

Strategies and challenges in managing measles outbreak in Pasir Puteh: A public health perspective

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ABSTRACT

Introduction: Measles is one of the most contagious illnesses, and despite the widespread availability of vaccines, Measles outbreaks continue to provide serious public health challenges globally, especially in the Pasir Puteh district. The purpose of this study is to examine the difficulties experienced during the management of the measles outbreak, as well as the Public Health measures adopted to contain the outbreak. **Materials and Methods:** A cross-sectional study was conducted on 108 private school pupils and staff. Comprehensive epidemiologic, environmental, and laboratory investigations were conducted. Measles investigation forms, e-notifikasi, e-wabak, lab forms, as well as data from active case detection, passive case detection, and mopping were collected. The data were then imported into Microsoft Excel and descriptively analysed. Prevention and control measures were done based on available guidelines and adapted to local circumstances. **Results:** A measles outbreak has been declared on May 5, 2023, affecting 25 out of 108 students, or 23% of the population. The majority of them were younger than 4 years old, and 64% were male. One hundred percent had not been vaccinated against measles. The epidemiology curve indicated that the spread has been propagated. The outbreak has been successfully contained despite the high number of cases. Assembling an epidemic control team, enhancing surveillance activities, disseminating information to the public and relevant health authorities, and increasing patient awareness are among the tactics employed during outbreak control. Dealing with pockets of vaccination rejection, collaborating with other organisations, and collecting correct statistics on vaccine coverage constituted some of the obstacles encountered. **Conclusion:** The immunity gap among the pockets of vaccine refusals had created an opportunity for the measles virus to spread among them and led to the outbreak. Although the strategies taken have successfully abated the outbreak, it is often insufficient to control measles transmission in the long term. The challenges addressed need to be tackled more vigorously to prevent a new outbreak from emerging.