

Engaging with Immigrant Communities to Increase Vaccine Acceptance and Uptake: A Somali-American Community Example

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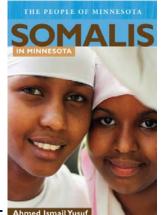
Disclosure & Acknowledgments

- Patricia Stinchfield has no conflicts of interest to disclose
- Thank you to Minnesota Department of Health for research slide
- Thank you to parents for giving permission to photograph their children for the purpose of provider and parent education.

Somalis in Minnesota?

2012 Book: by Ahmed Yusuf Somalis in Minnesota

- Primary refugees began coming to MN in 1993—jobs, acceptance, quality of life
- An oral society whose community relies on word of mouth +/-
- American Community Survey 2017 had MN as largest Somali community in US
- 52,333 Somali MN in 2017. Primary and secondary migration
- Word spread in refugee camps that MN was welcoming & had jobs
- New Somali refugees highest in 2006 at 3639, lowest in 2018 at 48
- Somalis hold elected positions locally and in congress

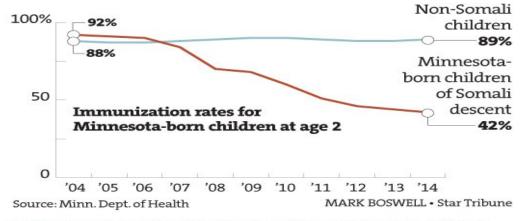


So how did MN get in this situation? Children's MINNESOTA



SOMALI VACCINATION RATES FALL

The Somali backlash against the measles vaccine is new; their kids' vaccination rates matched the general population until 2008, when fears of a link between the vaccine and autism sparked a reaction among Somali parents.



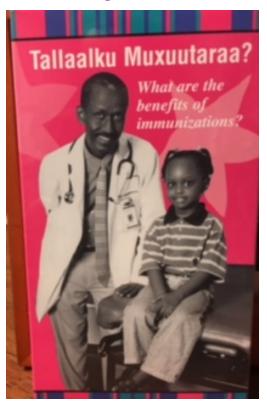
MMR uptake among Somali immigrants in Minnesota: This is the effect of nearly a decade of antivaccine propaganda.

Source: MN Department of Health

Education in Somali 2002 by VCR!



- All I knew was that when I came to America, don't take "the triple shot." I didn't know why but now I have evidence of <u>how dangerous it is to</u> not protect your children.
 - Mom of child admitted with measles in 2017



Minnesota 2011 Outbreak Follow Up Research



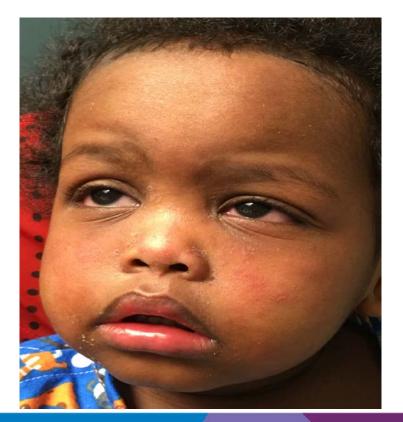
Childhood Vaccine Beliefs Reported by Somali and Non-Somali Parents E. Wolff, and D. Madlon-Kay, MD, MS 458 JABFM July—August 2014 Vol. 27 No. 4 http://www.jabfm.org

This project was to (1) ascertain whether Somali parents are more likely than non-Somalis to refuse childhood vaccinations, particularly the MMR, (2) determine what factors influence the decision not to vaccinate.

- <u>Methods:</u> Explored parental perceptions and utilization of vaccines through a survey distributed in FP Clinics
- <u>Results:</u> Somali parents were significantly more likely to believe that autism is caused by vaccines (35% vs. 8% of non-Somali parents).
- <u>Conclusions:</u> Statistically significant differences in perceptions and use of vaccines were reported by Somali and non-Somali participants. Somali parents are more likely to believe that the MMR vaccine causes autism and more likely to refuse the MMR vaccine than non-Somali parents. These beliefs have contributed to an immunization gap between Somali and non-Somali children.

Fever, rash, cough, conjunctivitis, coryza children's







Measles Cases – 2017 Outbreak Status Children's



State:

- 75 total cases
 - 66 in Hennepin County
 - 68 confirmed unvaccinated
 - (2) 1 MMR
 - (3) 2 MMR
 - (2) Unknown
 - 71 in children
 - 61 Somali Minnesotan

Children's:

- 53 cared for at Children's
 - Median age 3 yrs (range 10 mos-14 yrs)
- **21 children hospitalized** 100% at Children's
 - One child re-hospitalized for pneumonia for 22 hospitalizations
 - Average length of stay 4 days (range 2 d-17 d)



The Washington Post

Democracy Dies in Durkman





Inconsistencies are cited in dropping of charges that caused national stir

BY DAY MORES

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Busselo Balak conflictes her von Lugman, 2, at flede apartment in Hophim. Minn. Into has month. Lugman and the 16 menth-sild states both confragnel notable recently. Neither were confineded. Bussley: Abdolfabl, left, 5, del and get with said has new been ventionated.

Anti-vaccine rhetoric fuels scary reality

Minnesota faces major measles outbreak after groups sow antism fears in Somali American community

BY LESS H. SUN

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A plummeting vaccination rate in Minnesota The concentration take for measures, courses and reliefly bugger being afternly in decade ago among midden of flamed decared who high in Minnesons. That grap to now being blacked for a magic rescales suffrage, within the formal



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60% out for drug toor office

One vote leads to a long line of battle

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REALTH CARE NOW A DEFINING ISSUE

Parties already looking to madiorus and beyond

we Preside Responds

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The New Hork Times

Minnesota Sees Largest Outbreak of Measles in Almost 30 Years

By CHRISTOPHER MELE MAY 5, 2017



Amira Hassan of Burnsville, Minn., and her father, Mohamud, at the Children's Minnesota specialty clinic in Minneapolis on Tuesday.

Health officials are grappling with the largest outbreak of measles in Minnesota in almost 30 years, which is mainly sickening young children of Somali immigrants who fell under the sway of anti-vaccination activists.





MAY 9, 2017, 8:12 AM | Health officials in Mir

MORNING

worst measles outbreak in the state in nearly 30 years. Most of

those with the disease are unvaccinated Somali-American children. The state's health commissioner says the Somali community has been targeted with misinformation about vaccine risks. Jamie NBC Nightly News

PATSY STINCHFIELD
CHILDREN'S MINNESOTA HOSPITAL

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Here & Now

National
Public Radio



9 Cases Of Measles Confirmed In Minnesota

(1)

April 18, 2017

Health officials in Minnesota have confirmed nine cases of measles in the state, all in children who have not been vaccinated. There have also been recent cases of measles in Nebraska, Michigan and Texas. Experts say it could be a bad year for measles globally.

Here & Now's Meghna Chakrabarti speaks with <u>Patsy</u> <u>Stinchfield</u> (@InfectiousPS), senior director of infection prevention and control at Children's Hospitals and Clinics of Minnesota.

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Similar Somali MMR issues in England, Sweden and Minnesota

- **England:** Diversity and Equality in Health and Care 2013;10:101–13 *Health beliefs about preschool immunisations: an exploration of the views of Somali women resident in the UK.* N. Tomlinson & S. Redwood
- Found that fear and mistrust greatly impacted health beliefs

Sweden:

 There was a strong emotional component to the decision-making process, which was characterized by mistrust and fear

Systems communication





Local, social, cultural communication





Trusted Individual Communications Children's MINNESOTA





Trusted people reaching out to trusted Children's leaders in their familiar settings



Children's Interventions



- **≻**Somali Employee resource group
- **≻**Somali Clinicians Listening dinner
- ➤ Somali Imam meetings
- ► Ramadan Eid meeting & dinner
- **▶** Public Meetings
- ➤ Day to Day 1:1
- ► Phone conversations, build trust, really listening
- >Translated materials
- ➤ Somali staff helping lead



Photo CBS Morning Show



Public Health Interventions

- Outreach via Somali Imams and Somali health care providers
- ➤ Multiple Somali community meetings with health leaders and legislators

► Language and culturally appropriate messages on Somali

radio and TV

➤ Newspaper ads and articles





Reporting Back to Health Care Providers: MMR Survey

The Minnesota Department of Health (MDH) saw a significant increase in measles, mumps, and rubella (MMR) vaccination among the Minnesota Somali community during the 2017 measles outbreak. Following the outbreak, MDH Somali outreach staff conducted a

telephone survey with 300 Minnesotan Somali families who had previously delayed MMR vaccination. All families lived in the seven county metro area. From these families, 380 children got their first dose of MMR vaccine during the outbreak. We wanted to learn more about why families decided to vaccinate their children, where they got information about MMR vaccine, and how their children are doing after vaccination.

The design of the project included both quantitative and qualitative methods. Results below are descriptive and further analysis is currently being pursued. Surveys were completed in the Somali language, and translated results have been shared back to the survey participants via mail and text message.

Most families got the MMR vaccine because they feared measles disease.

Fear of measles	59
School or child care requirement	9%
Child now old enough	5%
Doctor recommendation	4%
Other	5%
Unknown	4%

Health care providers were top source for MMR vaccine information.

Knowing the community's strong oral tradition is influential, we wanted to know who or what influenced participants to get their child vaccinated.	Health care provider	65.7%
	School or child care	21.7%
	TV	17.7%
	Family	9.3%
	Friends	7.3%
	Other	24.1%

Respondents could provide more that one answer "Other" includes radio, MDH outreach, social media, flyer, work, community, Imam, mosque an unknown.

The MMR vaccine was well tolerated.

- Respondents perceived routine side effects such as fever and rash to be present. Families also described pain at injection site and crying. These are expected side effects.
- Perceived changes in speech/behavior were reported by a few respondents. MDH followed up on all these concerns. For those we were able to reach, the concerns around speech and behavior had gone away or were present before the child was vaccinated.

No concerns after MMR	80%
Fever	15%
Pain at injection site	3%
Behavior concerns	3%
Rash	2%
Pain/swelling	1%
Speech issues/concerns	1%

Post Outbreak **MDH Survey** N=300 Somali parents **Previously** unvaccinated Vaccinated during outbreak Why? How did it go?

Fatuma Sharif-Mohamed, MPH Ben Christianson, MPH



Lessons learned



- 1. Fear and Mistrust are major obstacles
- 2. Tap the Somali oral communication method
- 3. Somali speaking healthcare professionals are key
- 4. Gaining trust of Imam's by listening, going to them, sharing
- 5. Partner with PH Somali Outreach workers
- 6. Look at systemic, local/social and individual communication modes
- 7. Outbreaks change minds

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Fear of Measles, not MMR, not autism Children's

- Index patient in 2011 outbreak who survived 15 days on a ventilator in PICU.
- Mom requests his picture shown to educate about what we should fear.



Call to Action

Vitamin A for the Management of Measles in the United States







