
PROMOTING PUBLIC HEALTH SAFETY IN RECREATIONAL PARKS: A CASE STUDY OF LEPTOSPIROSIS

Nor Syahida Syakira Md Nor
Kulai District Health Office, Johor

Afiqah Syamimi Masrani
Kulai District Health Office, Johor

Mohd Anwar Shahrir Ahmad
Kulai District Health Office, Johor

ABSTRACT

INTRODUCTION: Leptospirosis is a zoonotic disease caused by the spirochete Leptospira species. It is mostly associated with recreational and non-recreational water activities where the disease is transmitted directly or indirectly following contact with water or soil contaminated with infected urine. Hence, it is crucial to get the travelling history and history of recent water-related activities for patients presenting with non-specific febrile symptoms. OBJECTIVE: To report the environmental investigation of a recreational park-related Leptospirosis case. CASE REPORT: We report a 7-year-old girl with no prior comorbidities presenting with fever, headache as well as vomiting, and diarrhoea on 28 July 2024. She went swimming with her family at Gunung Pulai Recreational Park (GPRP) 2 days before symptom onset. She was diagnosed with a probable case of leptospirosis and was subsequently treated with 1 gram of intravenous penicillin and successfully recovered 4 days post-admission. Environmental investigation of her home was unremarkable. Environmental investigation at GPRP shows evidence of Leptospirae hosts such as rats near the waterfall area. Despite ongoing enforcement forbidding the use of single-use containers for food and to bring own trash bags, pockets of rubbish-strewn areas were still present. With shades from trees and slow-moving waters in natural pools, it proves to be a high-risk area for leptospirosis transmission. CONCLUSION: Implementing control measures in natural recreational parks prove to be a challenge as engineering controls are not feasible without damaging the ecosystem. Therefore, administrative control including creating awareness of the disease's source and mode of transmission such as avoiding high-risk areas or ensuring that there are no wounds prior to water activities can help to minimize the risk of contracting this disease.

Keywords: Leptospirosis, Environmental investigation, Natural recreational park, One health
