

Atti del Society for Longitudinal and Life Course Studies conference. General population cohorts based on record linkage SYMPOSIUM, Losanna, 9 ottobre 2014, p. 13

Factors influencing compulsory vaccination in North East Italy

Canova Cristina, Silvana Zanon, Lorenzo Simonato, University of Padova, Italy;

Nicola Caranci, Regional Agency for Health and Social Care, Italy;

Loris Zanier, Health Directorate, Friuli Venezia-Giulia Region, Italy;

Pierantonio Romor, Divisione Applicazioni SW, Italy

Vaccine coverage has shown differences between the richest population and the poorest (WHO, 2008). In most Italian Regions, vaccination of children is compulsory, without reaching 100%. This study was carried out in order to assess changes in infant vaccination coverage at 24 months, in terms of completeness, and its relationship with socio-economic characteristics of the family.

The study population is composed of children born during 1995-2010 in the Friuli-Venezia Giulia (FVG) region. Data on vaccination was linked by the ID regional code to the birth cohort identified using the Medical birth register that contains socio-demographic data on both parents, and data on the newborn at birth. Associations between compulsory vaccination and socio-demographic variables at birth were estimated using unconditional logistic regression in order to calculate crude and adjusted odds ratios (OR) with 95% confidence interval (CI).

145,571 babies were included in the study. We identified a total of 2,636 (1.81%) of babies without any compulsory vaccination. Number of unvaccinated babies increased with increasing year of birth, showing the highest value in 2010 (2.3%). The predictors associated with being unvaccinated were female gender (OR=1.08 (1.00-1.16)), low (<25 years: OR=1.37 (1.18-1.58)) and high (40+ years: OR=1.75 (1.47-2.08)) maternal age, maternal citizenship (Western countries outside Italy: OR=7.10 (5.72-8.82) and Asia: OR=1.58 (1.21-2.05)), maternal (OR=1.29 (1.17-1.43)) and paternal (OR=1.34 (1.20-1.50)) high educational level.

The number of unvaccinated children in FVG is not negligible and the predictors of non-vaccination seem to be related particularly to high socio-economic status. In the middle-long term, FVG will shift to a system of recommended immunisations without compulsion which could lead to a decreased coverage. This birth cohort is being followed up life long and cross linked with the electronic health archives in order to ascertain the consequences of the increasing trend of vaccination refusal.