DECLINING MMR IMMUNIZATION RATES IN MINNESOTA SOMALIS: AN UPDATE

Lynn Bahta, BSN, PHN
Asli Ashkir, BSN, MPH
Minnesota Department of Health
Brief background

- Summer 2008: Immunization program became aware of MMR concerns via a TV news story
  - Featured community’s concern about high numbers of Somali children with autism in Minneapolis special education programs
  - “It’s the vaccines.” claimed a Somali parent.
- MDH study on Early Childhood Special Education enrollment fueled fear of autism and fanned misperception regarding MMR
- 2011 measles outbreak prompted MDH immunization program to look at MMR rates
Comparison of MMR Rates at 24 Months in Children of Somali Descent versus Non Somali, 2004-2009, Minnesota

Data from Minnesota Immunization Information Connection, March 2011
What we heard from the community

- **Leaders:**
  - Must educate the community
  - Address autism before addressing immunizations

- **Parents who have children diagnosed with autism:**
  - Cannot say “vaccines don’t cause autism” and then say “we don’t know what causes autism”
  - “I would rather my child die of measles which is destiny than get autism which is punishment.”
  - MDH has told us that Somali children have more autism, what are they doing about this? Maybe MDH doesn’t care.
Addressing MMR Vaccine Hesitancy: 2011-2012

- Formed a loose Coalition:
- Developed website specific to Somalis and autism
- Workgroup formed to explore diagnosing children from diverse cultural backgrounds formed
- Implemented the Autism and Developmental Disabilities Community Partnership Quality Improvement Initiative
- Collaborated with the U of M to sponsor national expert on culture and autism to conduct a training
- Collaborating partner in the U of M prevalence study
Addressing MMR Vaccine Hesitancy: 2011-2013

- Diverse media outreach – focused on measles disease and importance of vaccination
  - Promoted Mayo’s YouTube video
  - Developed a travel PSA
  - Posted a video of an interview with mother of child who almost died from measles
  - Radio announcements
2013 Reassessment:
Comparison of MMR Rates at 24 Months in Children of Somali Descent versus Non Somali, 2004-2011, Minnesota

Data derived from Minnesota Immunization Information Connection, April 2014
Time to Regroup

- What did we know?
  - Perspective of parents of children with autism
  - Parents were generally consenting to immunizations and specifically refusing MMR (12 month shots)
  - Autism fear was driving factor
  - Broad educational campaigns were not working

- Where were the gaps?
  - No “in” to the community
    - Was the source of misinformation only coming from parents of children with autism
    - How can we invite community members to trainings
  - What message would be effective
  - How to address fear of autism
Time to Regroup

- Consulted with CDC
- Developed cross-division team
  - Autism program
  - Immunizations
  - Communications Office
  - Refugee Health
- Hired Somali staff
  - RN – Children & Youth with Special Health Needs (CYSHN)
  - Outreach worker – Immunization Program
Key Informant Interviews

- Parents: 20 interviewed
  - 12 of 20 (60%) reported MMR refusal, 12 of 12 stated autism fear as reason
  - Fear autism more than measles – they avoid a diagnosis when they suspect that something is wrong
  - Only 7 parents could say what autism is, however receptive to education
  - Most (85%) named healthcare provider as their trusted source of medical information
    - Yet family and community influences were significant contributors to their vaccine hesitancy
Gathering Information

CLINICIANS: Four clinics selected and interviewed

- Interviewees included physicians, nurses, Somali outreach worker
- “MMR causes autism” belief is entrenched
- A deeply rooted oral tradition and the addition of a language barrier increases the creates difficulty in addressing misinformation
- Professional translators are used; providers gave mixed responses regarding trust in the translators
Gathering Information

- **MDH SOMALI STAFF**
  - Women frequently attend national/international conference calls
  - Parents tell the provider they don’t want “the vaccine that causes autism” - the provider says “okay”
  - Some translators tell parents not to get the MMR
  - Parents don’t understand the milestone checklist
Re-approaching MMR Vaccine Hesitancy

- Address perceived risk – autism
  - Focus trainings on child growth & development and autism first

- Change the script
  - From “we don’t know what causes autism” to “this is what we have learned about autism”

- Leverage social networks
  - Use oral tradition to change the advice
  - Peer to peer training
Strategies developed

- Outbreak control/mitigation
  - Increase community awareness of low rates through radio interviews, Somali newspapers, Somali TV
  - Internal/LPH planning for outbreak response –
  - Monitor MMR rates and provide outreach to places where Somali children congregate:
    - Somali-owned day care centers
    - Somali-attended charter schools
Strategies developed

- Provider/partner relationships
- Education and outreach

http://www.youtube.com/watch?v=mcsdreBpODI&feature=youtu.be
Acknowledgements

- Fatuma Irshat, BS
  Former Outreach Worker, Immunization Program

- Margo Roddy, MPH
  Minnesota Immunization Program Manager

- Sudha Setty, MPH
  Immunization data analysis, MDH

- Sara Chute, MPH
  International Health Coordinator