#### Immunization among Roma children in Southeastern Europe: What are the true vaccination rates? What are the barriers?

#### Kristefer Stojanovski, PhD candidate, MPH

Consultant, Center for Regional Policy Research and Cooperation, Studiorum University of Michigan, Department of Health Behavior & Health Education

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#### Outline

#### Introduction

- Rates of immunization across Southeast Europe
- Barriers to immunization
- Conclusion
- Discussion

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#### Studiorum

- Center for Regional Policy Research and Cooperation
  - Established in 2002 in Skopje, Macedonia
  - Non-governmental think tank
  - Works on issues of EU economic and social integration, public health, and human rights
- Program Areas
  - Health Policy & Management
  - Human Rights
  - New Media & Society

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# VACCINATION COVERAGE

# NONO SERBIA

### Disparities in vaccination rates in Serbia, MICS 2014



#### WHO Health & Nutrition Study, Serbia, 2012

- Multi-cluster random sample
- Roma living in Belgrade settlements
  - 42% of settlements considered illegal according to Serbian authorities
- N=468 children
- Aged 6-59 months

### Low vaccination coverage among Roma children in Belgrade settlements



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#### **BOSNIA & HERZEGOVINA**

#### Major disparities in vaccination coverage among Roma children in Bosnia, MICS 2011-2012



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#### **KOSOVO UNSCR 1244**

#### Disparities in vaccination coverage among Roma children in Kosovo under UNSCR 1244, MICS 2013-2014



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#### FORMER YUGOSLAV REPUBLIC OF MACEDONIA

#### Lower disparities in immunization coverage among Roma children in FYROM, MICS 2011



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#### MONTENEGRO

#### Major disparities in vaccination coverage among Roma children in Montenegro, MICS 2013



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#### ACROSS COUNTRIES OF SOUTHEASTERN EUROPE

### Roma children's vaccination rates across Southeastern Europe, MICS



0  Roma children's vaccination rates across Southeastern Europe, OSCE Regional Report 2013

Vaccination <sup>2</sup> (ages 0-6)	
Roma	Non-Roma
89%	99%
82%	97%
97%	99%
93%	99%
94%	99%
93%	99%
	Vacci (age Roma 89% 82% 97% 93% 93%

#### **BARRIERS TO COVERAGE**

Immunization rates among Roma children in Serbia, WHO Health and Nutrition Study



Stojanovski, K, McWeeney, G., Emiroglu, N., Ostlin, P., Koller, T., Licari, L., Kaluski, D. (2012). Risk factors for low vaccination coverage among Roma children in disadvantaged settlements in Belgrade, Serbia. *Vaccine.* 30;5459:5463.

Birth registration predicted vaccination coverage among Roma children in Serbia

- Vaccination card
  - OR=6.1, CI(2.5, 15.0)

#### Age appropriate vaccination

- DTP, OR=3.8, CI(1.5, 10.0)
- OPV, OR=3.2, CI(1.5, 6.6)
- MMR, OR=4.8, CI(1.1, 20.9)
- HepB, OR= 5.4, CI(1.4, 21.6)

Stojanovski, K, McWeeney, G., Emiroglu, N., Ostlin, P., Koller, T., Licari, L., Kaluski, D. (2012). Risk factors for low vaccination coverage among Roma children in disadvantaged settlements in Belgrade, Serbia. *Vaccine.* 30;5459:5463.

### Reduction in vaccination as Roma children age in Slovenia



Kraigher, A., Vidovic, M., Kustec, T., Skaza, A. (2006). Vaccination coverage in hard to reach Roma children in Slovenia. Coll. Anthropol. 4:789-794.

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### Reduction in MMR vaccination due to movement in Poland

- Mass immunization campaign in 2009
- Outbreak of measles in Roma community
- Opportunity to estimate Roma population size and vaccination coverage
- First dose of MMR during campaign, 56%
  Second dose of MMR during campaign, 37%

Stefanoff P, Orlikova H, Rogalska J, Kazanowska-Zielinska E, Slodzinski J. Mass immunization campaign in a Roma settled community created an opportunity to estimate its size and measles vaccination uptake, Poland, 2009. Euro Surveill 2010 Apr 29;15(17).

### Findings from WHO vaccination guide pilot study in Bulgaria

- Parents lacked information about importance of vaccinations and timing of vaccinations
- Lack of language fluency
- Costs of transportation, although vaccines are free
- Trust in the healthcare system

Available at: http://www.who.int/features/2013/bulgaria\_vaccination/en/

#### **Other barriers**

#### Administrative barriers

- Lack of identity documents
- Lack of child registration with primary care clinic/physician
- Lack of health insurance documents
- Access to health care
  - Discrimination in health institutions
  - Lack of cultural competency

#### CONCLUSIONS

#### Conclusions

- Vaccination rates of Roma children are 10-70% lower than children in the general population in countries of residence
- TB immunization has the highest rate across all countries because it is immediately done after birth in the hospital
- Highest rates of immunization in FYROM
  - Roma health mediators extensively used

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#### DISCUSSION

#### Why are rates low?

- Policy-level barriers
  - Birth registration procedures
  - Informal payment for health services
  - Costs such as transportation to go to health clinics
  - Neighborhood displacement and resettlement
- Institutional-level barriers
  - Discrimination in health institutions
  - Lack of knowledge regarding importance of vaccination
  - Lack of trust in government institutions

#### How can we improve rates?

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- Need for longitudinal research on immunization among Roma
- How can we improve upon best practices?
  - Why are disparities lower in Macedonia?
- Could local community-based organizations be an avenue for improved immunization?
- How does the diversity of Roma communities influence immunization?
  - Roma settlements vs. stable housing

#### What are the true rates?

Who is included in analyses of rates?

- Roma from Census?
  - Low level of identification as Roma
- Illegal vs. legal settlements?
- Displaced settlements?
- School enrolled children?
- All of the above are methodological challenges
  - Must overcome the challenge of estimating Roma populations in their countries of residence

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#### **QUESTIONS?**

#### **Contact Information**

 Kristefer Stojanovski Center for Regional Policy Research and Cooperation, Studiorum <u>kristefers@gmail.com</u> Skype: kstojanovski <u>www.studiorum.org.mk</u>