
FOOD POISONING OUTBREAK ASSOCIATED WITH CONSUMPTION OF CHICKEN TANDOORI IN A FOOD PREMISE IN KOTA BHARU, KELANTAN

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ABSTRACT

INTRODUCTION: Food poisoning is a significant public health issue, as it affects many people every year. OBJECTIVE: This study aimed to describe the epidemiology of a food poisoning outbreak in a food premise in Kota Bharu, Kelantan, that occurred in January 2024. METHODOLOGY: The investigation team performed active and passive case detection to identify cases involved in this outbreak using Kelantan Food Poisoning Tools and social media. Cases were defined as any individual who ate or bought food from the food premise in Kota Bharu, Kelantan on 16th of January 2024, and presented with either symptoms of vomiting, diarrhoea, abdominal pain or fever, or had epidemiologically linked with cases. Hygienic status of sanitation, food, and water supply at the food premise involved were evaluated. Clinical and environmental samples were sent for chemical and microbiological tests. RESULTS: An attack rate of 55.2% (n = 79) was recorded from a total of 143 customers. Majority of the cases involved women (62%), with a mean age of 31 years. The most frequent symptoms were diarrhoea (97.5%), fever (88.6%), abdominal pain (88.6%), nausea (60.8%) and vomiting (53.2%). 58 cases were treated as outpatient and 21 cases were hospitalized from this outbreak. Cross-contamination, inadequate thawing, and prolonged holding time contributed to the outbreak. Salmonella enteritidis strain was isolated from both the clinical samples of affected patients and the Chicken Tandoori food sample, with >99% similarities through pulse field gel electrophoresis (PFGE) analysis. CONCLUSION: Improper practices of food handling and preparation had contributed to food contamination. This outbreak highlights the need for rigorous enforcement of health such as fine and safety standards and regulations in the food service to prevent such incidents in the future.

Keywords: Foodborne Outbreak, Salmonella, Foodborne Disease, Chicken Tandoori
