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

Debrecen, Hungary
June 1-3, 2016
Outline

- Introduction
- Rates of immunization across Southeast Europe
- Barriers to immunization
- Conclusion
- Discussion
INTRODUCTIONS
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
SERBIA
Disparities in vaccination rates in Serbia, MICS 2014

- TB: 98%, Roma: 94%
- Polio: 86%, 61%
- DPT: 87%, 65%
- MMR: 93%, 63%
- Hep B: 91%, 68%
- Full vaccination: 80%, 44%

General Population ▪ Roma
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

- TB: 2%
- Polio: 16%
- DPT: 17%
- MMR: 14%
- Hep B: 11%
- Full vaccination: 0%
BOSNIA & HERZEGOVINA
Major disparities in vaccination coverage among Roma children in Bosnia, MICS 2011-2012
Disparities in vaccination coverage among Roma children in Kosovo under UNSCR 1244, MICS 2013-2014
FORMER YUGOSLAV REPUBLIC OF MACEDONIA
Lower disparities in immunization coverage among Roma children in FYROM, MICS 2011
MONTENEGRO
Major disparities in vaccination coverage among Roma children in Montenegro, MICS 2013

- Tuberculosis (TB): 99% General population, 77% Roma
- Polio: 80% General population, 30% Roma
- Diphtheria, pertussis, and tetanus (DPT): 85% General population, 35% Roma
- Measles, mumps, and rubella (MMR): 92% General population, 72% Roma
- Hepatitis B (Hep B): 87% General population, 43% Roma
- Full coverage: 60% General population, 11% Roma
ACROSS COUNTRIES OF SOUTHEASTERN EUROPE
Roma children’s vaccination rates across Southeastern Europe, MICS

![Graph showing vaccination rates for TB, Polio, DPT, MMR, and Hep B in FYROM, Montenegro, Serbia, Bosnia, and Kosovo UNSCR 1244 for years 2011, 2013, 2014, 2012, and 2014.]
Roma children’s vaccination rates across Southeastern Europe, OSCE Regional Report 2013

<table>
<thead>
<tr>
<th>Country</th>
<th>Vaccination&lt;sup&gt;2&lt;/sup&gt; (ages 0-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Roma</td>
</tr>
<tr>
<td>Albania</td>
<td>89%</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>82%</td>
</tr>
<tr>
<td>Croatia</td>
<td>97%</td>
</tr>
<tr>
<td>The former Yugoslav Republic of Macedonia</td>
<td>93%</td>
</tr>
<tr>
<td>Montenegro</td>
<td>94%</td>
</tr>
<tr>
<td>Serbia</td>
<td>93%</td>
</tr>
</tbody>
</table>
BARRIERS TO COVERAGE
Immunization rates among Roma children in Serbia, WHO Health and Nutrition Study

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)

Reduction in vaccination as Roma children age in Slovenia

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%

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.
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?

- 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
QUESTIONS?
Contact Information

Kristefer Stojanovski
Center for Regional Policy Research and Cooperation, Studiorum

kristefers@gmail.com
Skype: kstojanovski
www.studiorum.org.mk