SURVEILLANCE OF VARICELLA IN THE SICILIAN PAEDIATRIC POPULATION FOLLOWING THE INTRODUCTION OF UNIVERSAL VACCINATION

Saverio Ciriminna1, Hygienists Group2, Paediatricians Group3, Milena Logiudice1, Giuseppe Giannanco1, Lucina Titone1, Ignazio Barberi1, Anne-Laure Limousin5, Emilia Perinetti1, Luigi Roberto Biasio6

1Sicilian Health Department, 2Institute of Hygiene, University of Catania, 3Institute of Maternal and Child Health, University of Palermo, 4Institute of Science Pediatrician University of Messina, 5Sanofi Pasteur MSD, Lyon, France, 6Sanofi Pasteur MSD, Rome, Italy

INTRODUCTION

To describe the age-specific incidence of physician-diagnosed herpes zoster by vaccination status, the study was expected to enrol a sample of 30 paediatricians with electronic medical records (out of a total of 844 currently working in Sicily) – a 3-year varicella surveillance study (1994-1996) that was started in 2003, involving hygienists in local vaccination centres and the Regional Health Council – a 5-year surveillance study (that was started in March 2003, involving paediatricians).

METHODS

A sample of 30 paediatricians with electronic medical records (out of a total of 844 currently working in Sicily) was randomly selected to participate in the study. The number of paediatricians selected from each local health unit was proportional to the size of the population served by the unit and stratified by geographical location (urban vs. rural). At least one paediatrician was selected from each of the nine health units in Sicily.

Based on the estimated practice size of the 30 paediatricians, the study was expected to enrol approximately 18,250 children over the 3-year study period.

The overall coverage of children 12–23 months of age increased from 18.5% in 2003 to 67.4% for the 2004 birth cohort and 37.6% for the 2005 birth cohort.

RESULTS

The overall coverage rate was 40.4% for the 2003 birth cohort and 50.8% for the 2004 birth cohort.

The vaccine was well tolerated, and no serious adverse events were reported.

CONCLUSIONS

The incidence of varicella has decreased significantly in Sicily since the introduction of varicella vaccination. The incidence of herpes zoster has also decreased, and it is likely that this decrease will continue with continued vaccination.

References

1. Istituto Superiore di Sanità, Laboratorio di Epidemiologia e Biostatistica.
4. Annual number of varicella cases, persons years (PY) and incidence per 1000 PY by vaccination status.