

Descriptive Epidemiology of Diphtheria Outbreak Data, Taraba State, Nigeria, August-November 2023

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Abstract : Background: As of October 9, 2023, diphtheria has been noted to be re-emerging in four African countries: Algeria, Guinea, Niger, and Nigeria. 14,587 cases with a case fatality rate of 4.1% have been reported across these regions, with Nigeria alone responsible for over 90% of the cases. In Taraba State Nigeria, the index case of Diphtheria was reported on epidemic week 34, August 24, 2023 with 75 confirmed cases found 3 months after the index case and a case fatality of 1.3%. it described the distribution, trend and common symptoms found during the Outbreak. Methods: The Taraba State Diphtheria Outbreak line list on the Surveillance Outbreak Response Management & Analysis System (SORMAS) for all its 16 local government areas (LGAs) was analyzed using descriptive statistics (graphs, charts and maps) for the period between 24th August to 25th November 2023. Primary data was collected through the use of case investigation forms and variables like Age, gender, date of disease onset, LGA of residence, and symptoms exhibited were collected. Naso-pharyngeal and oro-pharyngeal samples were also collected for Laboratory confirmation. The most common diphtheria symptoms during the outbreak were also highlighted. Results: A total of 75 Diphtheria cases were diagnosed in 10 of the 16 LGAs in Taraba State between 24th August to 25th November 2023, 72% of the cases were female, with the age range 0-9 years having the highest proportion of 34 (45.3%), the number of positive diagnosis reduces with age among cases. The Northern part of the State had the highest proportion of cases, 68 (90.7%), with Ardo-Kola LGA having the highest 28 (29%). The remaining 9.2% of cases is shared among the middle belt and southern part of the State. The Epi-curve took the characteristic shape of a propagated infection with peaks at the 37th, 39th and 45th epidemic weeks. The most common symptoms found in cases were fever 71 (94.7%), pharyngitis 65(86.7%), tonsillitis 60 (80%), and laryngitis 53 (71%). Conclusions: The number of confirmed cases of Diphtheria in Taraba State, Nigeria between 24th August to 25th November 2023 is 75. The condition is higher among females than male and mostly affected children between ages 0-9 with the northern part of the state most affected. The most common symptoms exhibited by cases include fever, pharyngitis, tonsillitis and laryngitis.

Keywords : diphtheria outbreak, taraba nigeria, descriptive epidemiology, trend

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