

Evaluation of the implementation of the three phases of the vaccination program (2012-2014) against the human papilloma virus in girls born from 2003 to 2005 in the municipality of Manizales, Colombia

Prevention and control of HPV and HPV related cancers in Colombia: Lessons learnt and the way forward.

15-16 November 2018. BOGOTA, COLOMBIA

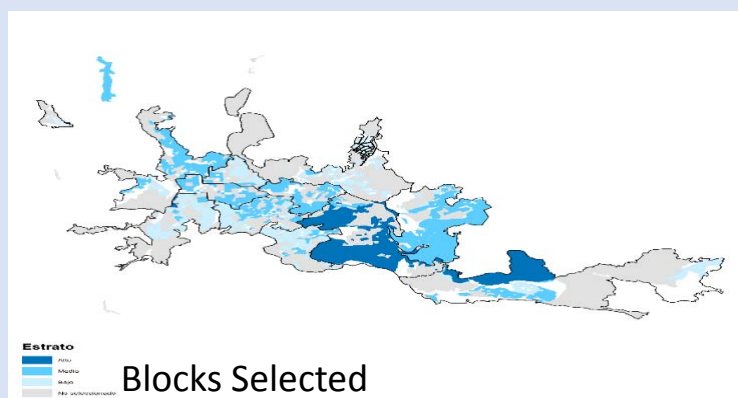
Objectives

- To estimate the uptake of HPV vaccine in girls 9 years old during the implementation phases of 2012, 2013 and 2014.
- To identify barriers and facilitators for HPV vaccine acceptability during the implementation phases of 2012, 2013 and 2014.
- To identify sociodemographic factors associated with HPV vaccine uptake during the implementation phases of 2012, 2013 and 2014.
- To compare the level of antibodies against HPV16 and HPV 18 VLPs between girls with 1 vs 2 doses of the vaccine

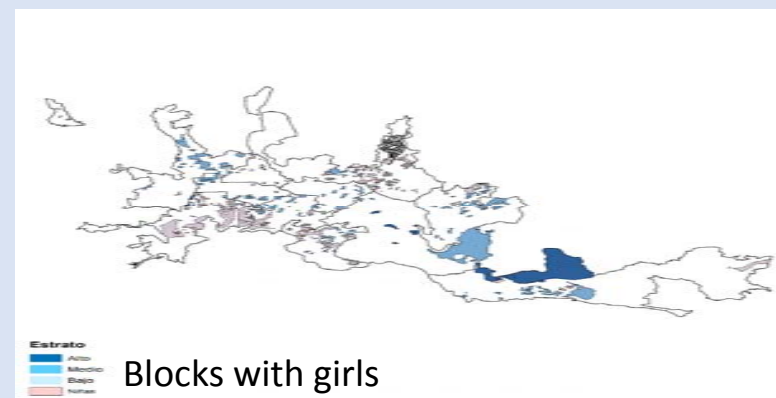
Methodology

- **Population-based survey** in Manizales, Colombia.
- **Dates:** September 2017, October, 2018.
- **Study Population:** girls born in 2003, 2004 and 2005 and residents of Manizales in 2012, 2013, 2014 and their respective parents, guardians or legal representatives
- **Two-stage cluster sampling:** Random selection of blocks from communes of low, medium and high socioeconomic levels (National Department of statistics, DANE in Spanish). All households of selected blocks visited for eligible girls.
- **Sample size:** 80% power for a difference of 20% in vaccine coverage, ~500 girls per birth cohort
- **Data collection:** A qualitative exploratory phase and health belief model (HBM) used to design the quantitative survey. FTA cards for finger-prick blood collection. Informed assent (girls) and consent [(parents or guardians (legal representatives))]
- **Definition of vaccination status:** Girl's self-report, parent's report, PAI Web (online vaccine registration), HMOs, level of anti-VLPs (HPV16 &18) IgG antibodies.

Geographic and socioeconomic distribution of selected blocks and blocks with girls

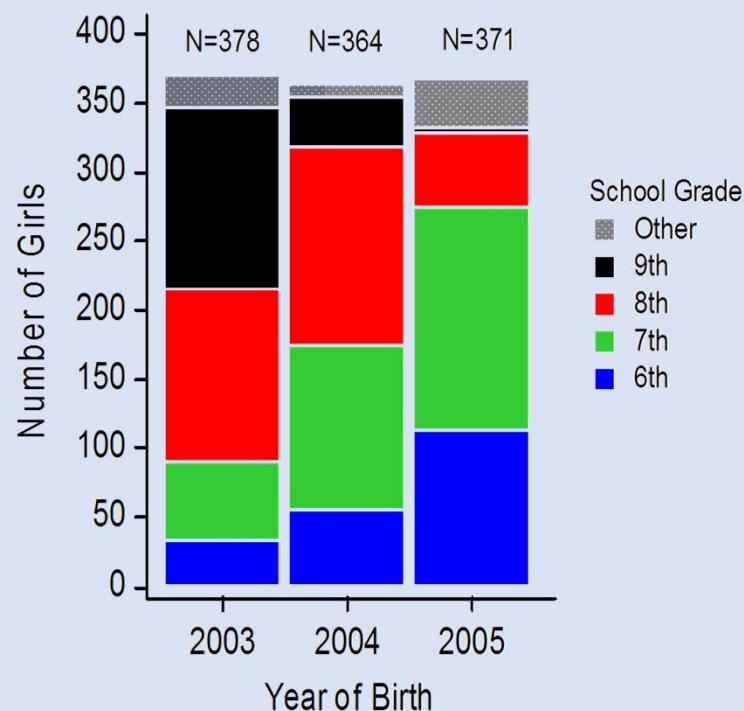
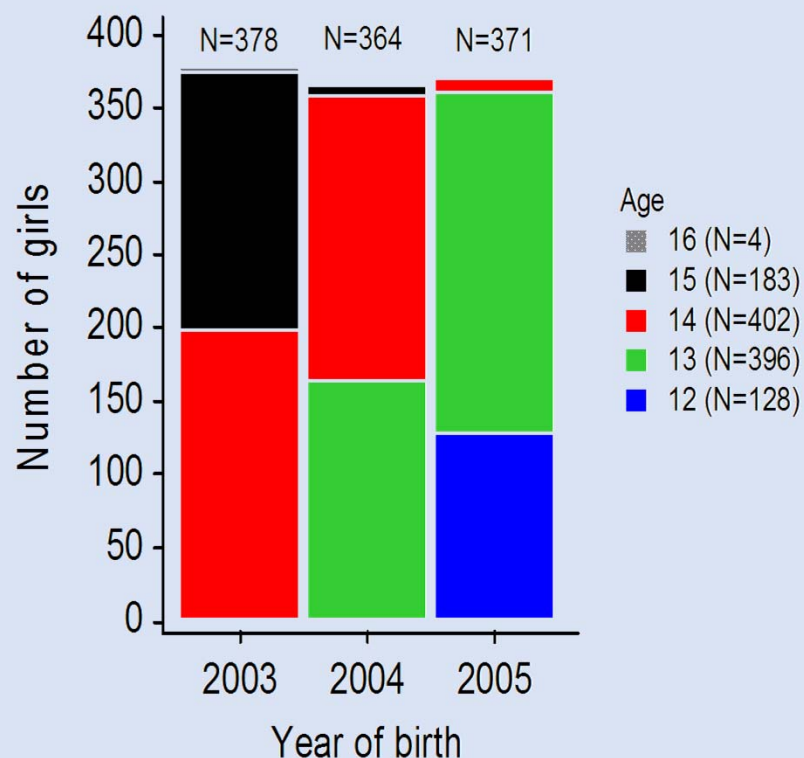


low
Medium
High
Unselected

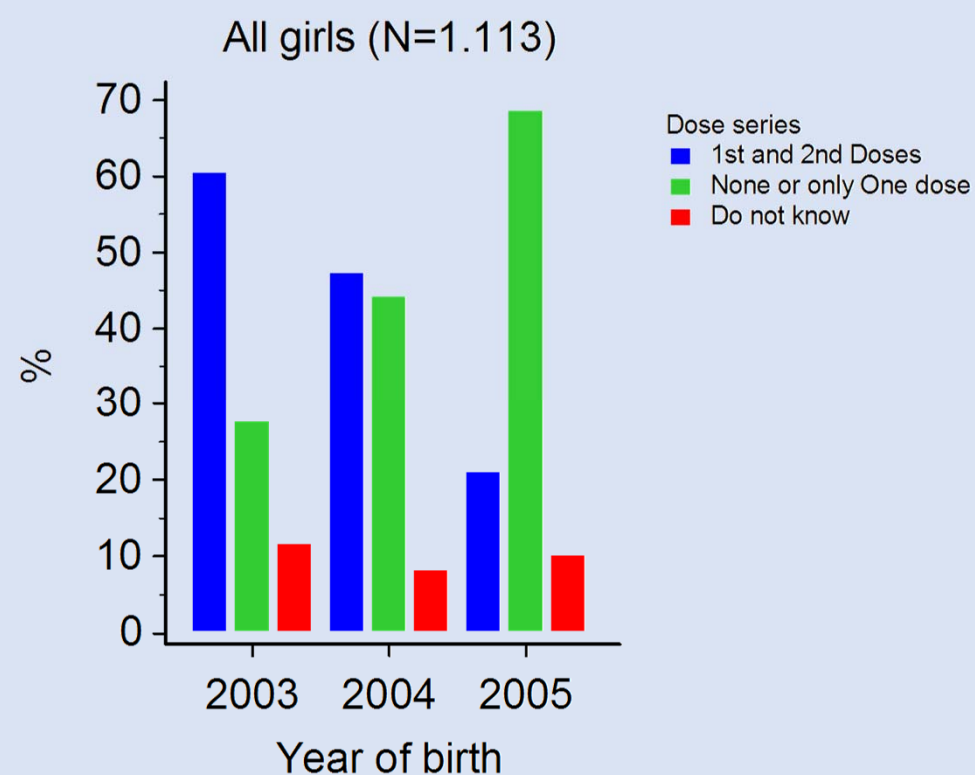
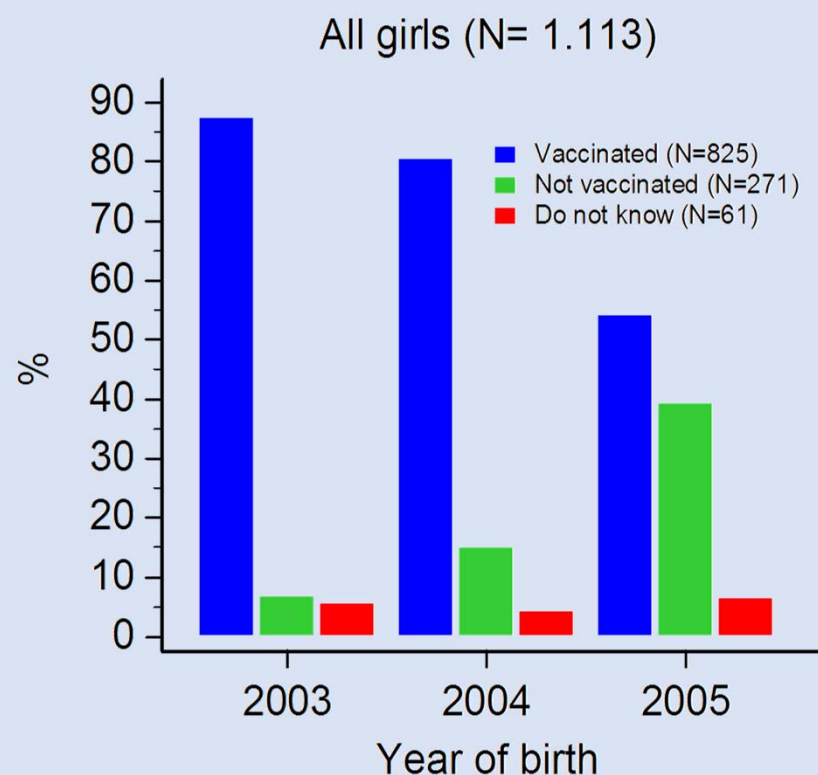


		Socioeconomic strata							
	# blocks	Low			Medium			High	
Blocks	3358	1644			1486			228	
		N	%		N	%		N	%
Visited	1568	710	43.2		760	51.1		98	43.0
With girls	561	358	50.4		190	25.0		13	13.3

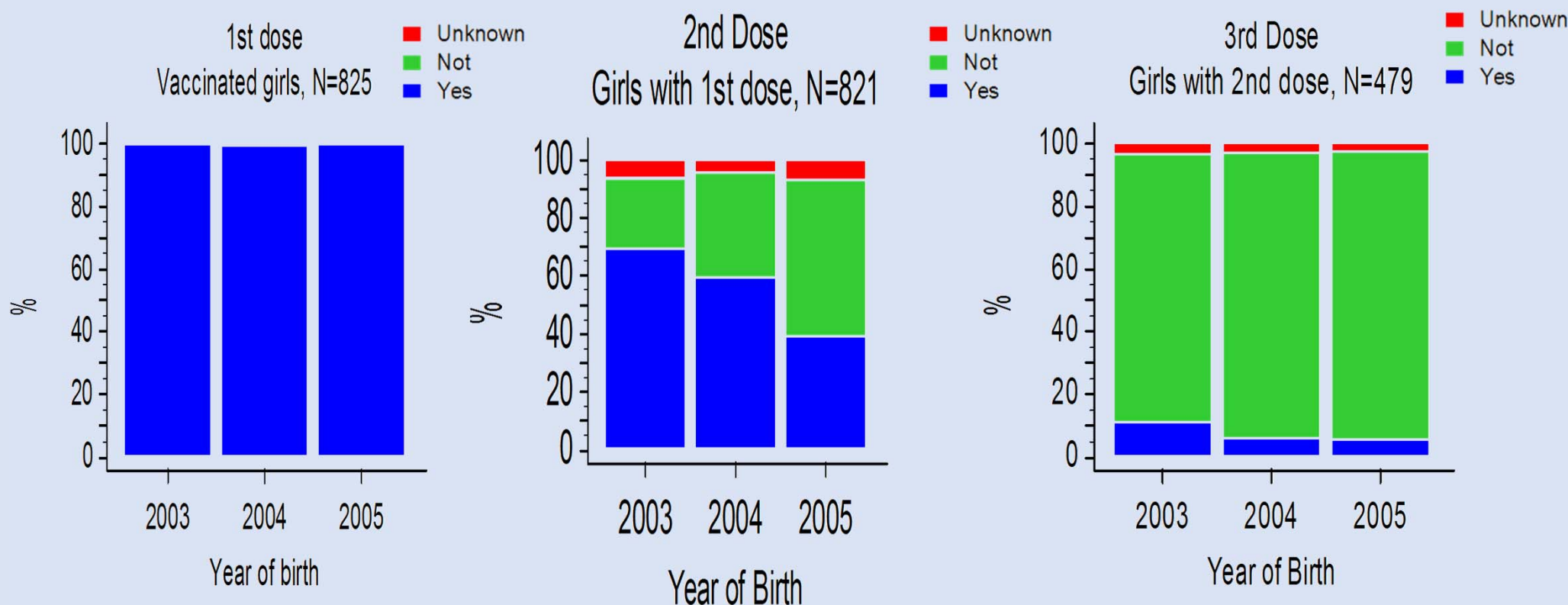
Age and School grade by year of birth, of 1.113 girls, Manizales, Colombia (Sep 2017, Oct 2018)



Self-report of vaccination or uptake of 1st and 2nd doses of HPV vaccine by year of birth in girls of Manizales, Colombia

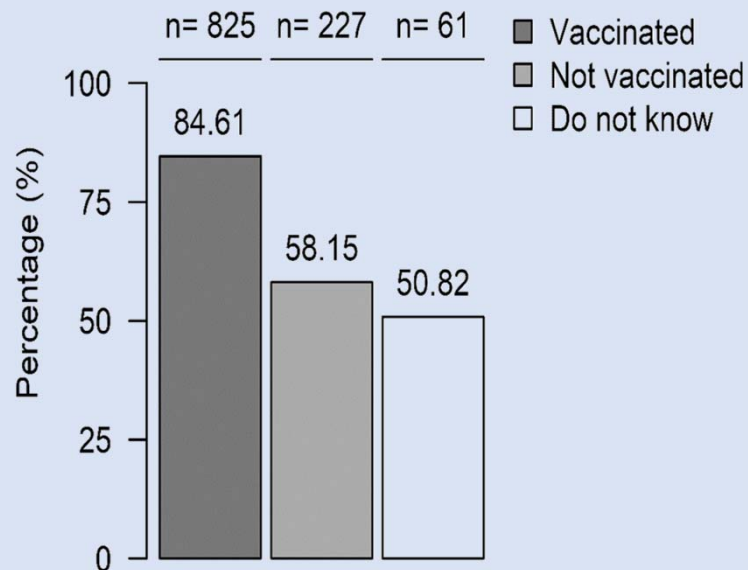


Self-report of uptake of 1st, 2nd or 3rd dose of HPV vaccine by year of birth in girls of Manizales, Colombia

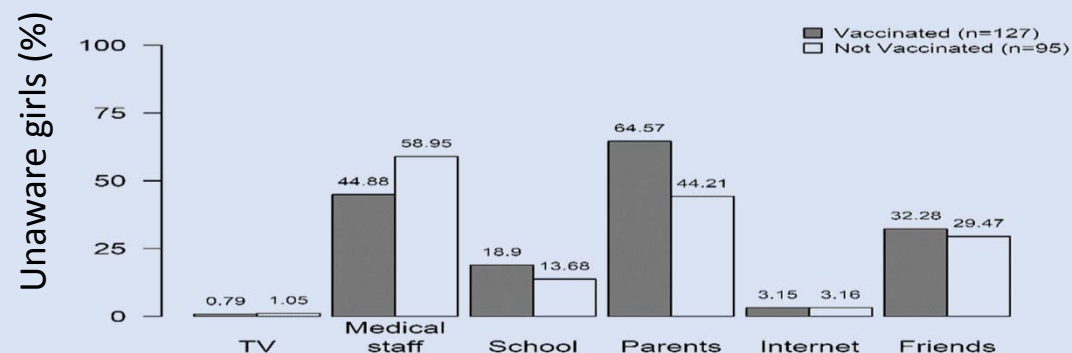
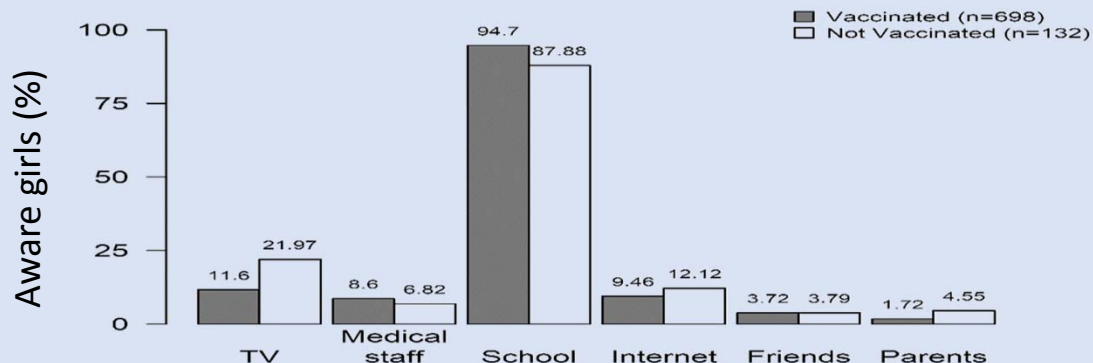


Awareness and sources of information about HPV vaccine

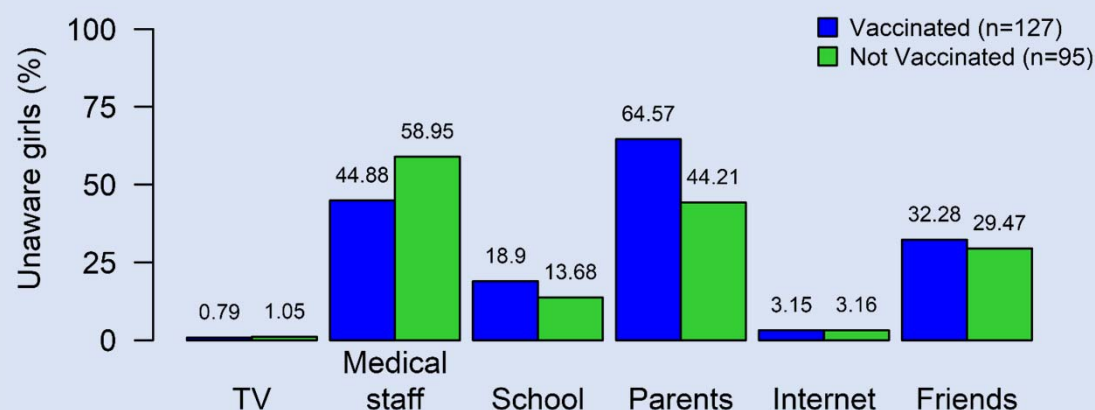
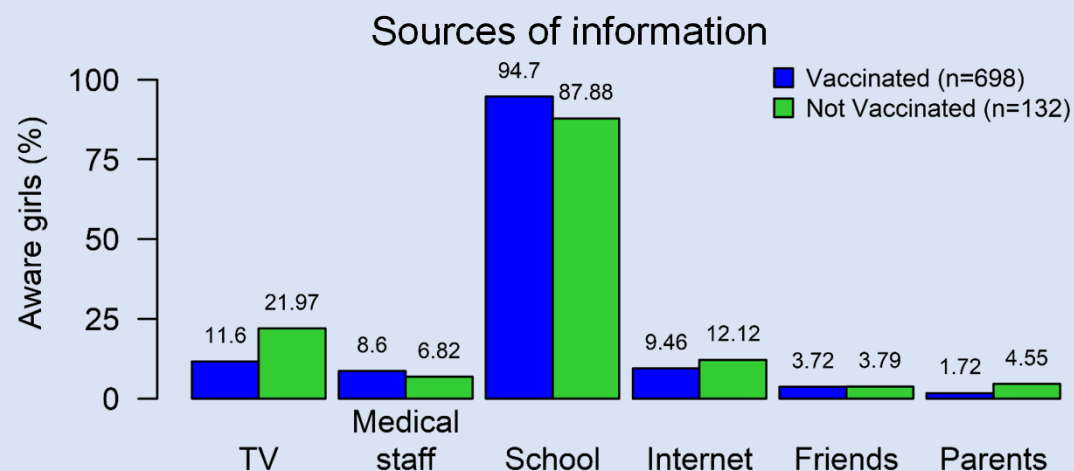
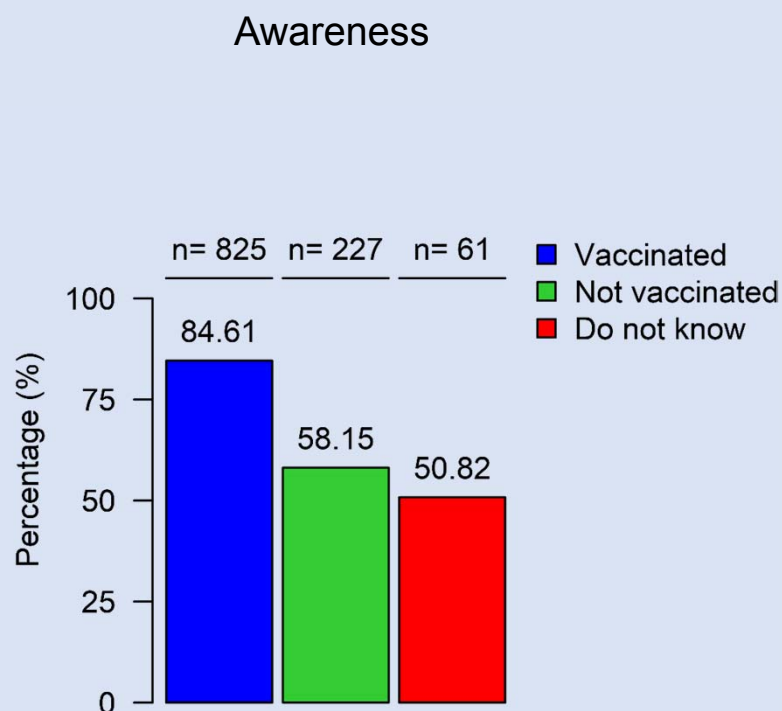
Awareness



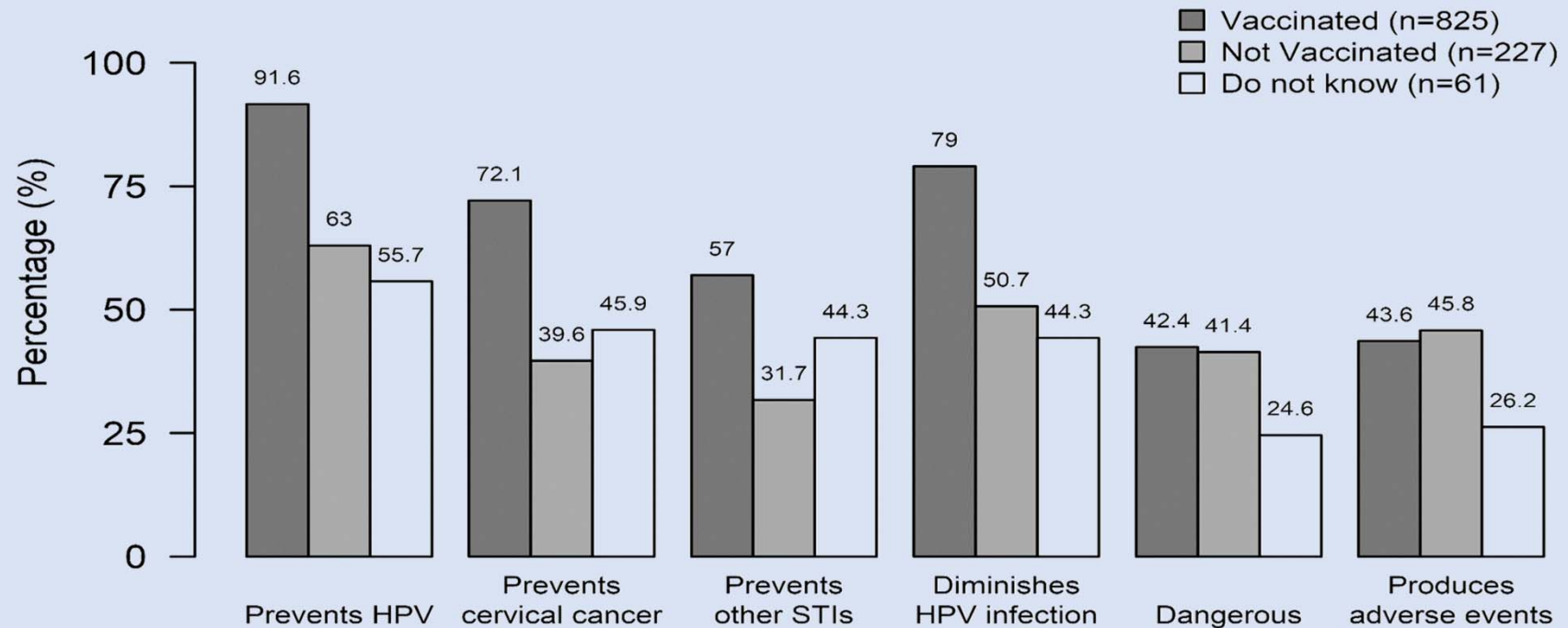
Sources of information



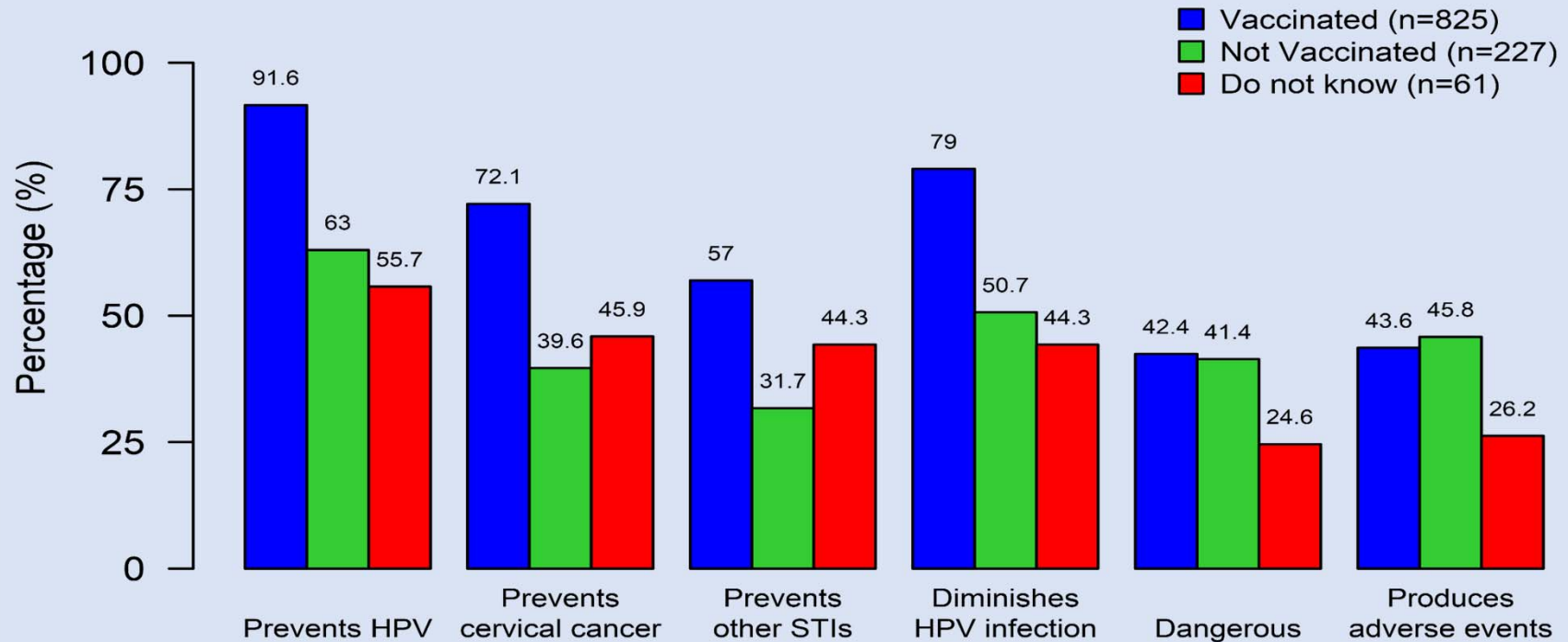
Awareness and sources of information about HPV vaccine among girls of Manizales, Colombia



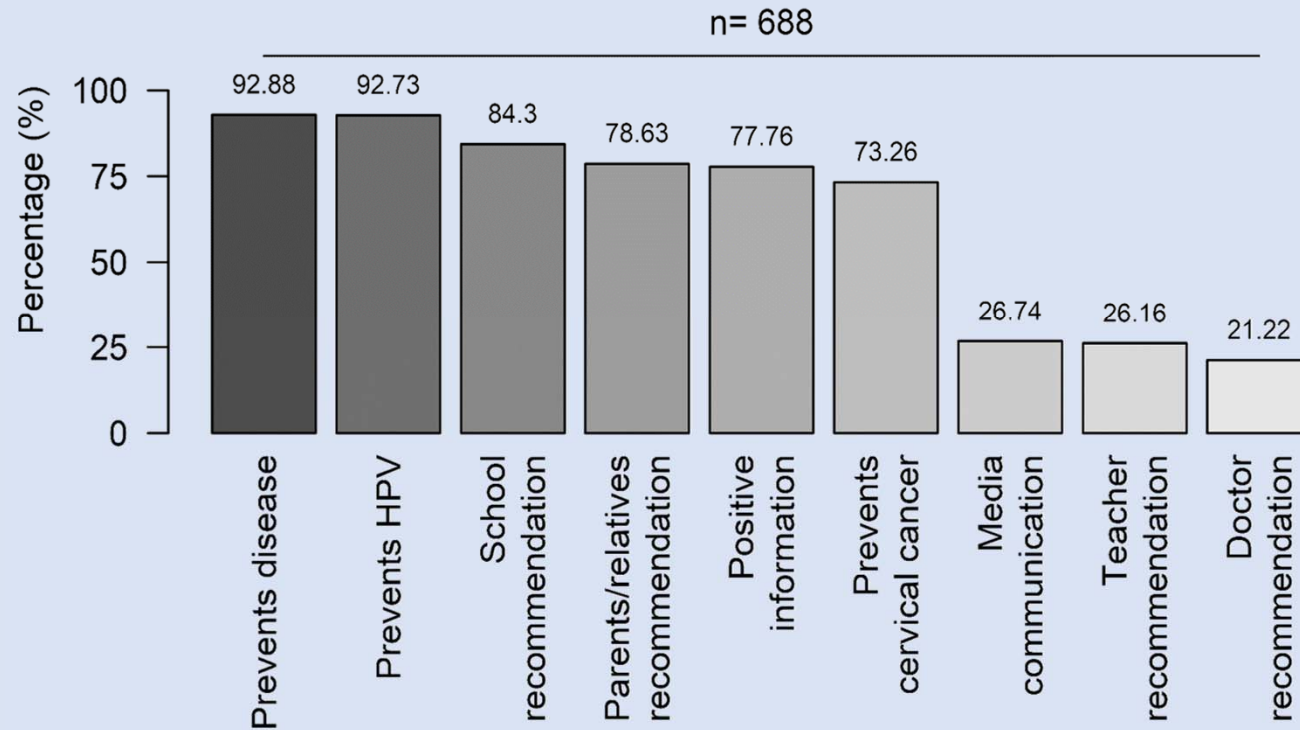
Beliefs about HPV vaccine among girls of Manizales, Colombia.



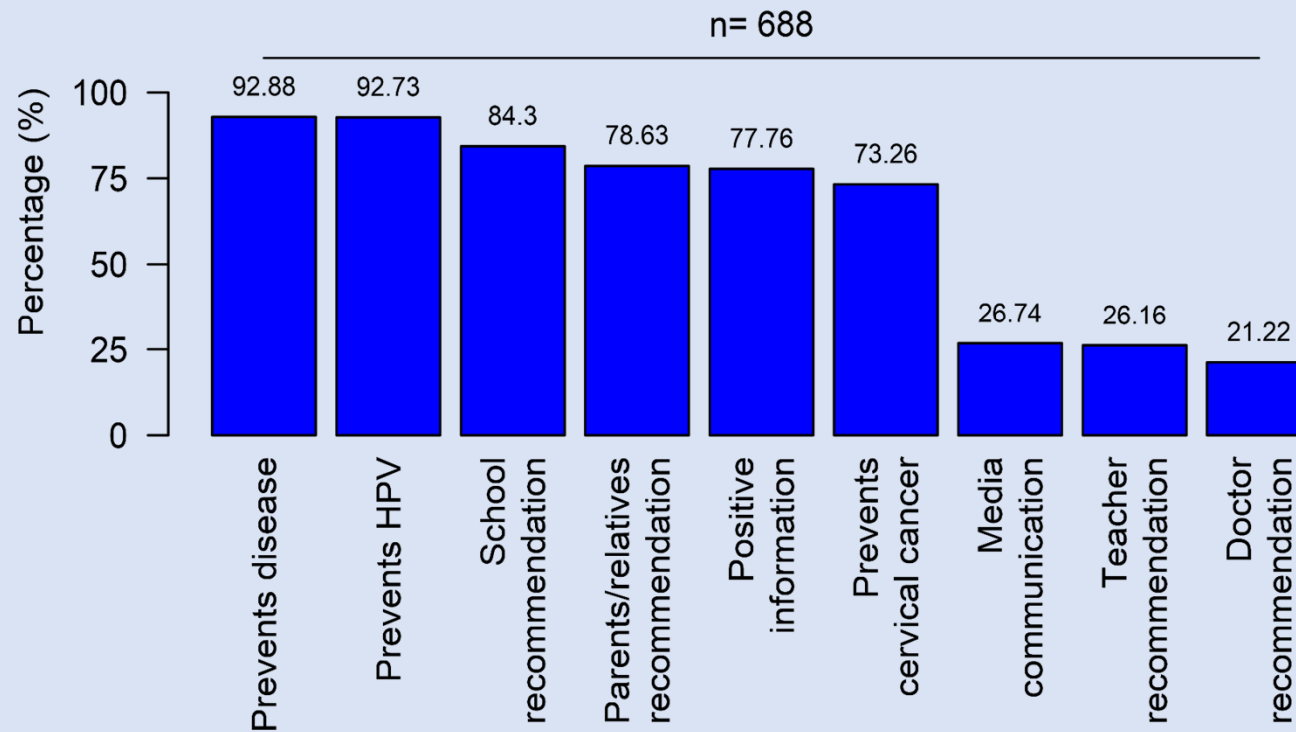
Beliefs about HPV vaccine among girls of Manizales, Colombia.



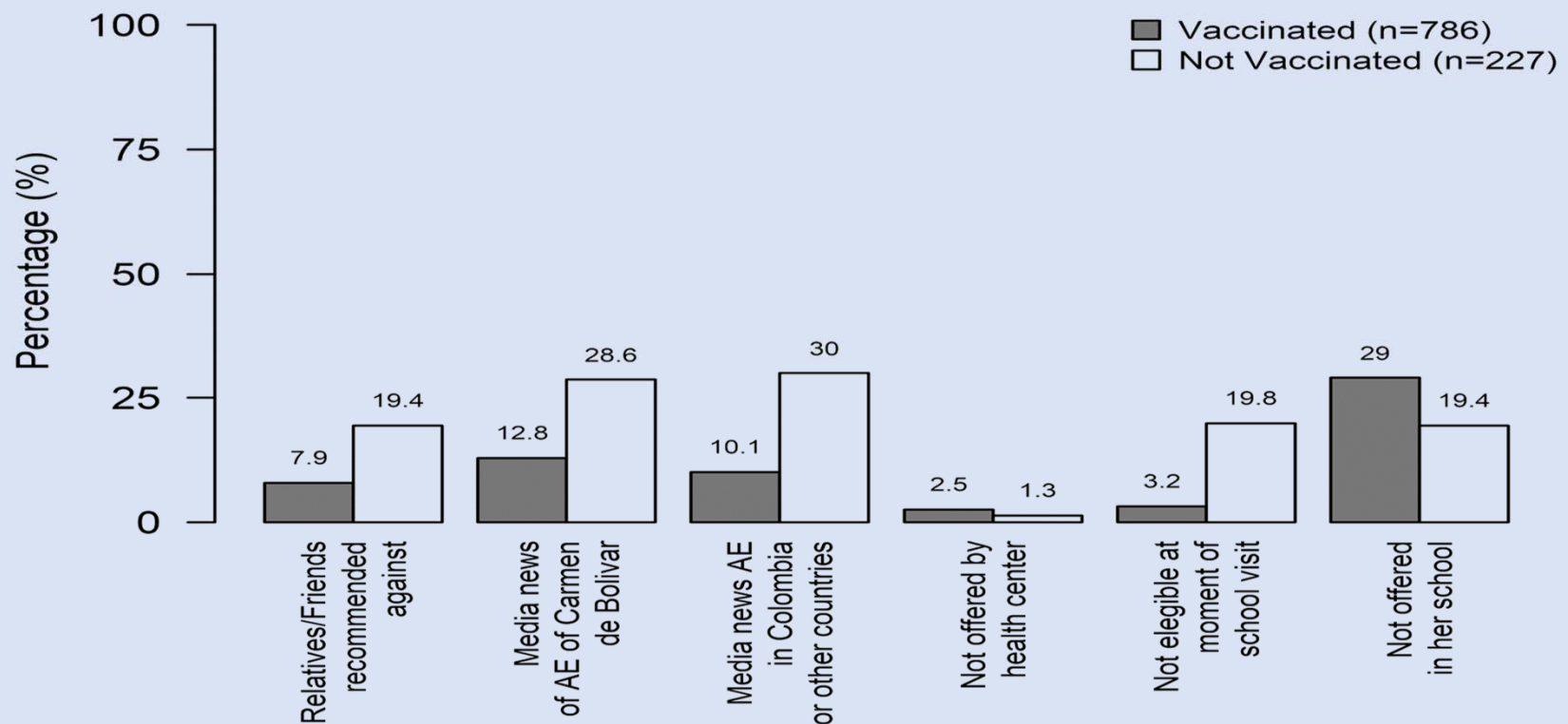
Reasons for uptaking or completing vaccine series (Facilitators)



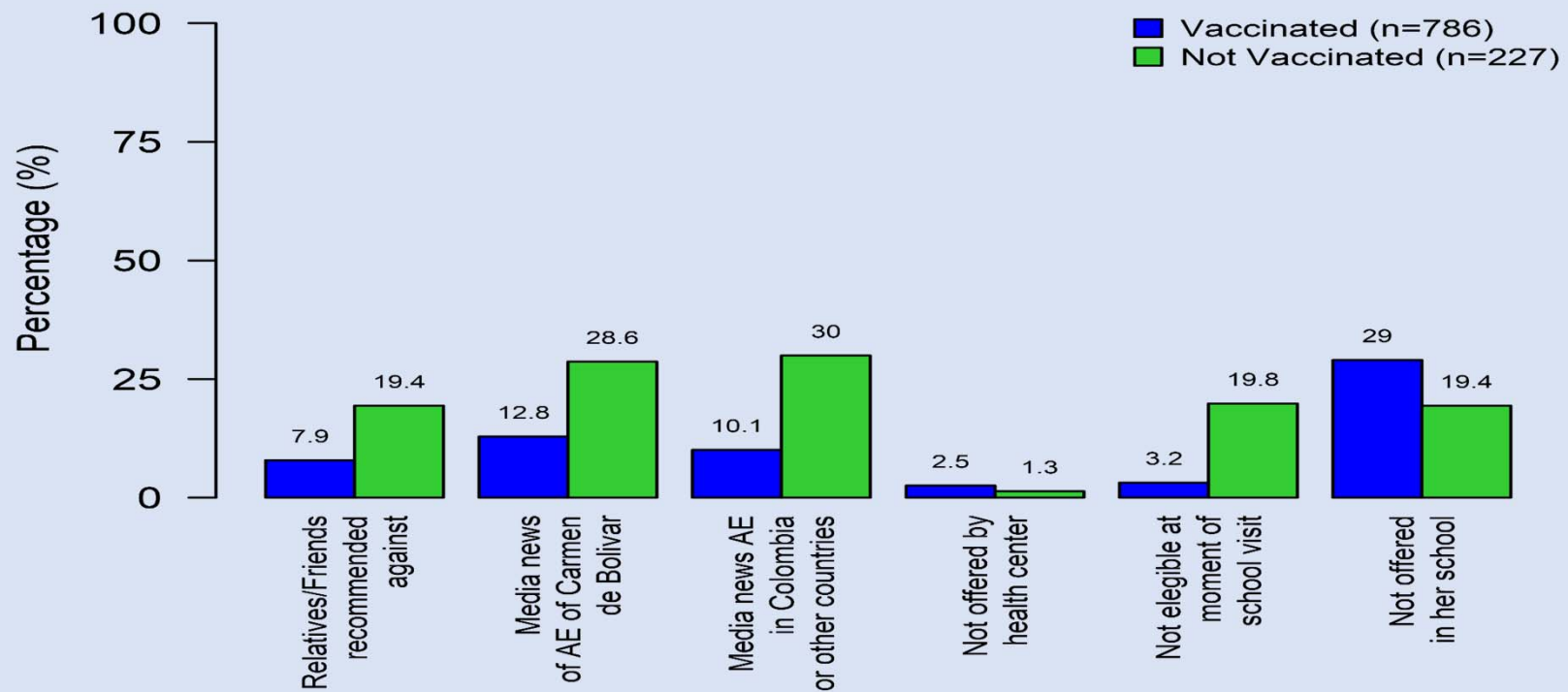
Reasons for uptaking or completing vaccine series (Facilitators)



Reasons for not uptaking or not completing the series of the HPV Vaccine (Barriers)

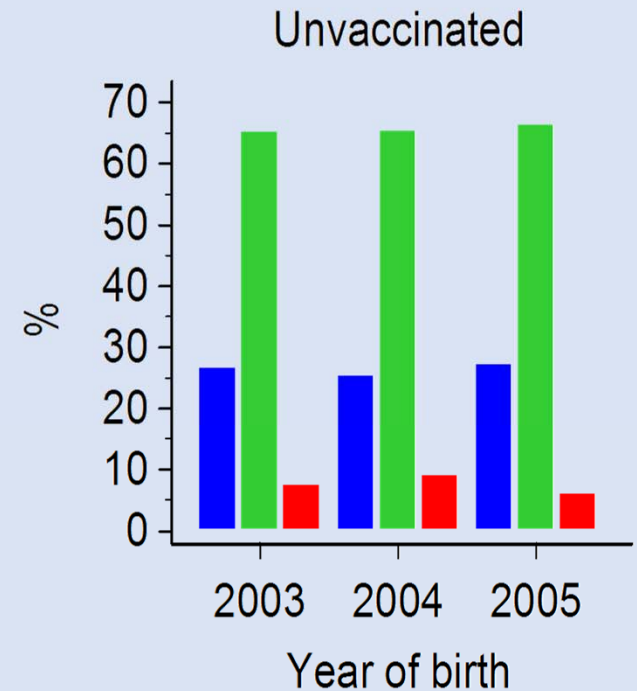
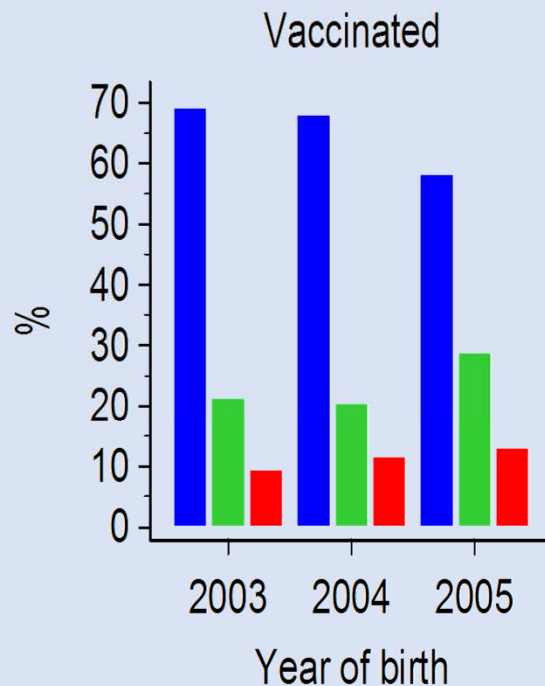
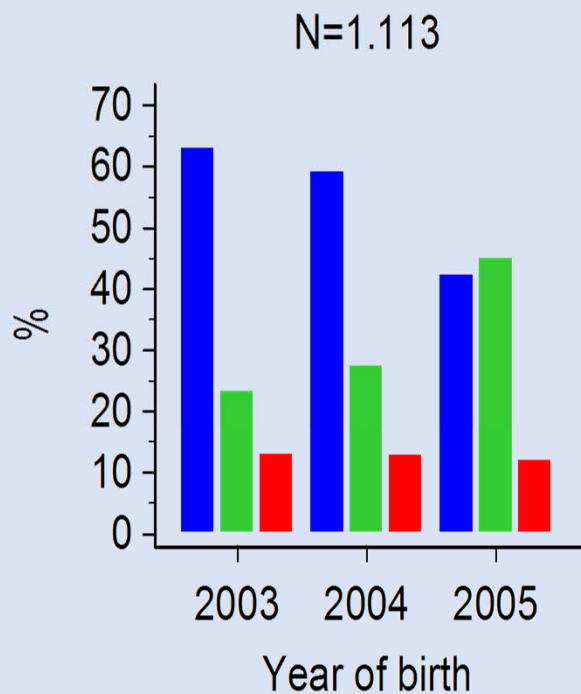


Reasons for not uptaking or not completing the series of the HPV Vaccine (Barriers)



Explanation about vaccine purpose during vaccination campaign

■ Do not know / Do not remember
■ Not
■ Yes



Preliminary Suggestions

- Girl's self-report uptake likely similar to officially published vaccination rates by cohort
- School was the main source of information for HPV vaccine for aware girls
- 60-90% of girls reporting vaccination believe in vaccine benefits.
- Regardless vaccine self-report, 40% of girls considered that HPV vaccine is dangerous and produces adverse events.
- Suggested barriers were recommendation against vaccination and media news of adverse events.
- 60% of girls born in 2003 and 2004 and 40% of those born in 2005, reported that they have been explained what the vaccine was for.
- As expected, the unvaccinated girls did not receive that information, but 20-30% of girls that report vaccination did not either.



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