

DOCTOR HESITANCY

*Esavalenti e recuperi, vaccino antirotavirus prima che si può,
MPRV e non se parli più, pluri antimeningococchi, successi
dell'antipneumococco...*

**Come può la letteratura scientifica aiutarci a superare i
nostri dubbi?**

Rosa Prato

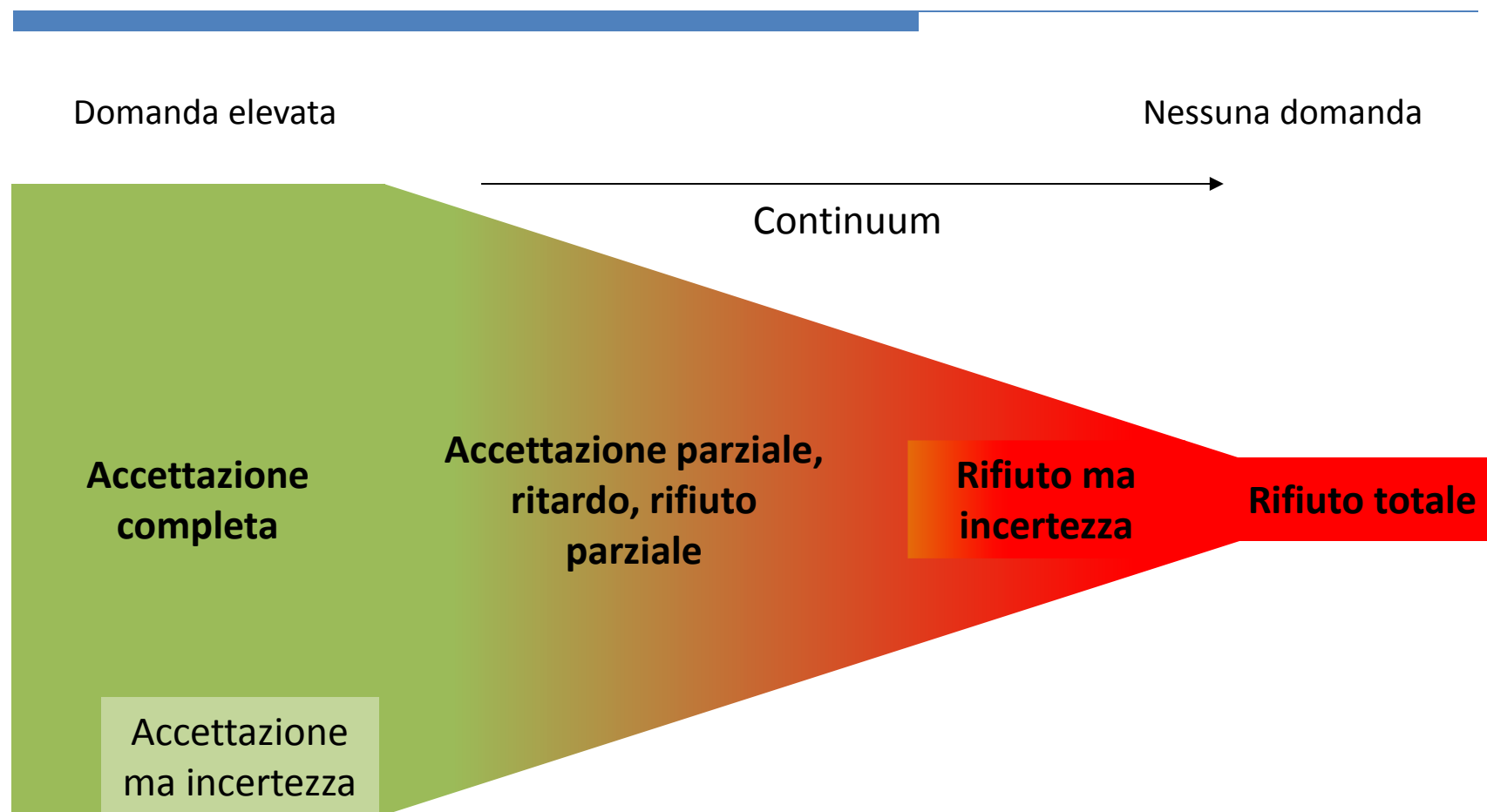
Dipartimento di Scienze Mediche e Chirurgiche

Università di Foggia

4^a edizione

Vaccinando su e giù per lo stivale

Il continuum della *vaccine hesitancy*

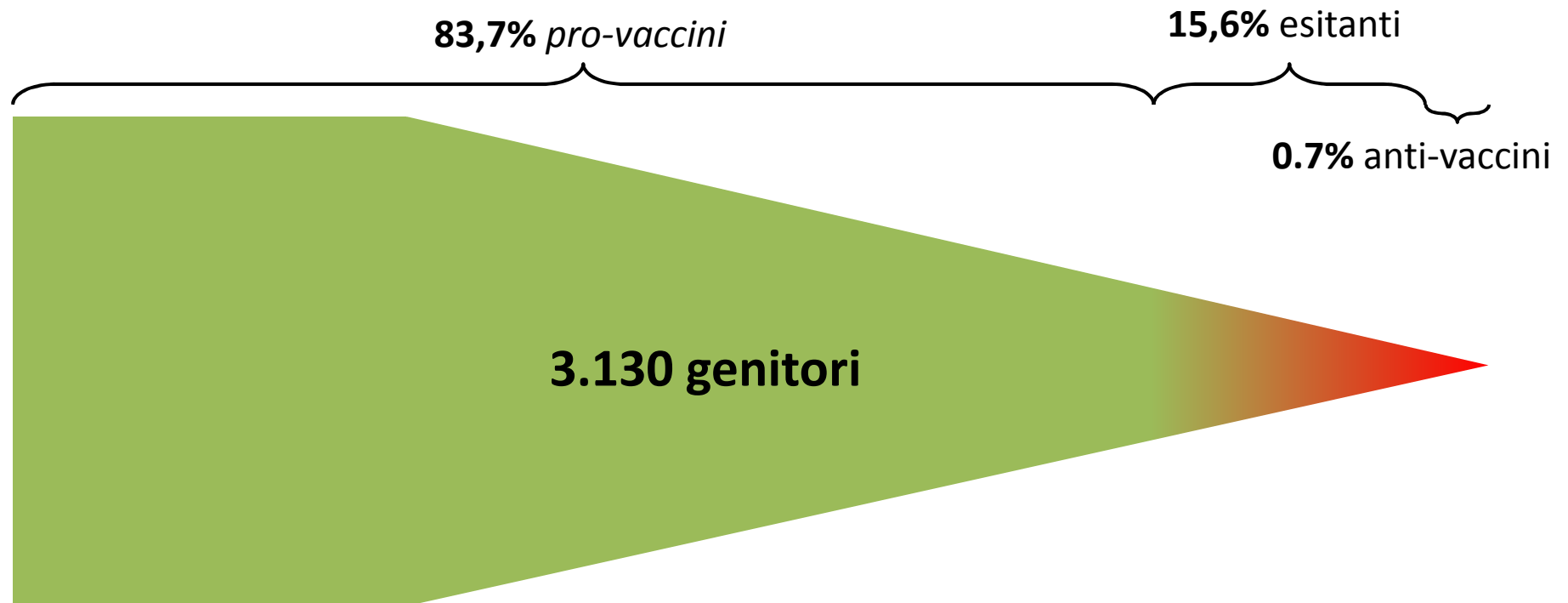


Adattato da: MacDonald NE, et al. MacDonald NE; SAGE Working Group on Vaccine Hesitancy. *Vaccine*. 2015;33(34):4161-4



Parental vaccine hesitancy in Italy – Results from a national survey

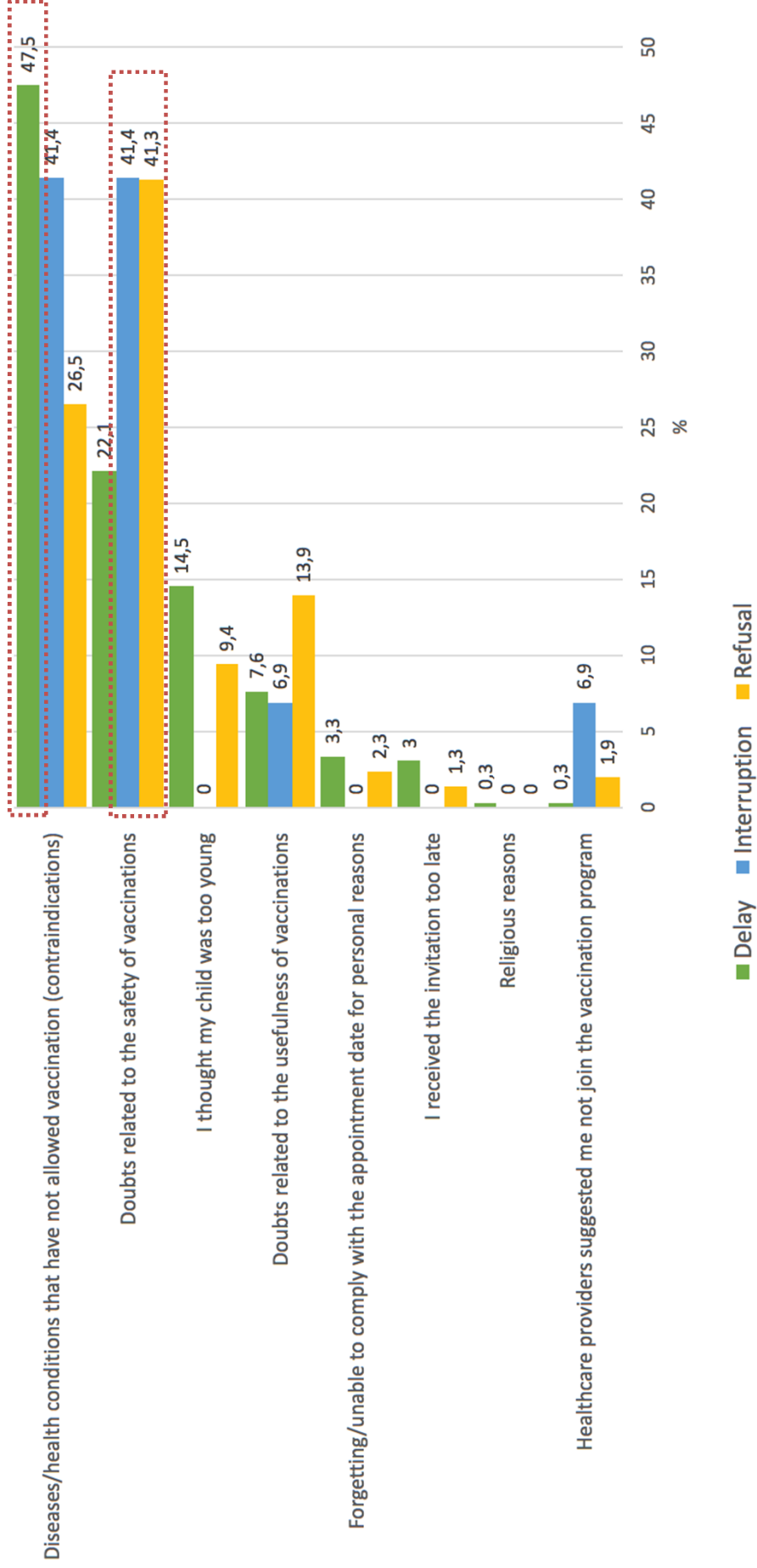
Cristina Giambi ^{a,*}, Massimo Fabiani ^{a,1}, Fortunato D'Ancona ^{a,2}, Lorenza Ferrara ^b, Daniel Fiacchini ^c, Tolinda Gallo ^d, Domenico Martinelli ^e, Maria Grazia Pascucci ^f, Rosa Prato ^e, Antonietta Filia ^{a,1}, Antonino Bella ^{a,1}, Martina Del Manso ^{a,1}, Caterina Rizzo ^{a,1}, Maria Cristina Rota ^{a,1}



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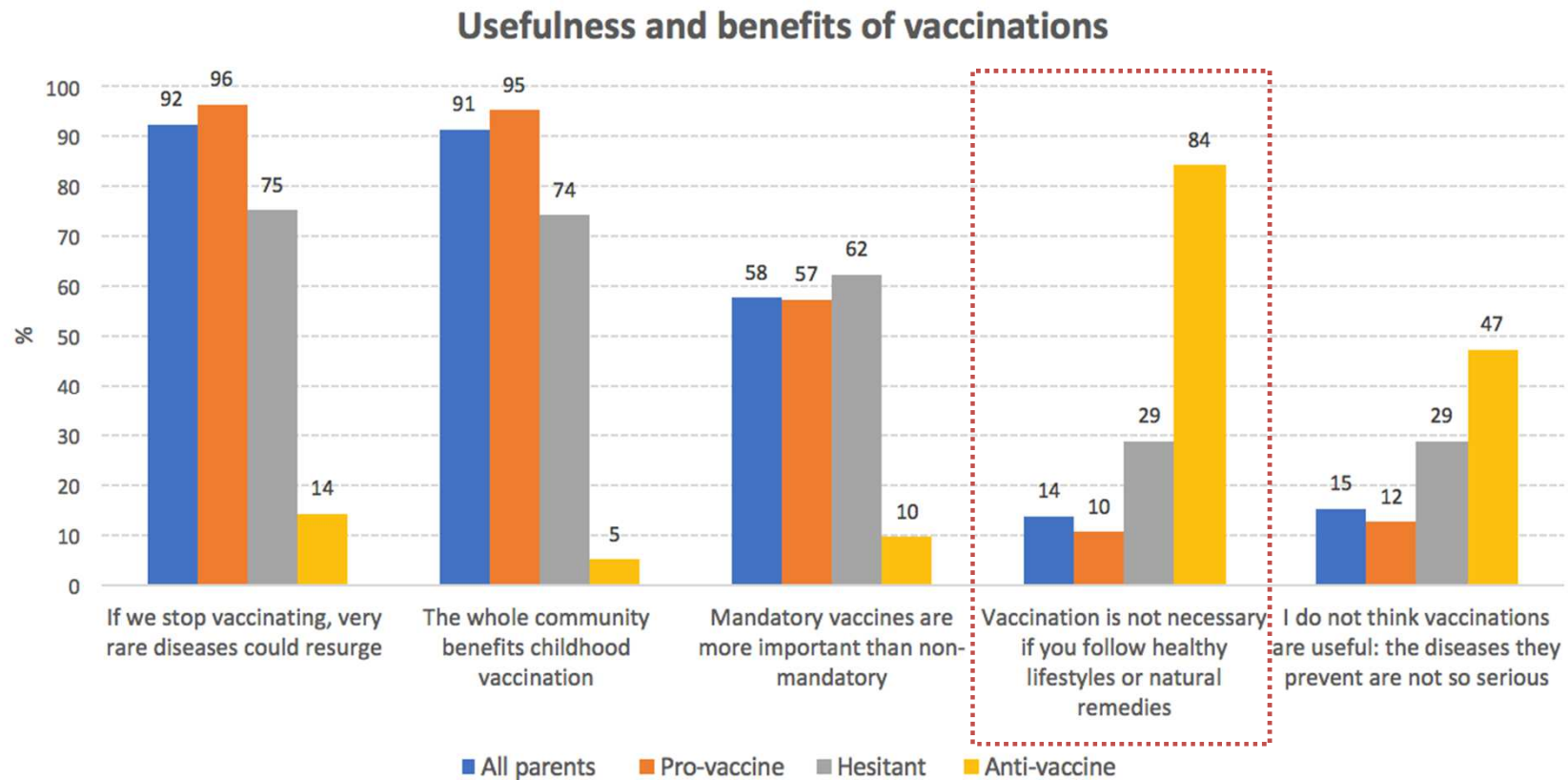
Main reason for having delayed, interrupted or not having performed one or more vaccinations



Parental vaccine hesitancy in Italy – Results from a national survey

Cristina Giambi ^{a,*}, Massimo Fabiani ^{a,1}, Fortunato D'Ancona ^{a,2}, Lorenza Ferrara ^b, Daniel Fiacchini ^c, Tolinda Gallo ^d, Domenico Martinelli ^e, Maria Grazia Pascucci ^f, Rosa Prato ^e, Antonietta Filia ^{a,1}, Antonino Bella ^{a,1}, Martina Del Manso ^{a,1}, Caterina Rizzo ^{a,1}, Maria Cristina Rota ^{a,1}

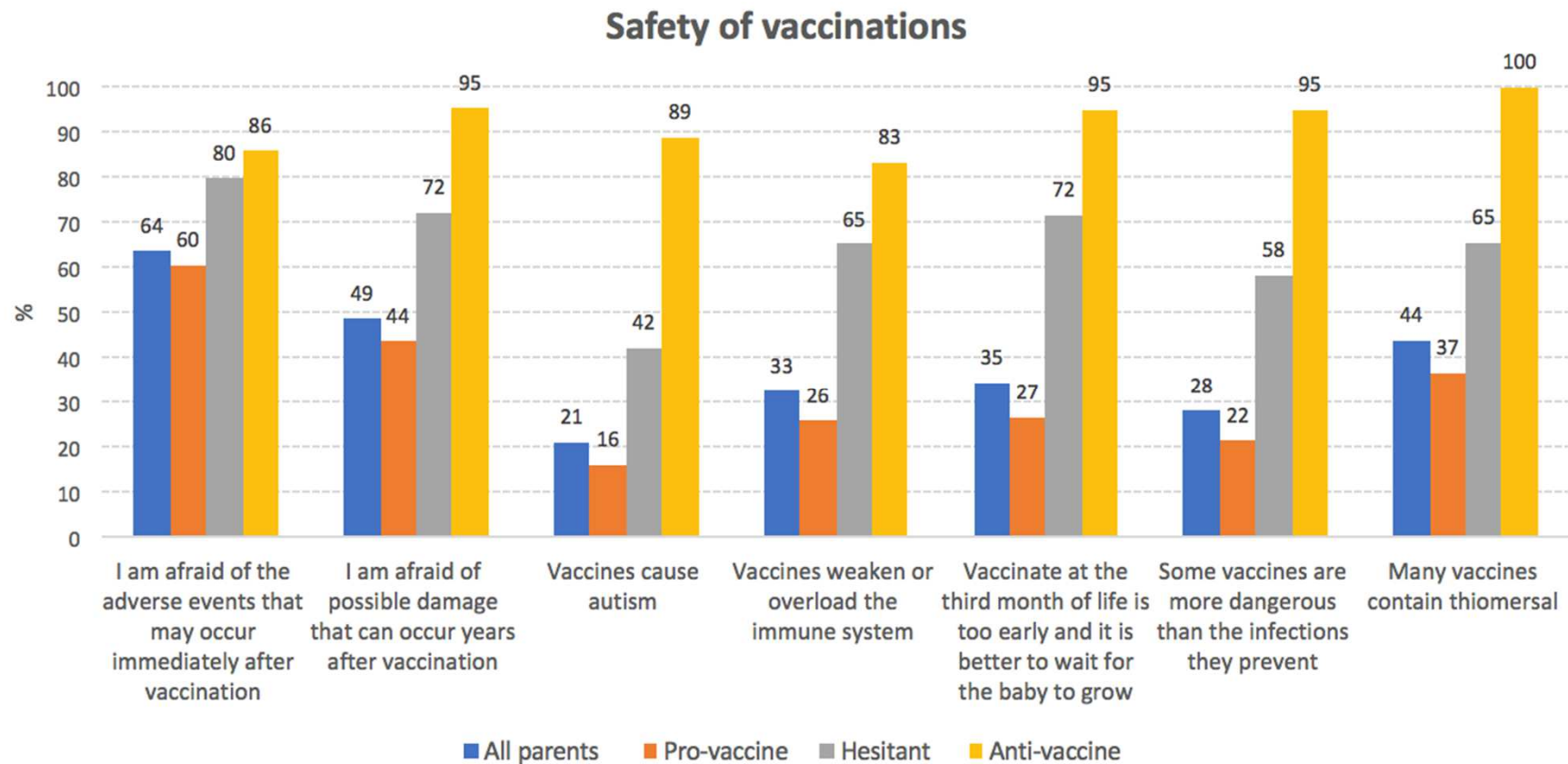
Beliefs regarding vaccinations: agreement degree on survey items of pro-vaccine, hesitant, and anti-vaccine parents



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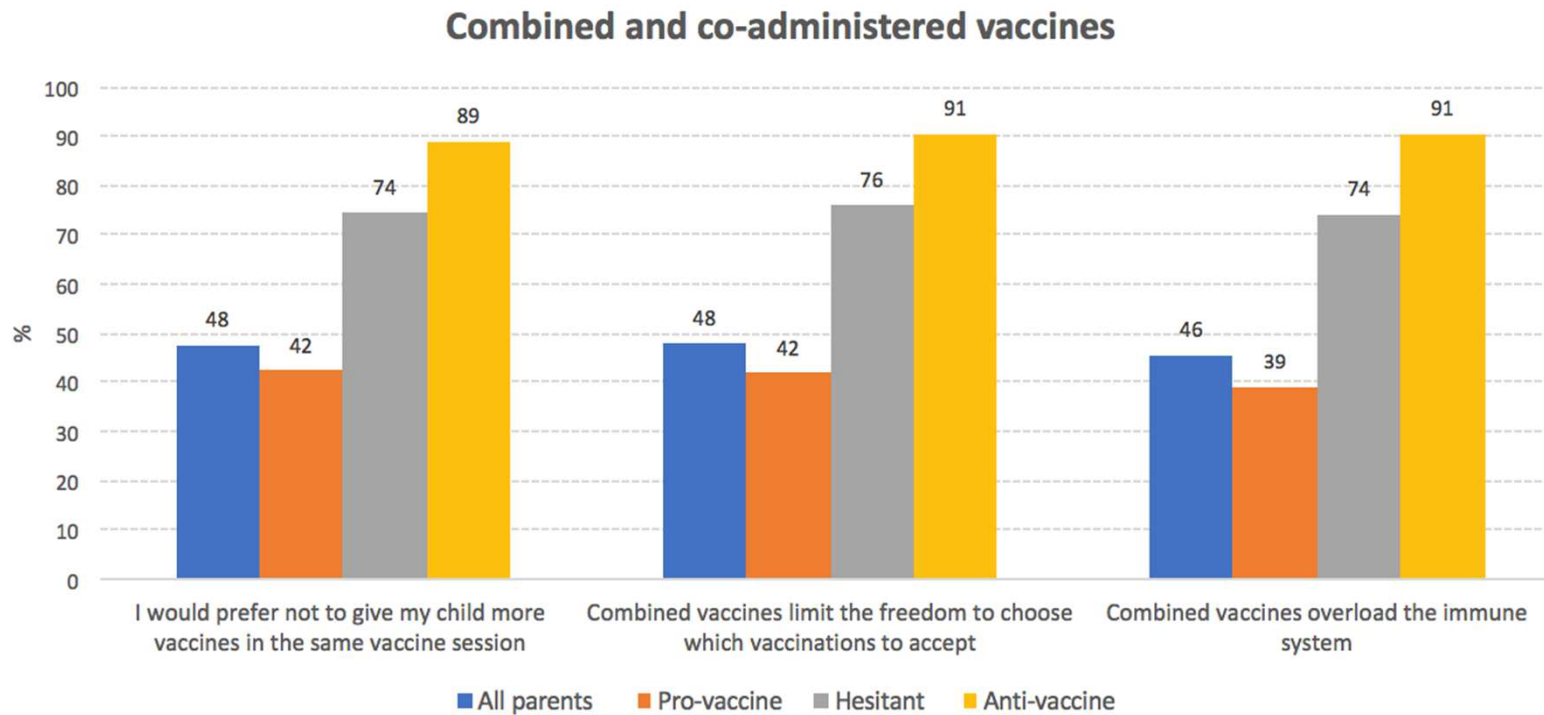
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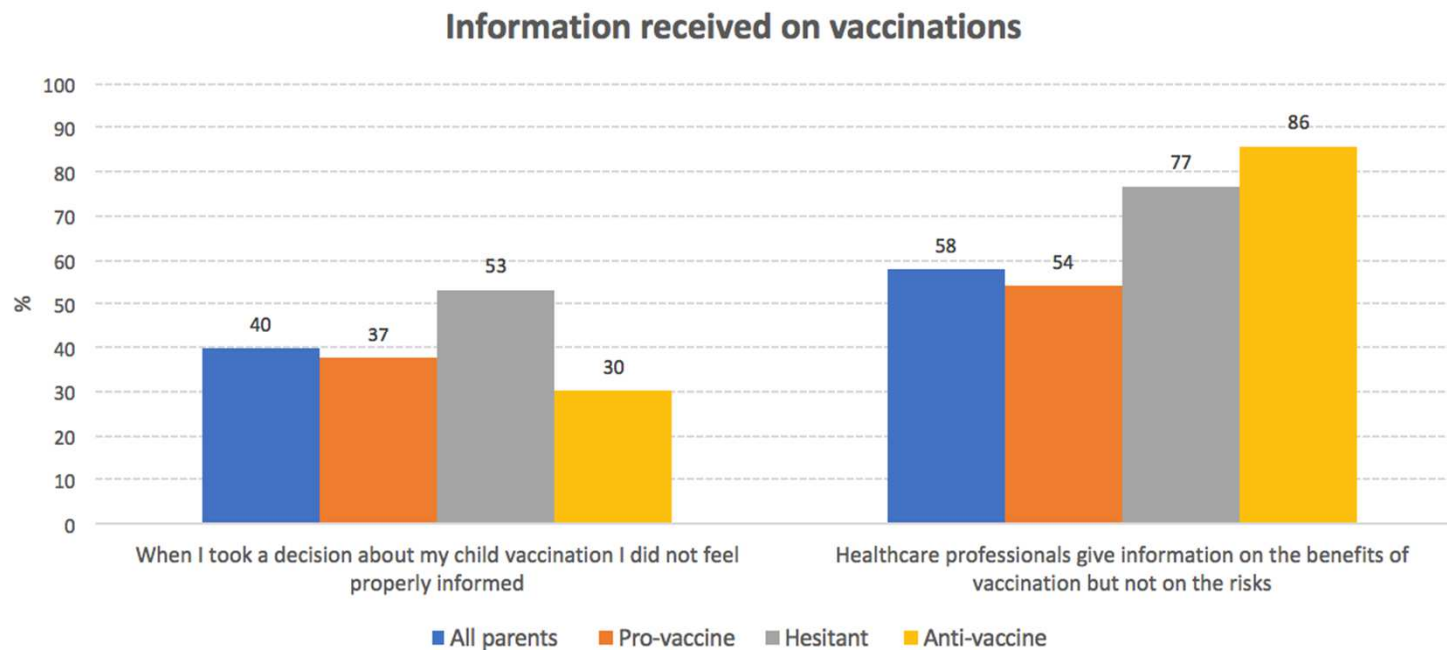




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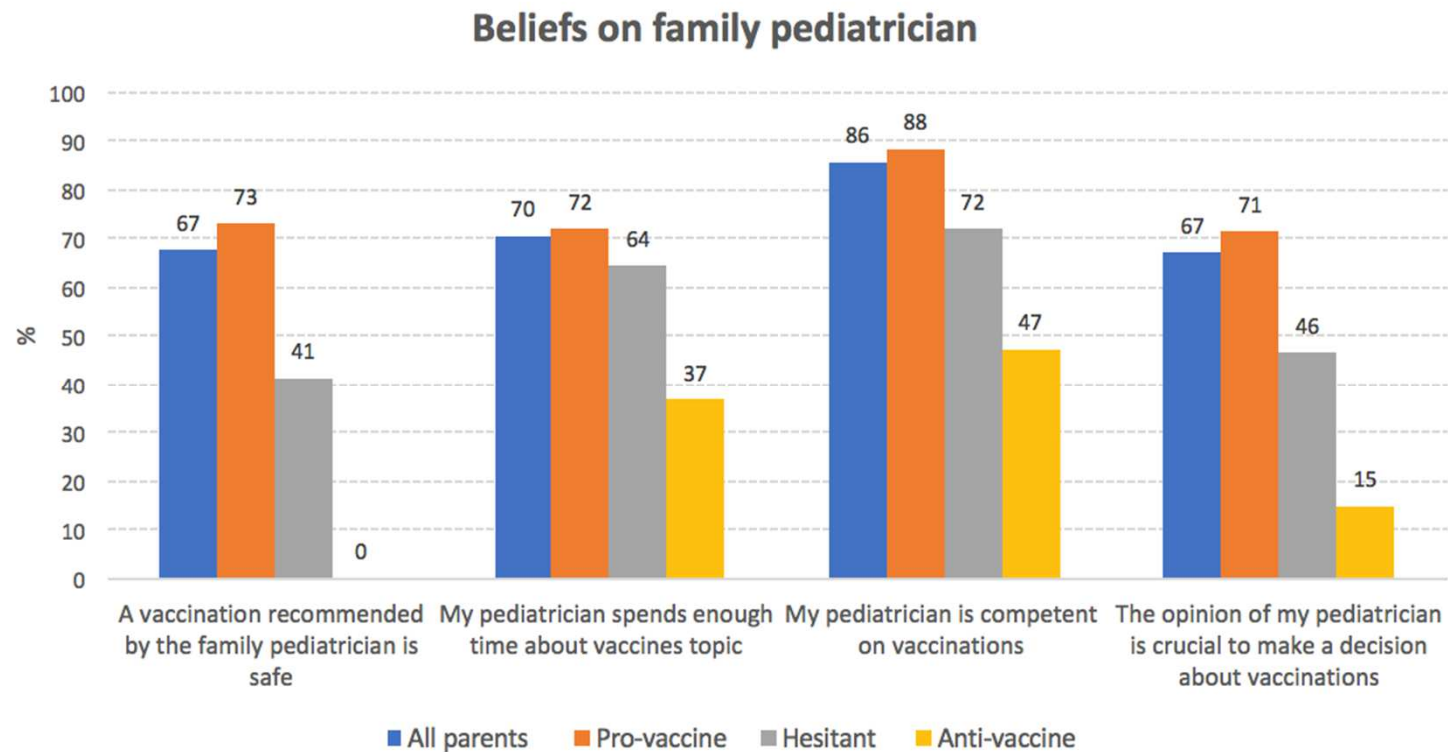
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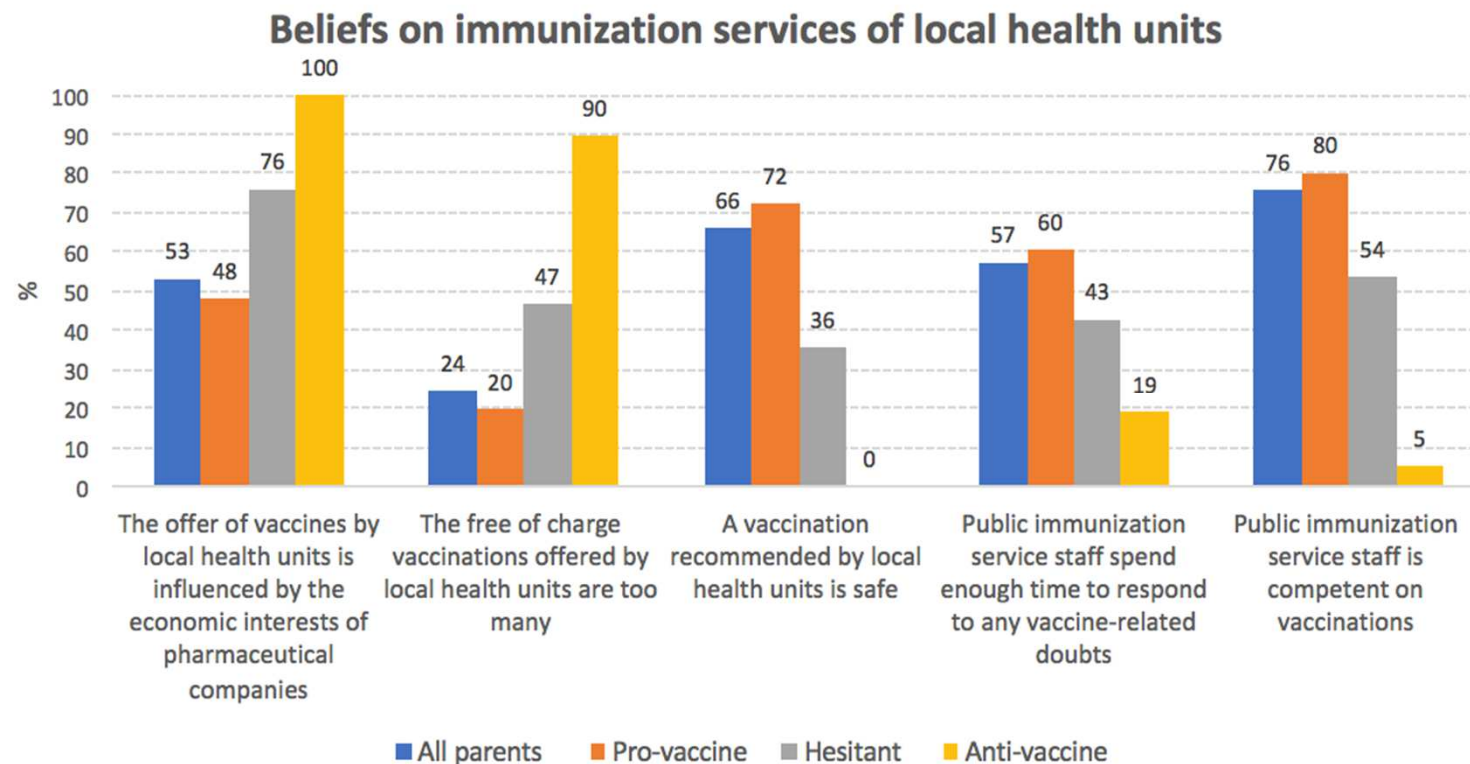
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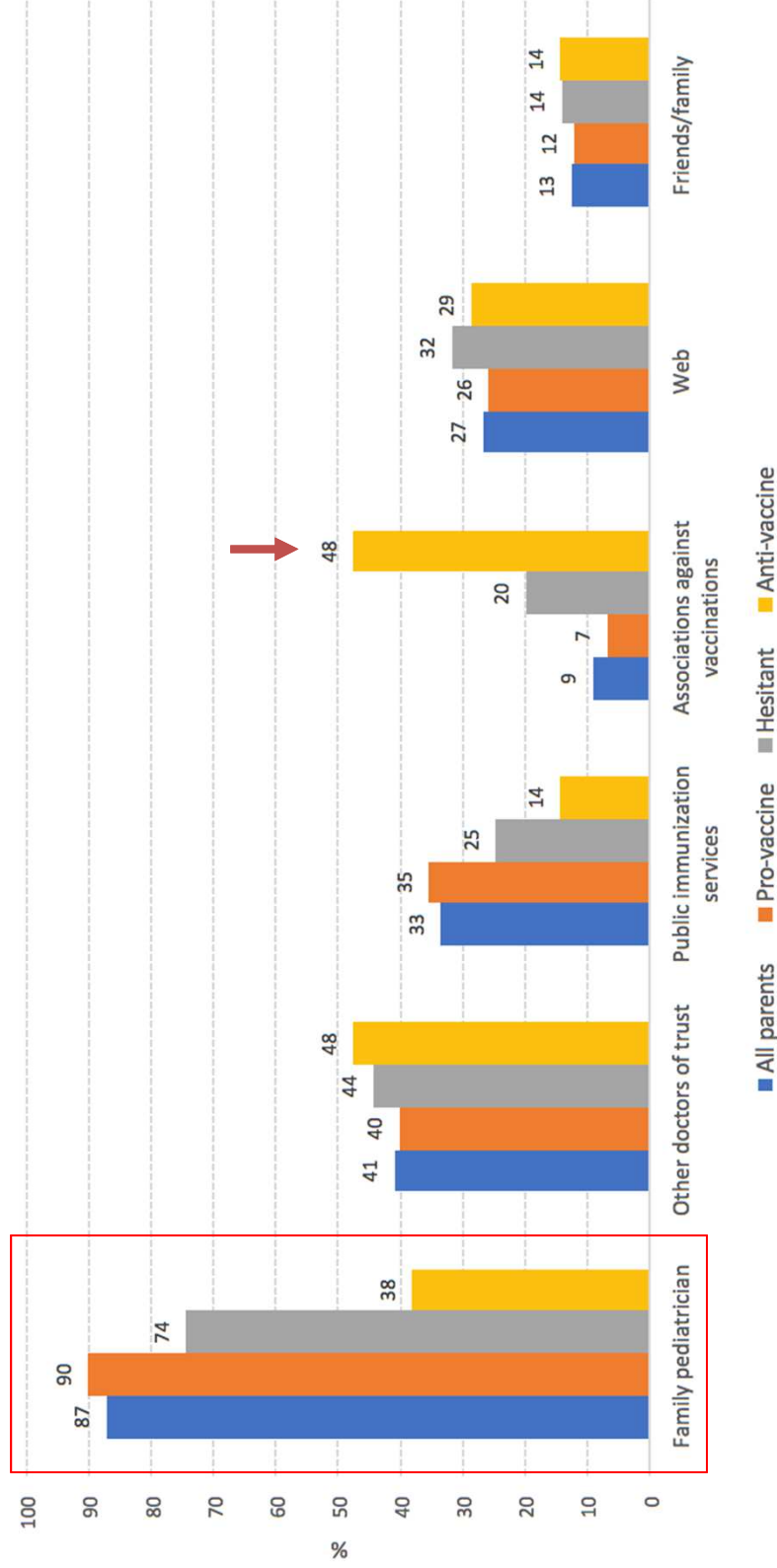
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If you have any doubts about the risks or the real benefits of a vaccine, which of the following sources would you consult for information?





Parental vaccine hesitancy in Italy – Results from a national survey

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Determinants of vaccine hesitancy

- ***Not having received from a paediatrician a recommendation to fully vaccinate their child***
- ***Having received discordant opinions on vaccinations***
- ***Having met parents of children who experienced serious adverse reactions***
- ***Mainly using non-traditional medical treatments***

*A high degree of hesitancy was also observed among parents who reported **not trusting paediatricians and public immunization services**, and among those who **consider associations against vaccinations as a reliable source of information***

Indagine su conoscenze, attitudini e pratica dei pediatri Italiani nei confronti delle vaccinazioni



A cura di: Antonietta Filia, Antonino Bella, Fortunato Paolo D'Ancona, Massimo Fabiani, Cristina Giambi, Caterina Rizzo, Maria Cristina Rota

Percezione dei pediatri nei confronti delle vaccinazioni in generale (N. 903)



[Dati non pubblicati]

Indagine su conoscenze, attitudini e pratica dei pediatri Italiani nei confronti delle vaccinazioni



A cura di: Antonietta Filia, Antonino Bella, Fortunato Paolo D'Ancona, Massimo Fabiani,
Cristina Giambi, Caterina Rizzo, Maria Cristina Rota

Determinanti per cui i pediatri si sentono sufficientemente informati sulle vaccinazioni e le malattie prevenibili da vaccinazione, inclusi l'incidenza, le complicanze, i benefici/rischi della vaccinazione, le controindicazioni alla vaccinazione

*Secondo i risultati dell'analisi multivariata, si sentono più informati i pediatri **maschi**, quelli di età **maggiore o uguale a 55 anni**, e i pediatri che **negli ultimi 5 anni** hanno seguito **corsi di formazione**. Inoltre, si sentono più informati i pediatri che ritengono che la **partecipazione a convegni** e la **letteratura scientifica** abbiano influito moltissimo o molto sulla loro formazione sulle malattie prevenibili da vaccinazione, e i pediatri che hanno messo in atto **iniziative per promuovere le vaccinazioni**. I pediatri di libera scelta si sentono meno informati rispetto agli altri (pediatri di comunità/ambulatoriale, pediatri ospedalieri/universitari e pediatri libero professionista)*

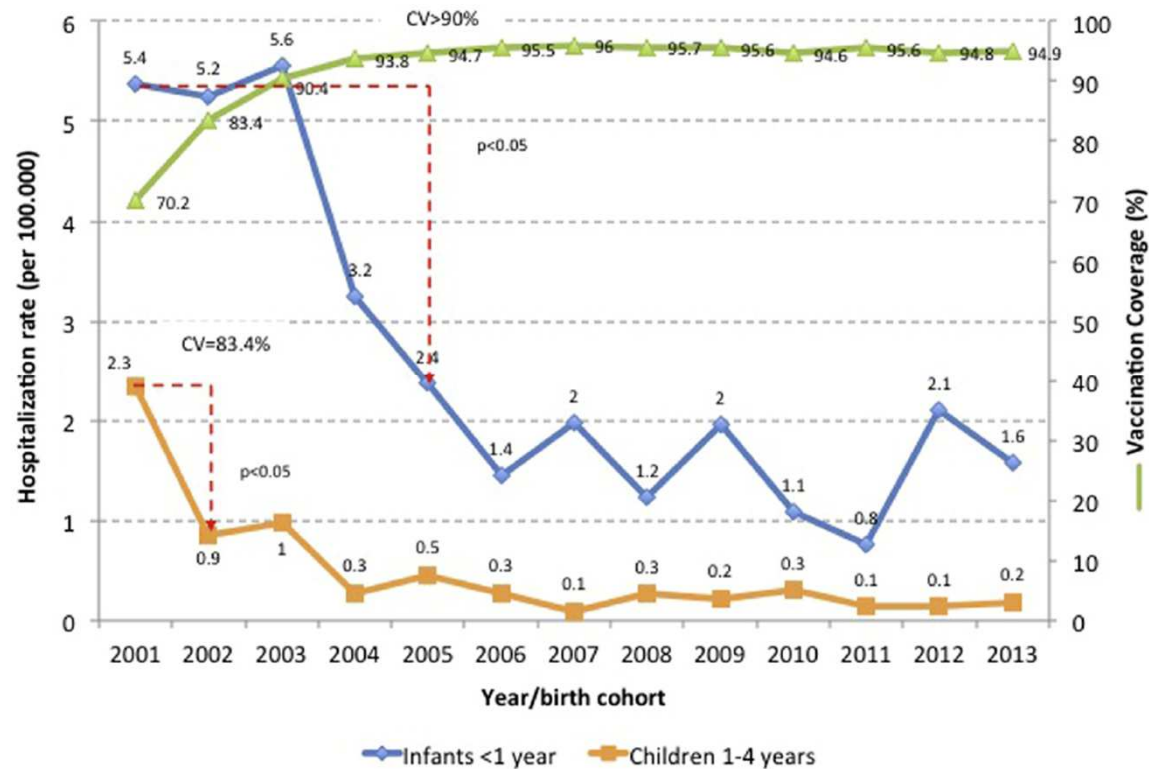


Impact of *Haemophilus influenzae* type b conjugate vaccination on hospitalization for invasive disease in children fifteen years after its introduction in Italy



Domenico Martinelli^a, Chiara Azzari^b, Paolo Bonanni^c, Susanna Esposito^d, Elisabetta Franco^e, Giancarlo Icardi^f, Gianvincenzo Zuccotti^g, Rosa Prato^{a,*}

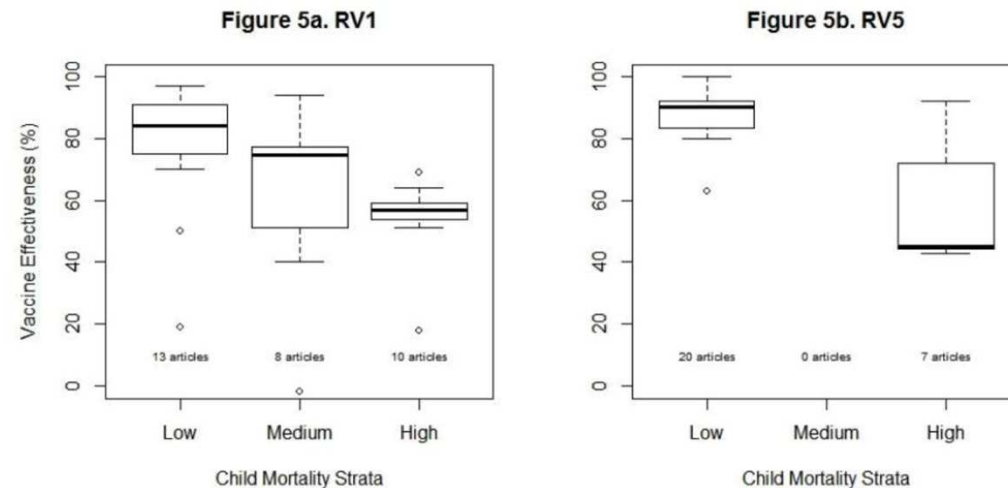
Hospitalization rates for invasive *H. influenzae* disease in infants <1 year and children 1–4 years, Italy, 2001–2013. Vaccination coverage at age 24 months in the same period



Effectiveness of Rotavirus Vaccination: A Systematic Review of the First Decade of Global Postlicensure Data, 2006–2016

Christine L Jonesteller, Eleanor Burnett, Catherine Yen, Jacqueline E Tate, Umesh D Parashar

Median vaccine effectiveness by vaccine and child mortality stratum



A partial vaccine series provided considerable protection, but not to the same level as a full series. VE tended to decline in the second year of life, particularly in medium and high mortality settings, and tended to be greater against more severe rotavirus disease. Post-licensure data from countries across geographic regions and with different child mortality levels demonstrate that under routine use, both RV1 and RV5 are effective against rotavirus disease, supporting the WHO recommendation that all countries introduce rotavirus vaccine into their national immunization program

Effectiveness and impact of a reduced infant schedule of 4CMenB vaccine against group B meningococcal disease in England: a national observational cohort study



Sydel R Parikh, Nick J Andrews, Kazim Beebejaun, Helen Campbell, Sonia Ribeiro, Charlotte Ward, Joanne M White, Ray Borrow, Mary E Ramsay, Shamez N Ladhani

Coverage of 4CMenB in infants eligible for routine vaccination was high, achieving 95·5% for one dose and 88·6% for two doses by 6 months of age. **Two-dose vaccine effectiveness was 82·9% (95% CI 24·1–95·2) against all MenB cases, equivalent to a vaccine effectiveness of 94·2% against the highest predicted MenB strain coverage of 88%.**

Compared with the prevaccine period, there was a **50% incidence rate ratio (IRR) reduction in MenB cases in the vaccine-eligible cohort (37 cases vs average 74 cases; IRR 0·50 [95% CI 0·36–0·71]; $p=0\cdot0001$), irrespective of the infants' vaccination status or predicted MenB strain coverage. Similar reductions were observed even after adjustment for disease trends in vaccine-eligible and vaccine-ineligible children**

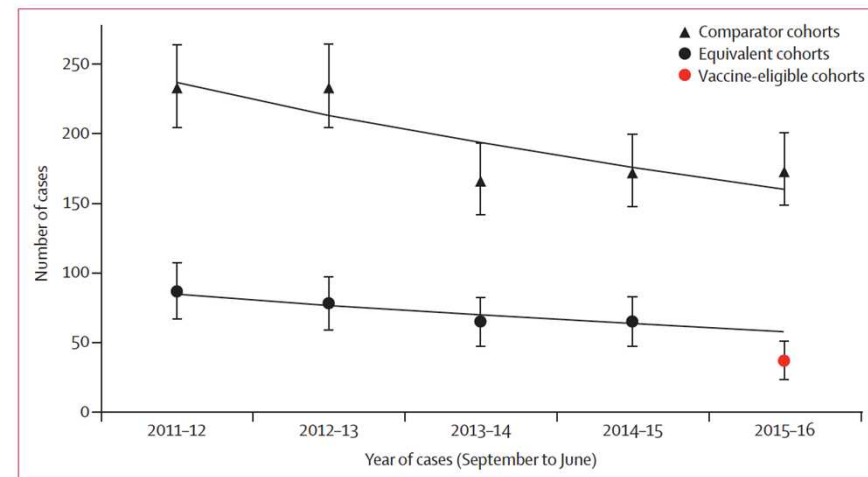


Figure 2: Numbers of cases of MenB disease in vaccine-eligible and comparator cohorts in England, 2011-16, with Poisson 95% CIs and fitted trend

The vaccine-eligible cohort included infants born on or after May 1, 2015, aged 10 weeks or older and diagnosed between Sept 1, 2015, and June 30, 2016. The equivalent cohorts fulfilled the same criteria as the vaccine-eligible cohorts for each of the previous 4 prevaccine years. The comparator cohorts included all children aged younger than 5 years with MenB disease excluding the vaccine-eligible and equivalent cohorts. MenB=group B meningococcal disease.

Pneumococcal conjugate vaccine 13 delivered as one primary and one booster dose (1 + 1) compared with two primary doses and a booster (2 + 1) in UK infants: a multicentre, parallel group randomised controlled trial



David Goldblatt*, Jo Southern*, Nick J Andrews, Polly Burbidge, Jo Partington, Lucy Roalfo, Marta Valente Pinto, Vasilli Thalasselis, Emma Pleased, Hayley Richardson, Matthew D Snape, Elizabeth Miller

	Post-primary group 1 (2 m, 4 m; N _{max} =97)*	Post-primary group 2 (3 m; N _{max} =102)*	p value†	Post-boost group 1 (2 m, 4 m, 12 m; N _{max} =91)*	Post-boost group 2 (3 m, 12 m; N _{max} =86)*	Group 2 to group 1 ratio‡	Adjusted‡ p value	
1	1.25 (1.07-1.45)	0.57 (0.47-0.69)	<0.0001	3.07 (2.58-3.64)	8.92 (7.42-10.73)	2.73 (2.13-3.51)	<0.0001	+
3	0.28 (0.23-0.33)	0.27 (0.21-0.34)	0.66	0.61 (0.51-0.74)	0.62 (0.52-0.74)	0.93 (0.72-1.19)	0.57	
4	1.08 (0.93-1.26)	0.43 (0.36-0.51)	<0.0001	2.55 (2.15-3.04)	3.43 (2.86-4.12)	1.29 (1.01-1.64)	0.047	+
5	0.88 (0.77-1.07)	0.38 (0.31-0.45)	<0.0001	1.71 (1.46-2.02)	2.11 (1.81-2.45)	1.15 (0.83-1.62)	0.20	
7	0.87 (0.77-0.97)	0.38 (0.31-0.45)	<0.0001	1.71 (1.46-2.02)	2.11 (1.81-2.45)	1.15 (0.83-1.62)	0.002	-
7)	0.87 (0.77-0.97)	0.38 (0.31-0.45)	<0.0001	1.71 (1.46-2.02)	2.11 (1.81-2.45)	1.15 (0.83-1.62)	<0.0001	-
1)	0.87 (0.77-0.97)	0.38 (0.31-0.45)	<0.0001	1.71 (1.46-2.02)	2.11 (1.81-2.45)	1.15 (0.83-1.62)	0.059	
6)	0.87 (0.77-0.97)	0.38 (0.31-0.45)	<0.0001	1.71 (1.46-2.02)	2.11 (1.81-2.45)	1.15 (0.83-1.62)	0.85	
3)	0.87 (0.77-0.97)	0.38 (0.31-0.45)	<0.0001	1.71 (1.46-2.02)	2.11 (1.81-2.45)	1.15 (0.83-1.62)	0.002	+
5)	0.87 (0.77-0.97)	0.38 (0.31-0.45)	<0.0001	1.71 (1.46-2.02)	2.11 (1.81-2.45)	1.15 (0.83-1.62)	0.017	-
6)	0.87 (0.77-0.97)	0.38 (0.31-0.45)	<0.0001	1.71 (1.46-2.02)	2.11 (1.81-2.45)	1.15 (0.83-1.62)	0.98	
1)	0.87 (0.77-0.97)	0.38 (0.31-0.45)	<0.0001	1.71 (1.46-2.02)	2.11 (1.81-2.45)	1.15 (0.83-1.62)	0.035	+
3)	0.87 (0.77-0.97)	0.38 (0.31-0.45)	<0.0001	1.71 (1.46-2.02)	2.11 (1.81-2.45)	1.15 (0.83-1.62)	<0.0001	-

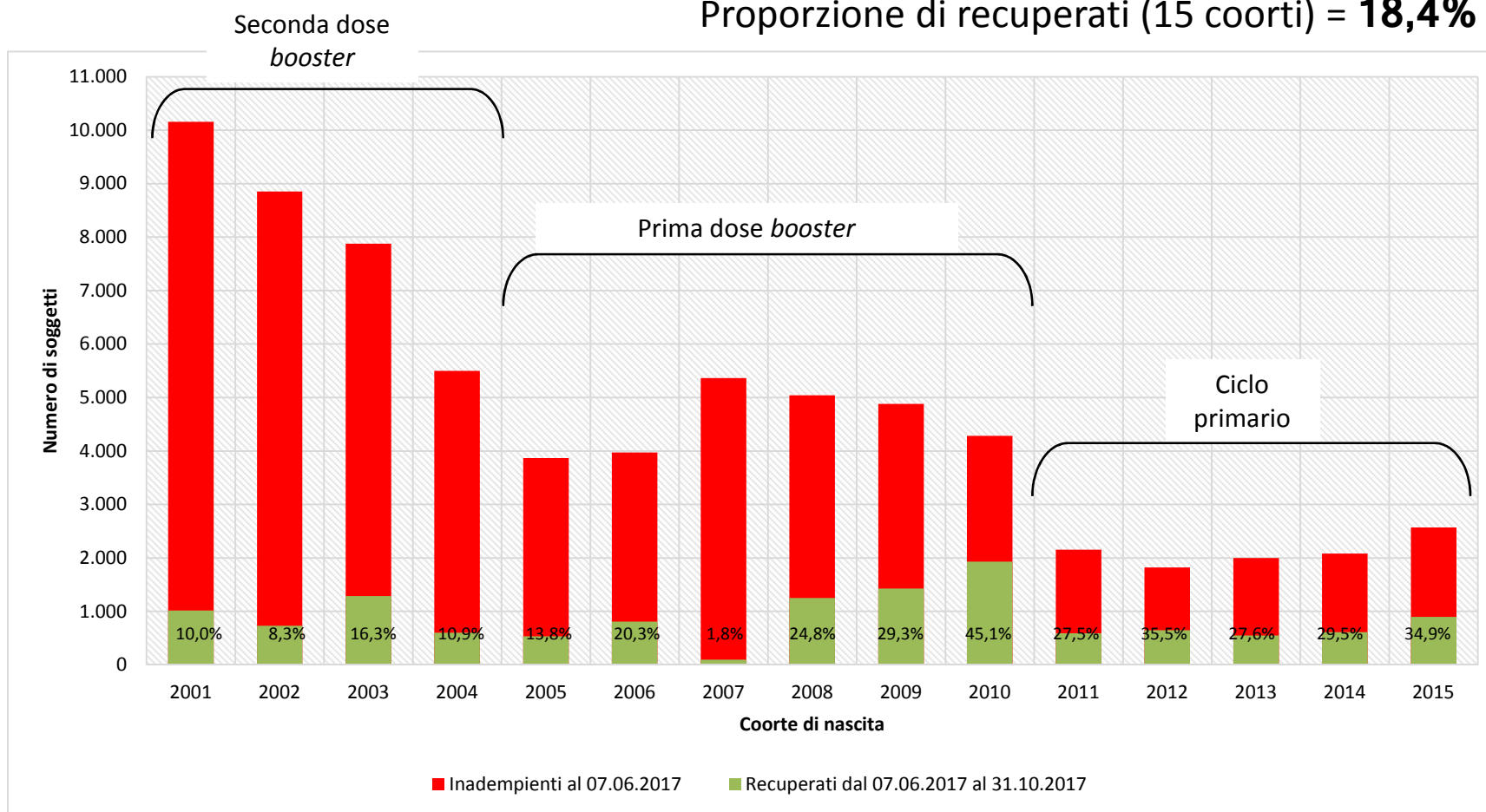
Interpretation: Our findings show that for **nine of the 13 serotypes in PCV13, post-booster responses in infants primed with a single dose are equivalent or superior to those seen following the standard UK 2 + 1 schedule.** Introducing a 1 + 1 schedule in countries with a mature PCV programme and established herd immunity is likely to maintain population control of vaccine-type pneumococcal disease.

Table 2: Post-primary and post-booster serotype specific immunoglobulin G geometric mean concentrations in µg/mL

Mappatura applicazione del D.L. n. 73 del 7 giugno 2017

Inadempienti e recuperi anti-tetano, rilevazione al 31.10.2017

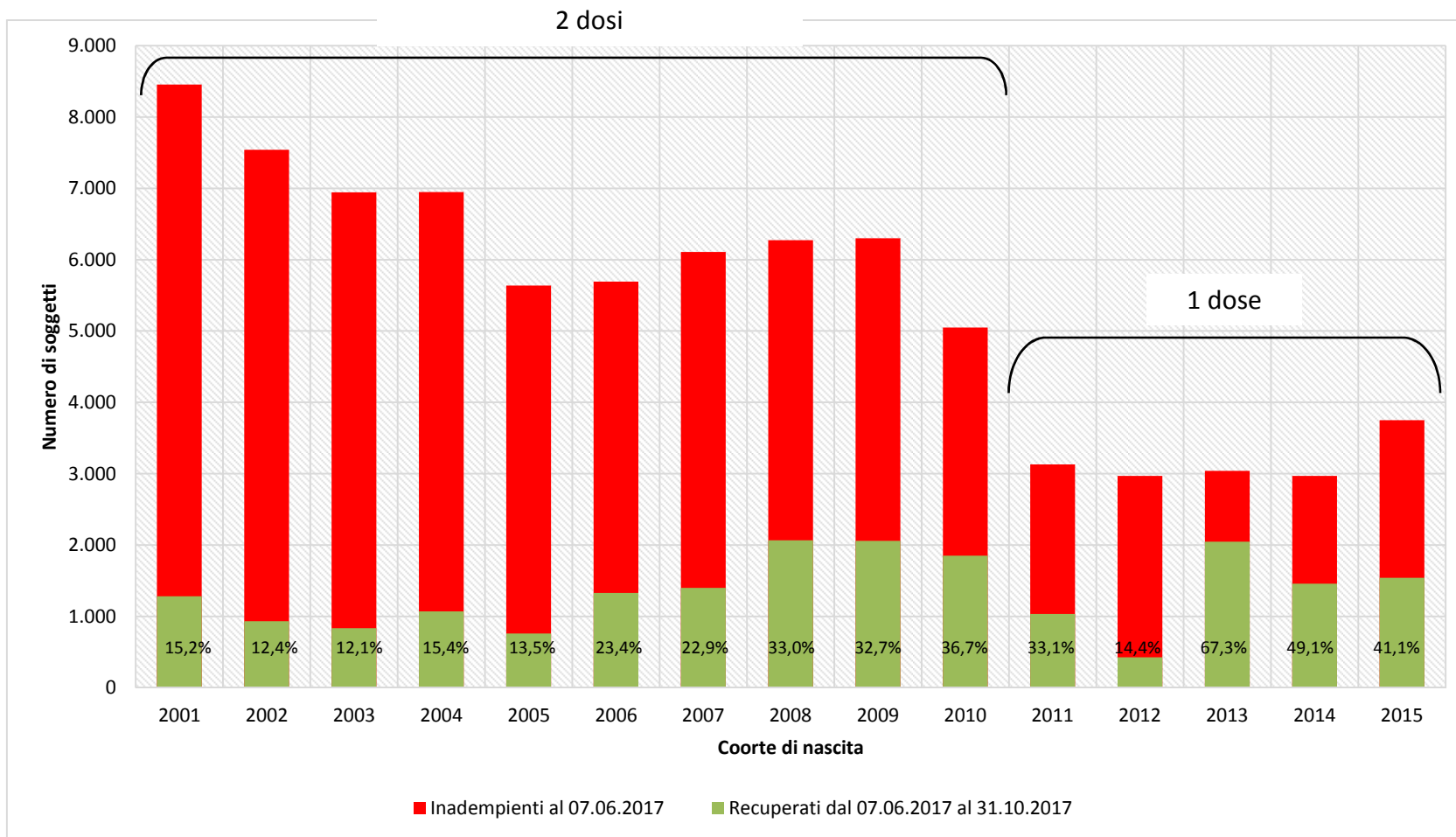
Proporzione di recuperati (15 coorti) = **18,4%**



Mappatura applicazione del D.L. n. 73 del 7 giugno 2017

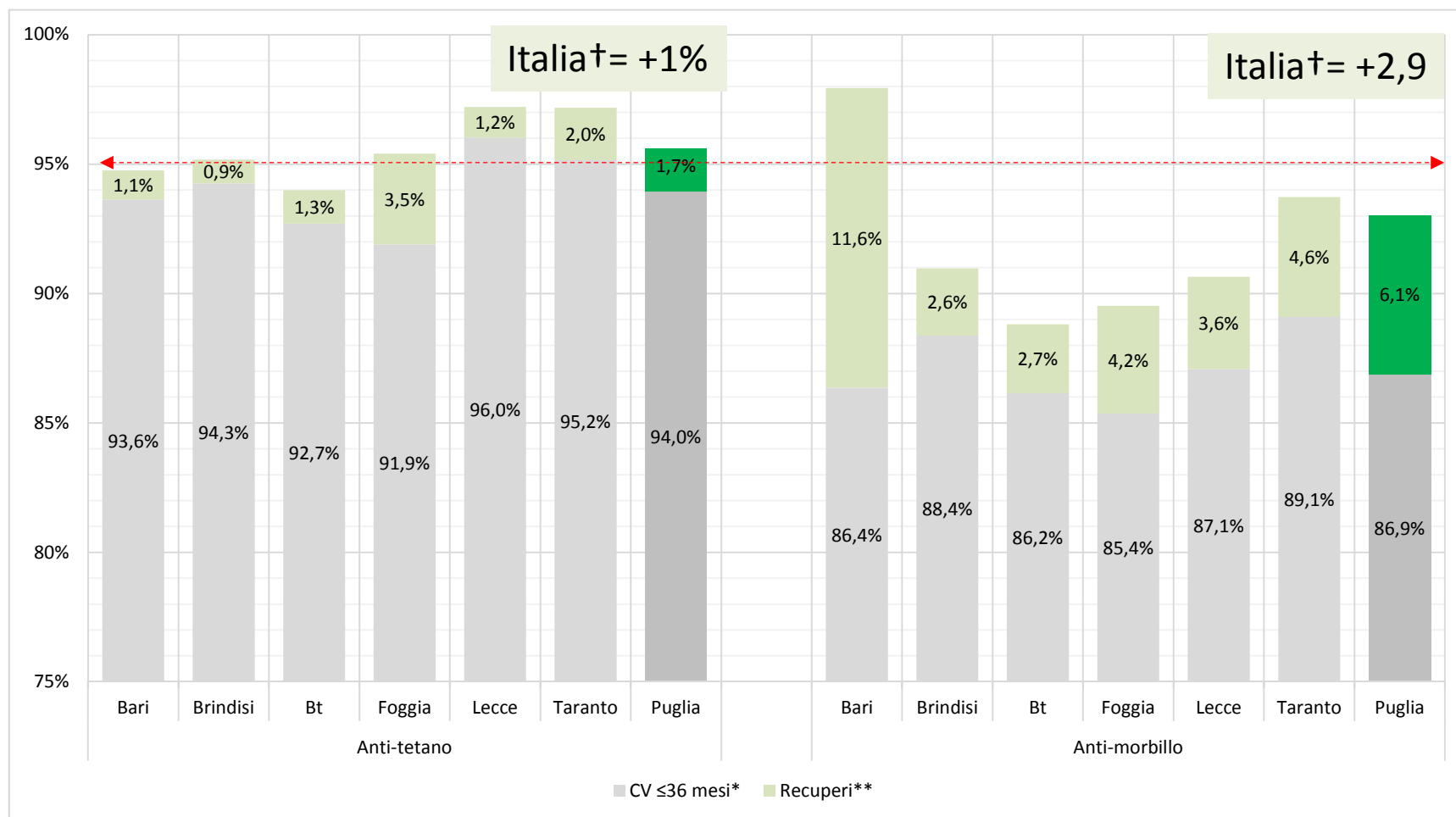
Inadempienti e recuperi anti-morbillo, rilevazione al 31.10.2017

Proporzione di recuperati (15 coorti) = **24,9%**



CV (%) anti-tetano (ciclo primario) e anti-morbillo (1 dose di MPR o MPRV) dopo introduzione del D.L. n. 73 del 7 giugno 2017

Coorte di nascita 2013, 31 ottobre 2017



* Sez2 del Modulo di rilevazione delle coperture vaccinali al 31 dicembre 2016

** Mappatura applicazione del D.L. n. 73 del 7 giugno 2017 al 31.10.2017

† Dati preliminari disponibili per 5 regioni. *Signorelli C, Iannazzo S, Odone A. The imperative of vaccination put into practice. Lancet Infect Dis. 2018;18(1):26-27*

Grazie per l'attenzione

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