ABSTRACT

Objective: A study was carried out with an objective to find out the incidence of typhoid cases in Lakhimpur district of Assam for a period from 2013 to 2015.

Methods: All government as well as private hospital laboratories was included for the study. Widal/Typhidot test assays were used for laboratory confirmation of typhoid cases in all reporting units.

Results: A total of 3734 typhoid positive cases were observed in 36 months. The average incidence was 104 cases per month with a value of standard deviation 70.261 and standard error of mean 11.710. The two-tailed p value was found as <0.0001, considered extremely significant. The incidence of typhoid cases was found very high in 2013 as compared to 2014 and 2015. Most of the typhoid positive cases were detected from North Lakhimpur civil hospital and Nowboicha area. The incidence rate for typhoid cases was found maximum in Nowboicha and Dhakuakhana area. The people were having poor knowledge on proper hygiene habit and sanitation. In affected places, most of the wells/tube wells are found as without brim or platform.

Conclusion: A special class should be taken in every school on health seeking behaviors thorough which one can expect that the entire community will have gain knowledge on different diseases and how to get rid of such diseases.

Key words: Incidence, Lakhimpur, Nowboicha, Typhoid, Widal

INTRODUCTION

Typhoid is a common disease in India1,2. Children are most commonly affected3,4. It is prevalent in rural areas as compared to the urban settings5,6. The disease occurs due to the poor hygiene and sanitary condition. The clinical symptoms of typhoid cases are fever, headaches, abdominal pain, body rashes, terry stool, weakness, poor appetite, lethargy etc. Usually, typhoid fever causes diarrhea and a rash. Salmonella typhi is the major causative agent for typhoid infection7. Any patients may be infected with typhoid fever by the use of contaminated water as well as food substances. After eating any food substances or water contaminated with such type of bacteria, it enters into the blood stream through intestine. Later on, it goes to the liver, spleen and other parts of the body through blood circulation system. Different diagnostic techniques are available for confirmation of Salmonella typhi. Nowadays, widal/typhidot test assays are widely used for laboratory confirmation of typhoid cases as these tests are easy to perform and less time consuming. Typhoid cases are prevalent in all over the state of Assam. Lakhimpur district is also vulnerable for typhoid infection8. According to previous studies, a significant numbers of typhoid cases were detected in different areas of Lakhimpur, Assam9. Hence, the present study has been undertaken to find out the incidence of typhoid cases in different areas of Lakhimpur, Assam.

MATERIALS AND METHODS

The objective of the study was to comprehend the current scenario of typhoid incidence in Lakhimpur, Assam. The study was undertaken for a period of 3 years (2013 to 2015). All the government as well as private hospital laboratories were included for the study. In all laboratories, widal tests as well as typhidot test assays were used for confirmation of typhoid cases. Laboratory reports from all reporting units were obtained in weekly basis on every Monday. After obtaining all laboratory reports of typhoid positive cases, the reports were compiled on monthly basis and then analyzed in terms of time, place and person. The incidence rate for typhoid disease was calculated in terms of six block public health centers (BPHC). However, due to unsteady population size under private hospitals and district civil hospital, the incidence rate was not calculated for such health institutions. The following statistical formal was used for calculation of incidence rate.
CONCLUSION

Typhoid cases are prevalent in Nowboicha and Dhakuakhana areas. During the field visit to mostly affected areas, mugga wells were observed without any unprotected brim or lid. Incidence rate for typhoid fever was most prevalent among people having habit of poor sanitation and hygienic. During the field visit to mostly affected areas, many unprotected mugga wells were observed without any lid or brim. During the field visit, it was observed that, a special typhoid disease by gaining basic knowledge on such diseases. For this reason, it is very important to reduce the incidence as well as father transmission of such diseases.

Typhoid positive cases

Figure 2: Area wise positive cases in Labhimpur (in terms of month)

Figure 3: Incidence rate of typhoid positive cases in different blocks of Labhimpur, Assam.

REFERENCES


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