

pregnancy pertussis vaccination on children's subsequent MMR uptake.

Results:

Overall, 92.6% (736,495/795,497) children had 1st MMR by 5 years with 89.4% (710,797) by 2 years. Among children still in the cohort when eligible for 2nd MMR, 85.9% had two MMRs by 5 years (478,480/557,050). Lower 1st & 2nd MMR uptake was associated with living in more deprived areas of England, being Black or Black British ethnicity or having mothers aged <20 years (1st MMR by 5 years, adjusted Hazard Ratios (HR):0.86 (CI:0.85-0.87), HR:0.87 (CI:0.85-0.88) & HR:0.89 (CI:0.88-0.90) respectively). Children of mothers vaccinated in pregnancy were more likely to have 1st & 2nd MMRs after adjusting for ethnicity, deprivation and maternal age (1st & 2nd MMRs by 5 years adjusted HRs:1.43 (CI:1.41-1.45), 1.49 (CI:1.45-1.53).

Conclusions:

There are inequalities in UK childhood MMR vaccine uptake based on maternal characteristics. Mothers vaccinated against pertussis in pregnancy are more likely to have a child vaccinated with MMR. Health professionals should promote pregnancy and childhood vaccinations during pregnancy and consider how families can be supported to access childhood vaccines.

Key messages:

- There are inequalities in UK childhood MMR vaccine uptake based on maternal characteristics with MMR uptake lower among children living in more deprived areas.
- Maternal vaccination and subsequent childhood vaccination uptake are related; pregnancy offers an opportunity to promote childhood vaccines and ensure families can access childhood vaccine services.

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Maternal predictors of timeliness & uptake of Measles, Mumps & Rubella vaccine: A birth cohort study

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Background:

In the United Kingdom (UK) measles, mumps & rubella (MMR) vaccine uptake is below national recommendations. We aimed to identify maternal predictors for missed or late vaccination, including the association with pregnancy pertussis vaccination, added to the UK schedule in 2012.

Methods:

We used electronic primary care records from the Clinical Practice Research Datalink to create a UK birth cohort following babies born between 01.01.2000 to 12.12.2020 and linked to their mother's record from birth. We estimated the proportion who received their 1st MMR vaccine by 2 years and 1st & 2nd MMR vaccines by 5 years and examined associated maternal predictors using survival analysis and Cox proportional hazard models. We examined a sub-cohort of babies born from 01.01.2013 to estimate the impact of