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Abstract

Background: In Morocco, acute gastroenteritis in children is a public health issue. Since 1987, several strategies have been conducted to reduce its burden by the Moroccan Ministry of Health, including the introduction of the anti-rotavirus vaccine into the national immunization programme in 2010.

Aims: To evaluate the impact of the anti-rotavirus vaccine in outpatients and inpatients with acute gastroenteritis under 5 years old.

Methods: We conducted descriptive studies and a retrospective cohort study using data from the hospital's sentinel surveillance system and the national ambulatory surveillance registry for acute gastroenteritis from 2006 to 2014. This include the period before and after the implementation of the rotavirus (RV) vaccine on children under age 5 years.

Results: The decrease in acute gastroenteritis cases was about 5.2%, mainly among children aged 0–11 months. The proportion of acute RV gastroenteritis (RVGE) decreased from 37.0% to 31.1% after the vaccine's introduction; it was statistically significant among the children aged 0–11 months (38.8% to 28.1%; P = 0.009). The proportion of RVGE among inpatients decreased from 97.0% to 91.7% (P = 0.022). Diarrheal disease cases without dehydration increased from 7.8% to 11.1% (P