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Editorial Letter

An Epidemic in the Making: The Urgent Need to Address the Diphtheria Outbreak in Nigeria

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Dear Editor,

An outbreak of diphtheria in Nigeria, specifically in the state of Kano, has been reported by the Nigeria Centre for Disease Control and Prevention (NCDC). The death toll has reached 34, with Kano State alone recording 25 deaths and 100 total cases. [1] This outbreak serves as a reminder of the significance of vaccination and appropriate disease management. Diphtheria is an acute toxic infection caused by the Corynebacterium species, transmitted through respiratory droplets and contact with contaminated clothing and objects. Symptoms range from mild to severe fever, cough, sneezing, sore throat, neck swelling, and difficulty in breathing. Complications may include damage to the heart, kidney, and bleeding, with death occurring in up to 21% of cases.[1] It is imperative to note that diphtheria is a vaccine-preventable disease. The antigens for diphtheria are included in the pentatonic vaccine (PETA), given three times (PENTA-3) before the age of one year. However, it appears that many of the affected patients were not fully vaccinated, and even those who were vaccinated were not protected. [1] This emphasizes the effectiveness and protective nature of vaccination against all vaccine-preventable diseases. Experts suggest that the spread of diphtheria infection can be prevented through improved personal hygiene, the use of face masks, especially among older children, appropriate handling of respiratory secretions, and appropriate handling of suspected cases by healthcare workers. Prompt referrals, appropriate case management, and adherence to public health recommendations are also necessary for prevention.

Furthermore, it is crucial to address underlying factors that have contributed to this outbreak. As reported by Besa et al. in 2014, diphtheria outbreaks in Nigeria have been linked to poor socioeconomic conditions, low vaccination coverage, and inadequate surveillance and response systems. [2]Sadoh et al. (2012) have also pointed to inadequate funding and logistics as major challenges in the implementation of vaccination programs in Nigeria. It was observed that the vaccination rate for diphtheria in Nigeria is low, with a small percentage of the population being fully vaccinated. [3] Another study by Sadoh et al. (2016) reported that the introduction of the pentavalent vaccine as a replacement for Diphtheria-Tetanus-Pertussis and Hepatitis B vaccines did not significantly increase vaccination uptake in a health facility in Nigeria. [4] Additionally, Cummings et al. (2014) revealed low anti-diphtheria immunity in Nigerian mothers and their newborns. [5] These studies indicate the need for increased efforts to improve vaccination coverage and access to vaccination services in Nigeria to prevent future outbreaks of diphtheria. We must take immediate steps to address the current outbreak of diphtheria and prevent future occurrences of the disease. To achieve this, we must improve vaccination coverage in Nigeria, particularly in areas where coverage is low. This can be achieved by raising awareness about the importance of vaccination, providing easy access to vaccination services, and addressing any logistical or financial barriers that may prevent individuals from getting vaccinated. We also need to improve surveillance and response systems in Nigeria. This includes increasing funding for surveillance activities, training healthcare workers to recognize and respond to cases of diphtheria and strengthening the overall healthcare infrastructure in the country. Additionally, it is crucial to address the underlying socio-economic factors that contribute to low vaccination coverage and poor disease management. This includes addressing poverty, improving access to clean water and sanitation, and investing in education and awareness programs.

In conclusion, the outbreak of diphtheria in Nigeria serves as a reminder of the significance of vaccination and appropriate disease management. Immediate action must be taken to address underlying factors and prevent future outbreaks.

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