5, Ner - 6, Behed - 13, Wadi Budruk - 11, Tarwade - 7, Kokale-3, Total - 45 cases of Dengue had been reported.
- 2) Dhule Municipal corporation hospital has - 13 cases of Dengue.

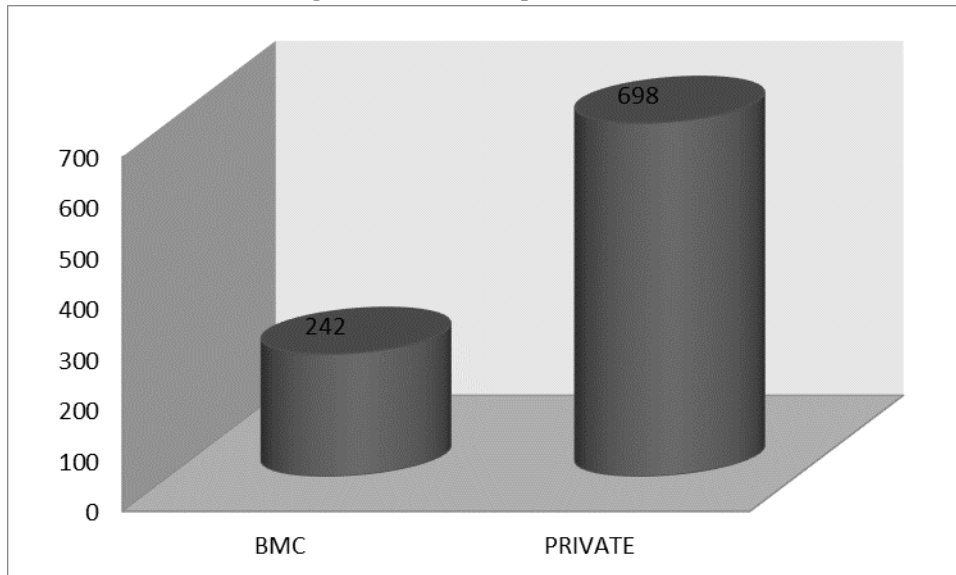
3) As well as Dhule city child hospitals as private hospitals records are as below

|                                 |   |          |
|---------------------------------|---|----------|
| a) Hari Chhaya child hospital   | : | 20       |
| b) Chirantan Child hospital     | : | 25       |
| c) Meher Child care hospital    | : | 15 to 20 |
| d) Akshdeep child care hospital | : | 09       |
| e) Keemay child care hospital   | : | 10       |
| f) Chirayu child care hospital  | : | 05       |
| Total                           | : | 89       |

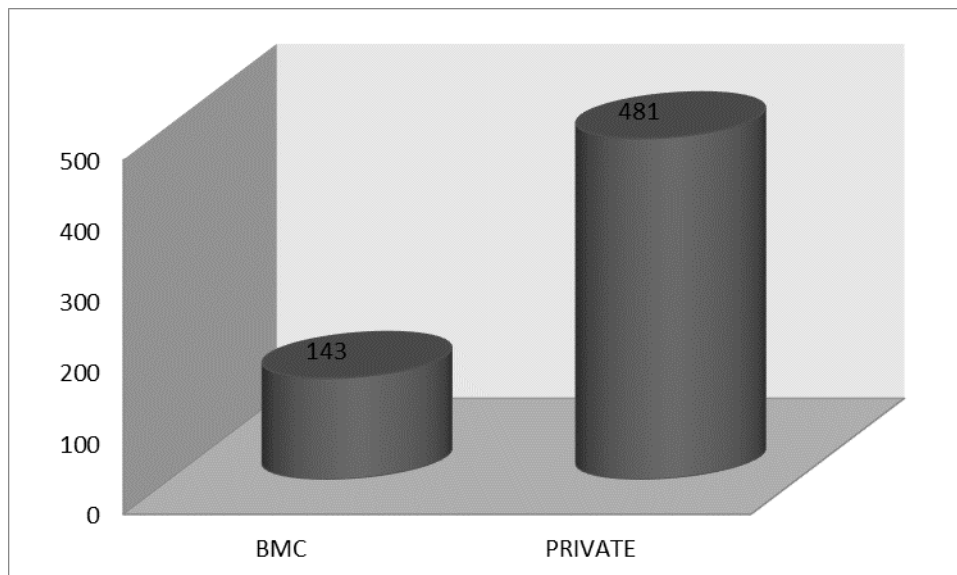
Number of Cases during Month of September to October 2012

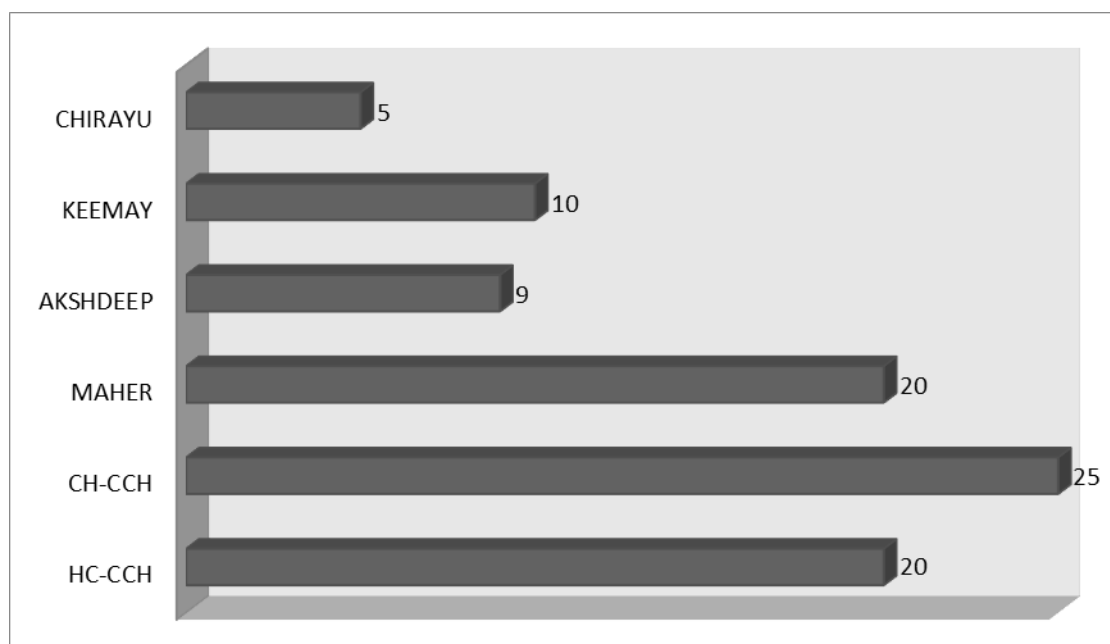
**Table**

**Dengue Statistics:- September - 2012**



**October - 2012**





## DISCUSSION

Mosquitoes aedes and culex are belongs to order diptera. These species known to transmit viral encephalitis, dengue, filiasiasis, fever etc. Due to less rainfall, there I drought like situation, tension due to earth -quacks etc. Man's immunity and power of tolerance is less. There lation of wastes water inn ponds and dirt etc (140 C to 320 c) there is peak population of mosquitoes. Culex and aedes mosquito survive on blood and lays eggs in dirty water ponds. Cattle, Buffallows, pig's blood is snaked by aedes and culex. Aedes viruses number increases due to fite of aedes weak immune peoples are get infected spreads these disease like Eneephalitis, dengue Elephantiasis, fever, etc. in 8-10 days.

In certain people it may takes 10-40 days time for spreading viral eneephalitis, Immunoglobulin or antibodies level decreases such weak people are easily susceptible to this disease. Some people shows allergic-symptoms.

In the globe there are about 20-30 million people are living in hot temperate zone in which such people are very severly infected by dengue, viral encephalitis, malaria etc.

There are 3000 species of mosquitoes in the world. Mosquitoes that spreads diseases mostly people organisms live in hot, moist places near the equator. Mosquitoes are around this world for about as hundred

million years of jurassic period due to mosquitoes finding their mates keeps reproducing. The mother cannot protect it's young ones after birth. Dr. Atanne Sarkar (2000), DMO Nandurbar (2003-2004), Health action (2000) MAP (1999), NMCPE (1953), Tanushreetal ( 2009) Ahirrao etc (1996-2008). Umar et (2008) etc given their opinion according to environmental conditions inn which they grow and causing infections to man and his domestic animals through various causative agents like protoanparasites, insect, Viruces etc.

## CONCLUSION

Mosquitoes are therefore, number one enemy of human and his domesticated animal from ancient times. They cause huge economic loss to various contries and man on medical grounds.

**Acknowledgement :-** I am very much thank to my Guide, Principial, Pratap College, Amalner. Principial, Dr. M.V. Patil, Management of S.S.V.P.S's Dr.P.R.Ghogrey Science College, Dhule

**Conflicts of interest:** The authors stated that no conflicts of interest.

## References

- "Communicable disease control programmes in India".  
 Dr. Atanu Sarkar, M.B.B.S., MCH (JNU), Doctoral Fellow (JNU), Program Officer, Catholic Health Assn. of India 1<sup>st</sup> floor, NIIT centre, 7 Ansari

Road, Daryaganj New- Delhi- 110002. Health - Action Vol.12-13 Dec. 2000.

District malaria Officer, Nandurbar, year 2003-04.

Journal of Health -action Vol. 13. NO. 12 Dec. 2000 (ISSN No. 0970-471x)

Malaria action programme - 1995 - Govt. of india Guidelines to control malaria.

Ministry of Health - (M.S) in Mumbai - About 39 cases were recorded 2 - were died. This is a Govt. Hospital figures Private is not recorded.

National Malaria Control Programme - 1953 - Govt. of India for malaria eradication.

Effect of Medium pH of some aspects of life of culex fatigans (Diptera : Culicidae) - Tannu Shree1 and Ajit Kumar Sinha2 - Int. J. Mendel, Vol. 26 (1-4), 55-56, 2009.

The effect of Medium pH on the larvae of Aedes aegypti and culex quinquefasciatus. International Journal of Pure and Applied Sciences - Umar A. and Don Pedro, K.N. 2008. Vol. 2 : 58-62.

---

© 2018 | Published by IJLSCI

**Submit your manuscript to a IJLSCI journal and benefit from:**

- ✓ Convenient online submission
- ✓ Rigorous peer review
- ✓ Immediate publication on acceptance
- ✓ Open access: articles freely available online
- ✓ High visibility within the field

---

Email your next manuscript to IRJSE  
: [editorirjse@gmail.com](mailto:editorirjse@gmail.com)

---