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Descriptive Analysis of the Database of Poliomyelitis Surveillance System in Mauritania from 2012-2019

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Abstract: Introduction: Polio is a highly contagious viral infection, with children under 5 years of age being the most affected. It is a public health emergency of international concern. Polio surveillance in Mauritania has been ongoing since 1998 and has achieved "polio free" status in 2007, our objective is to analyse a pidemiological surveillance database of poliomyélitis in Mauritania from 2012-2019. Method: A transversal descriptive analysis of poliomyélitis database was carried out in Mauritania from 2012-2019. An exhaustive sampling was done on all suspected polio cases recorded in the database from 2012 -2019. This study used EPI-INFO 7.4 for frequency calculation for qualitative variables, mean and standard deviation for quantitative variables. Results: We found 459 suspected cases of polio over the study period with an average rate of acute non-polio flaccid paralysis of 25.4 cases/100,000 children under 15 years of age. The age group 0-6 years represented 75.2%. Males constituted 50.2%. Females represented 49.78% with a ratio of M/F=1.Among the 422 observations, the average age is 4 years +/- 3.38. The four regions, TIRIS-ZEMMOUR, INCHIRI, TAGANT, NOUACHCHOTT OUEST recorded the lowest percentages of notifications, respectively (3.28%; 3.93%; 4.37%; 4.8%). 99.34% [98.09-99.78] of cases presented acute flaccid paralysis. And 56.77% [52.19-61.23], had limb asymmetry. We showed that 82.93% [79.21-86.10], had fever. we found that 89.5% of suspected polio cases were investigated before 48 hours. And 88.39% of suspected cases had two adequate samples taken 48 hours apart and within 14 days after the onset of symptoms. Only 30.95% of samples arrived at the referral laboratory before 72 hours. Conclusion: This study has shown that Mauritania has achieved the objectives in most of the quantitative performance indicators of polio surveillance. This study has shown a low notification of cases in the northern and central regions of the country. There is a problem with the transport of samples to the laboratory.

Keywords: analysis, data base, Epi-Info, polio

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