

Surveillance of Mumps Cases in Lakhimpur District, Assam and Importance of MMR Vaccine

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ABSTRACT

Objective: The study has been commenced to observe the incidence of Mumps cases in Chauldhuwa area under Boginodi block of Lakhimpur, Assam. So, active surveillance for detection of Mumps cases have been done in the particular area. **Method:** The study site was selected based on the previous history of Mumps cases. Those patient's clinical sign and symptoms in accordance with the standard case definition of Mumps are included for the study and diagnosed as per protocol. **Result:** A total of 28 numbers of Mumps cases were reported from Chauldhuwa area under Boginodi block in Lakhimpur, Assam at a time period of two months. Most of them (83%) were children. Maximum cases were observed from Dhanpur area. **Conclusion:** This result concluded that Measles, Mumps and Rubella (MMR) vaccine is essential in this part of Assam. At the same time, health education regarding hygiene, sanitation and isolation of cases is also necessary to reduce further spreading of Mumps cases.

Keywords: Boginodi, Lakhimpur, MMR, Mumps.

INTRODUCTION

Mumps is well-known as a common childhood disease. It is a very contagious and spreads easily in highly populated areas during a very short term period. The symptoms include swelling of cheeks and jaw due to the inflammation in the parotid glands, salivary glands and other epithelial tissues. Mumps is preventable by vaccination. It is still a major health problem in India. A very limited study has been carried out in this aspect. The epidemiology of Mumps has not been investigated in Assam,

in the past. Hence, a study was carried out in Chauldhuwa area under Boginodi block in Lakhimpur, Assam.

MATERIALS AND METHODS

As per 2011 census, the total population coverage in Chauldhuwa Mini PHC area was 6594. Patients attending in Chauldhuwa MPHC having above mentioned complained were included for the study. The study was conducted for a period of 2 months, from September to October,

2014. Patients of all age groups and both sexes were included.

RESULTS AND DISCUSSION

After the active surveillance in Chauldhuwa area, a total of 28 numbers of Mumps cases were identified. It has been observed that almost 83% (23/28) Mumps cases were occurred among the people of below fifteen years of age groups and the remaining 17% (5/28) Mumps cases were seen among adult age groups (Figure 1). The study has shown resemblance with earlier findings.¹

Particular attention should be given on children's for improving health and hygiene practices. Such strategies are helpful to reduce the incidence of Mumps cases. Beside this, policy evaluation and institutional improvement is also essential step to prevent the transmission.

Females were found more vulnerable for the infection as compared to the male. In opposition, few earlier results revealed that males are mostly affected.² The initial case of Mumps was noticed on 22nd September, 2014 in Ghagar nagar village area. After the occurrence of initial case, few cases were also reported from the nearby village area. Later on it was spread to Jurhotia Katorichapori, Rupohi Mishing, Dhalbasti, Ahatguri, Basantipur and Dhanpur area (Figure 2). Most cases were observed from Dhanpur area.

Previous studies have indicated that incidence of Mumps infection occurs during January to March each year.² However, in our study we observed that the incidence reached at peak level on 13th October, 2014 and then

declined slowly (Figure 3). Such type of sharp increase in number of Mumps cases have not been observed previously from Lakhimpur, Assam.

Measles and Rubella outbreak has already been taken place in Lakhimpur and nearby district Dhemaji in previous time.^{3,4} Keeping in view the above reason, implementation of trivalent Measles, Mumps and Rubella (MMR) vaccine is necessary in this part of Assam. At present, the National Immunization Programme used only Measles vaccine instead of MMR vaccine. So, in this aspect immunization against Mumps and Rubella is also very much essential.

CONCLUSION

Strengthening the surveillance system in other areas of Assam will helpful to find out the actual numbers of Mumps cases. So that, one can asks for introduction of MMR vaccine in this region of India.

REFERENCES

1. John TJ. An outbreak of mumps in Thiruvananthapuram district. *Indian Pediatrics.*, 2004; 41:298-300.
2. Ghatge ST, Kakade GM. An outbreak of mumps meningoencephalitis in Sangli district. *Indian Pediatrics.*, 2007; 44 : 235
3. Sharma J, Malakar M, Das JN. Outbreak of Rubella cases in Lakhimpur district of Assam. *Entomology and Applied Science Letters.*, 2014; 1 (3):49-52.
4. Sharma J, Baruah MK. Incidence of suspected measles and chickenpox cases in Dhemaji district, Assam. *Journal of Zoological and Bioscience Research.*, 2014; 1 (3): 25-27.

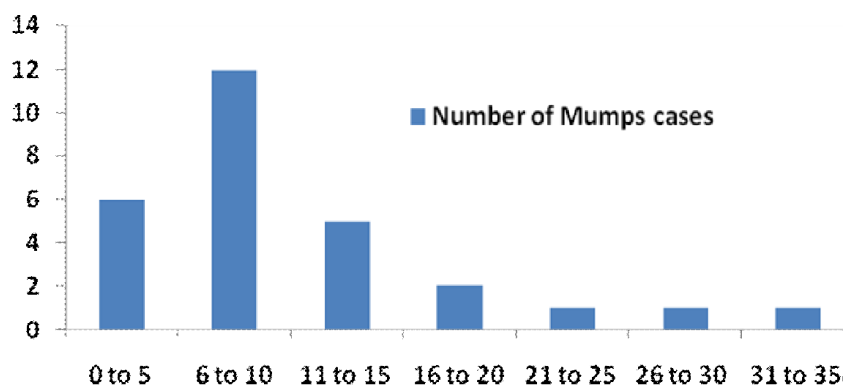


Figure 1. Age wise numbers of Mumps cases (In X axis: Age groups and in Y axis: Number of Mumps cases)

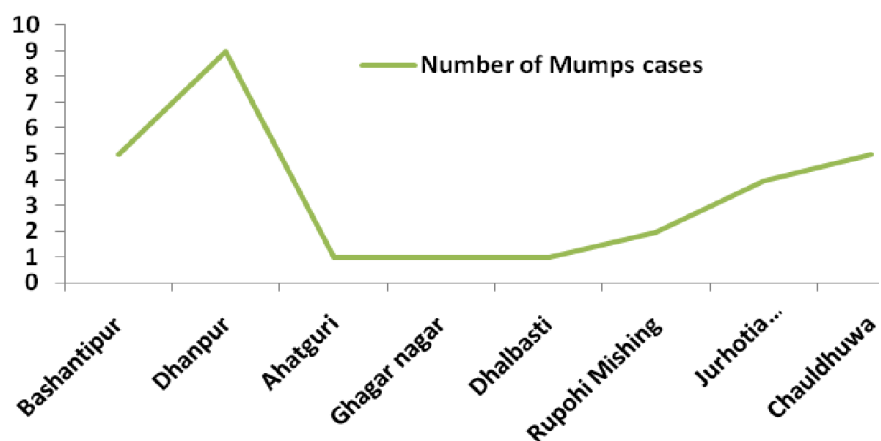


Figure 2. Numbers of Mumps cases in different areas in Lakhimpur, Assam (In X axis: study areas and in Y axis: Number of Mumps cases)

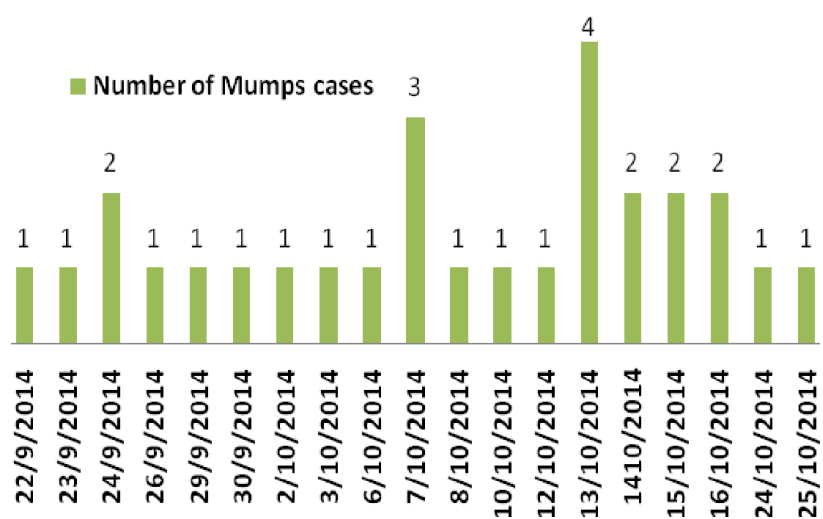


Figure 3. Numbers of Mumps cases and date of onset (Date of onset in X axis and Number of Mumps cases in Y axis)