TALLINNA KOOLITERVISHOID

Estonian pupils' immunization coverage and the affecting factors

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Aim

To introduce

- how immunization has been carried out in Estonia;
- what are the affecting factors and possible methods to increase the coverage of vaccination among Estonian pupils

Background information

- Immunization is voluntary in Estonia
- The National Immunization Schedule is set up on a national level and applies to the whole country
- Immunization program vaccines are free of charge for children and dT vaccine for adults in Estonia
- Parents' agreement is needed for vaccination of children
- The vaccination of preschool children is performed by a family physician or nurse. The vaccination of school-aged children is organized by the school nurse on the basis of the immunization schedule

Immunization Schedule in Estonia, 2016

AGE	Hep B	BCG	DTP	OPV	Hib	MMR	dT
12 hours	Yes						
1-5 days		Yes					
1 month	Yes						
3 months			Yes	Yes	Yes		
4,5 months			Yes	Yes	Yes		
6 month	Yes		Yes	Yes	Yes		
1 year						Yes	
2 years			yes	Yes	Yes		
7 years				Yes			Yes
12 years							Yes
13 years					Yes *	Yes	
17 years							Yes
>18 years							Yes **

HPV (2 doses) will be added for girls aged 12 - 14 from 2018

* Hep B administered only for children who were not immunized at birth

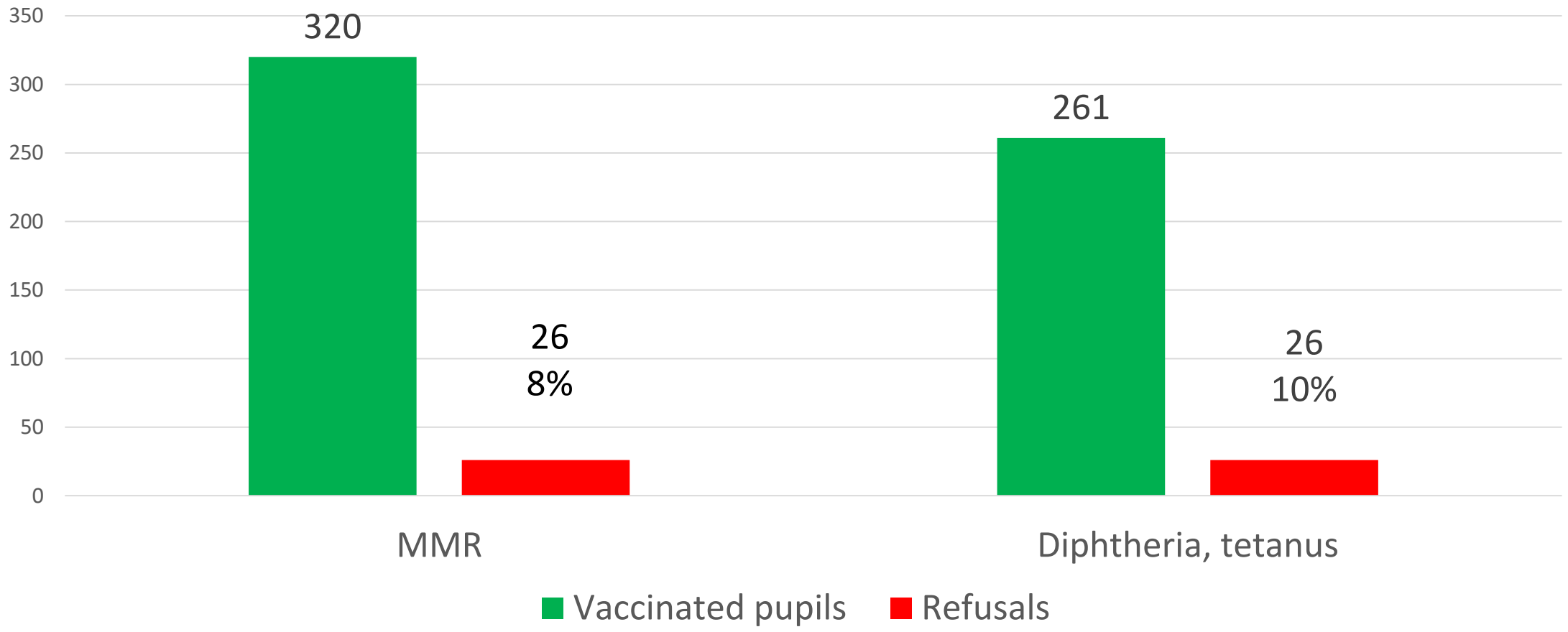
** Free of charge booster every 10 years for adults

Vaccination coverage in Estonia 2011 - 2016

Vaccination coverage in a age groups	2011	2012	2013	2014	2015	2016
Diphtheria, tetanus (7 month-14 years)	97,1	97,0	96,7	96,4	96,2	95,9
Pertussis (7 month-10 years)	96,3	96,3	96,0	95,7	95,4	95,2
Measles, rubella, mumps (1-14 years)	96,6	96,3	96,0	95,7	95,5	95,4
HebB (2 years)	95,0	94,7	94,7	94,1	93,4	**92,5**
Hib (2 years)	93,5	95,1	95,1	95,0	94,1	**93,8**
Polio (7 month-14 years)	97,1	97,0	96,7	96,4	96,2	95,9
Tuberculosis (0-11 month)	97,0	97,9	95,9	95,1	95,5	95,1

* Vaccination refusals 5,5%

No of vaccination refusals in 2015/16 school year on an example of two Tallinn schools*



*French Lyceum and Gustav Adolf Gymnasium

Possible reasons of refusing from vaccination

- Favourable epidemiological situation
- Insufficient level of knowledge about vaccination
- People do not trust information coming from state
- Doubts about the effectiveness of vaccination
- Doubts about vaccine safety
- Sceptical attitude towards new vaccines
- Voluntariness of immunization in Estonia
- Controversial information on the Internet

Estonian Health Board, 2017

Reasons of refusal told by parents

- Doubt about vaccine efficiency
- Belief that naturally acquired immunity is preferable
- Fear of autism spectrum disorder
- Concerns about added ingredients in vaccines
- Fear that child will suffer other complications from vaccine
- Belief that child will get illness from vaccine
- Pain/stress from multiple injections for child
- Family`s life style

Anti-vaccine movements

Almost as long as there have been vaccines, there has been an anti-vaccine movement. The misinformation promoted by antivaccinationists can infect parents and make them vaccineaverse.

David H. Gorski, MD, PhD

religious groups

homeopathy
naturopathy
alternative medicine

followers of conspiracy theories

Best communication

Emphasize on <u>vaccine protection</u> not about vaccine safety or risk

Manual and communication guide for vaccinators

Effective strategies (1)

- Reminding parents that healthcare providers, too, want what is best for their children
- Explaining that healthy children must be vaccinated to protect more vulnerable children who can’t be vaccinated (kids with cancer, autoimmune diseases, transplant recipients, newborns)
- Providing evidence-based responses to concerns and info on potential morbidity/mortality of vaccine-preventable diseases

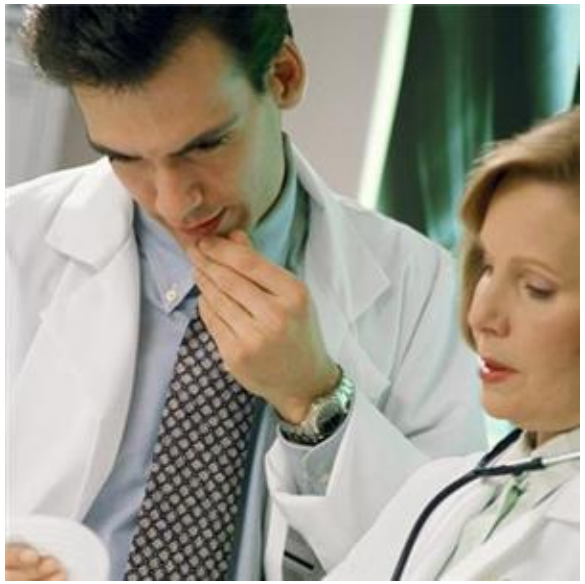
Effective strategies (2)

- Being the positive role model for your patients
- Communicating real life examples instead of facts
- Offering an alternative schedule for vaccination
- Noticing and recognising those who feel positive about vaccination
- Storing immunization data online and making a record in the immunization passport

Conclusion

Active communication about vaccines protection

Increases awareness about the protection



Increases reputation and trust in vaccination

Thank you for your attention!