Scourge of Monsoon-Leptospirosis

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Background and Rationale
A zoonotic disease which caused a lot of fantods in the near past, especially in Kerala. With long monsoons and frequent flood our state serves as an ideal place for its transmission. Leptospirosis is a bacterial infection caused by certain members of the genus Leptospira. Mostly who develop a leptospirosis infection gets only mild symptoms. In a minority of infected persons, it develops into the dreaded Weill’s disease. Incubation period is usually one to two weeks. Symptoms include: calf muscle pain, fever, diarrhea etc. In view of this our study was conducted in Sree Gokulam Medical College and Research Foundation, Kerala.

Methodology
We conducted a Retrospective observational study. The 190 blood samples were collected from our hospital suspected of having leptospirosis during the period of January to October of 2019 from patients residing from rural areas of Trivandrum.

The blood samples were collected & tested for leptospirosis specific IgM antibodies by ELISA. We persuaded case sheets, discharge summaries and microbial test results of the study subjects with the help of infection control department of the institution.

Result
Out of the 190 suspected cases, 23 were IgM ELISA positive for leptospirosis in leptospirosis reported areas from January to October 2019 and maximum cases reported during the monsoon floods, risk factors include:
Inadequate prophylaxis
Water stagnation
Heavy Monsoon
Uncontrollable rodents.

Among this only 23 of them were provided with prophylactic measures (12%). Among the 23 affected, 19 of them had rodent disturbances (82.6%) and 15 of the affected complaints of stagnant water in the surrounding (65.2%).

Discussion
In the study LEPTOSPIROSIS IN URBAN SLUMS by Karande S Kulkarni – leptospirosis was frequent in urban slum population
In the study by Mark Moosley- AN INFECTIOUS WATER BORNE leptospirosis is foundmost common among farmers and occupation associated with water and animal contact.

Conclusion
Prevalence of leptospirosis is seen maximum during monsoon season. Among the suspected cases 87.5% didn't prophylactic measures during heavy monsoon and floods though all the affected cases spread of leptospirosis through different Medias.
This can be tackled by
Social awareness-key to proper and early diagnosis
Screening of fever with Unknown origin
Rodent control programs
Cleaning of river banks and sewage systems to minimize flood risks
Protective clothing/footwear in soil and water

References
1. Karande S Kulkarni-LEPTOSPIROSIS IN URBAN SLUMS
2. Mark Moosley-AN INFECTIOUS EMERGING WATER BORNE
3. ZOONOSIS OF GLOBAL SIGNIFICANCE -Mahindra Pal