

hospitalization costs in Sicily, before and after universal mass RV (UMRV) introduction.

Methods

Cases of RVGE were defined as all hospitalizations with an ICD-9-CM diagnosis code of 008.61 on any diagnosis position among children aged 0 to 59 months. Data were obtained from Hospital discharge records (HDR) of the Health Regional Office from 2009 to 2014. Direct and indirect costs of RVGE hospitalization for health care and social perspective were calculated on data reported in the REVEAL study. RV costs was extrapolated from a budget impact analysis published in 2013 by Vitale et al.

Results

In Sicily, during the pre-vaccination era (2009-2012) were reported 963 RVGE hospitalizations per year with a mean HDR cost of 1,521€ (1,465,000€ per year), against 511 RVGE cases per year (mean HDR cost of 1,321€; 675,000€ per year) after UMRV introduction (direct hospitalization Health care costs). Moreover, direct and indirect hospitalization costs for social perspective was estimated 1.5 times bigger than direct hospitalization health care cost (pre-vaccination era 2,255,000€ per year, post-vaccination era 1,020,000€ per year). Finally, cost of RV vaccine in Sicily in 2013 and 2014 was 1,300,000€ per year (mean vaccination coverage 37%). In Sicily after RV introduction, every year was estimated a 46% reduction of RVGE hospitalizations and a 700,000€ benefit for Regional fund.

Conclusions

Despite low vaccination rate and even though the inability to evaluate the impact of RV vaccination on primary care and emergency access for RVGE, our study demonstrated the high cost-effectiveness of UMRV on hospitalization rate and costs in Sicily.

Key messages

- In Sicily after UMRV introduction was observed a 46% reduction per year of RVGE hospitalizations respect to pre-vaccination era
- Moreover, was reported a 700,000€ yearly decrease of RVGE direct and indirect hospitalization costs according to health care and social perspective

Cost analysis of the first two year of universal mass vaccination against rotavirus in Sicily

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Background

Rotavirus vaccination (RV) is recognized by international health authority as the best strategy to prevent rotavirus gastroenteritis (RVGE) in children. Costs of RVGE were estimated in several studies and were classified into direct and indirect costs, that should be further divided into Health care and social perspective. This study aims to evaluate RVGE