

# Addressing MMR Vaccine Resistance in Minnesota's Somali Community

BY LYNN BAHTA, RN, PHN, AND ASLI ASHKIR, RN, PHN, MPH

Over the past 10 years, Minnesota clinicians have noticed increased resistance to MMR vaccination among Somali Minnesotans. Misinformation about a discredited study asserting a link between the MMR vaccine and autism has permeated this community as parents have increasingly become concerned about the prevalence of autism spectrum disorder among their children. As a result, MMR vaccination rates among U.S.-born children of Somali descent are declining. This article reports findings from an investigation by the Minnesota Department of Health, which was undertaken to better understand vaccine hesitancy among Somali Minnesotans. Based on these and other findings, we propose a multi-pronged approach for increasing vaccination rates in this population.

Parents in Minnesota's Somali community have voiced concern that their children are disproportionately affected by autism spectrum disorder (ASD) compared with children of other ethnicities. Many in the community blame the MMR vaccine. In an August 2008 news story on WCCO-TV, one parent was quoted as saying, "It's the vaccines."

Shortly after the story aired, the Minnesota Department of Health reached out to members of the Somali community to gather more information. Health department staff attended meetings with Somali parents, many of whom were unfamiliar with ASD. Repeatedly, they stated that they don't even have a word for autism in their language. In telling her story, one mother reported that in their attempt to understand ASD, she and others discovered groups that supported the claim that vaccines, particularly MMR, cause autism.<sup>1</sup>

Misinformation can spread rapidly in the Somali community, which has a rich oral tradition of passing information to one another. It is now widely accepted among Somali Minnesotans that MMR is to blame for autism.

During the 2011 measles outbreak in Hennepin County, in which 38% of the cases were among children of Somali descent, the Department of Health compared the vaccination rates of 24-month-old children of Somali descent with those of other 24-month-old children in Hennepin County and found that the rate for children of Somali descent was much lower (54.0%) compared with that for non-Somali children (88.3%).<sup>2</sup> A formal analysis showed there had been a significant decline in the MMR vaccination rate among children of Somali descent in the state since 2004, with a visible drop between the 2007 and 2008 birth cohort.<sup>2</sup> A

recent analysis of data from the Minnesota Immunization Information Connection (MIIC)—Minnesota's immunization registry—showed a continued decline. Children of Somali descent who were 24 months of age had an MMR vaccination rate of 46%; the rate among non-Somali children was 88% (Figure 1).<sup>3</sup>

In 2013, the Minnesota Department of Health set out to discover why immunization rates among Somali children continued to fall despite broad efforts to educate the community about the dangers of measles and the fact that MMR does not cause autism. Over the past two years, health department staff, including a nurse and outreach worker of Somali descent, gathered information about the attitudes and beliefs about vaccines and autism held by members of Minnesota's Somali community. Staff had conversations and meetings with Somali health professionals, commu-

nity leaders, parents of children diagnosed with ASD and parents within the broader Somali community. The purpose of this effort was to uncover information that could be useful to developing culturally relevant, effective approaches to addressing vaccine hesitancy in this population.

This article shares some of the findings and recommendations for dealing with vaccine hesitancy among Somali Minnesotans.

## Findings

Minnesota Department of Health staff found that fear of autism was often the reason for parents' refusal to have their children vaccinated. Highly educated Somali Minnesotans are not exempt from this fear. As one Somali educator admitted, "My children did not get the MMR; my evidence is the Somali children I see who have autism."

Parents who cited fear of autism as the reason for their vaccine hesitancy told health department staff that they received their information mostly from other Somali Minnesotans. Being told that MMR does not cause autism was not satisfactory for many parents because no one could tell them what *does* cause autism. Yet, when asked whom they would trust for health information, nearly all said they trusted their health care provider. And a significant number who refused vaccinations said they would reconsider their decision if they were given more information.

Parents of children diagnosed with ASD were articulate about their belief in an association between MMR and autism and sometimes also implicated receipt of multiple vaccines as the cause of their child's autism. Some Somali parents have come to realize that autism and vaccines are unrelated, but they are in the minority.

Parents who are less familiar with ASD also had less knowledge about vaccines. Many would say, "I vaccinate, except for the triple-letter vaccine." When asked if they knew what the three letters actually were or what diseases were prevented by the "triple-letter vaccine," only some were able to answer. Recently, some parents said that they stopped taking their children to

their clinic after the first well-child visit because they weren't sure when the baby would get the "triple-letter vaccine."

In addition, health department staff sought to find out what parents do understand about ASD and its signs and symptoms. Many parents could not describe autism except to say that their child stopped talking. The importance of observing the development of a baby is an unfamiliar concept to most Somali Minnesotans, who think a healthy baby is one who is eating well and gaining weight. Parents are not prepared for the questions physicians and other health care providers ask about development and may answer positively when asked if they have observed a specific behavior even though they may not understand the question or have witnessed the behavior. Additionally, Somali health care providers said we should stop saying, "We don't know the cause of autism" and instead discuss what is known about its causes and the immense amount of research that is occurring in this area.

Somali Minnesotan parents are strongly influenced by their community, and there is both a lack of information and an abundance of misinformation about vaccines and ASD within the community. Regardless of whether parents have more or less familiarity with the issue, they perceive autism as a greater threat to their child than measles and are basing their decisions about vaccination on that perception. Yet, because Somali Minnesotans hold health care professionals in high esteem, they are open to learning from physicians and other clinicians.

## Strategies for Working with Parents

Using information gleaned from conversations with members of Minnesota's Somali community, we developed strategies for addressing the problem of low MMR vaccination rates in children of Somali descent. They include holding informational sessions about child growth and development, as well as about autism and vaccine-preventable diseases for parents, interpreters and spiritual leaders; and keeping local health departments and health care

providers updated regarding what they are learning. Already, there has been outreach through charter schools and child care centers aimed at increasing awareness of Somali children's growing vulnerability to preventable diseases.

Finding ways to leverage the respect Somalis have for doctors and other health care professionals is challenging. In studies examining how clinicians can provide effective care to Somali patients, building trust has been identified as important.<sup>4,5</sup> Two things that contribute to trust that are repeatedly cited in the literature are the availability of a competent interpreter and not feeling rushed by the clinician.<sup>4-7</sup> Clinic policies such as ensuring that a professional interpreter is available, adding time to appointments when interpreters are needed, and consistently scheduling families with the same clinician can support efforts to build trusting relationships with Somali patients.

The Minnesota Department of Health's Somali staff members report that Somali parents appreciate when a health care provider calls a baby by his or her name and is familiar with some Somali words. They also want clear direction from their physicians. Providing parents with options may confuse them. A statement such as, "We can give your child the vaccine today, or if you want, we can wait," may be perceived by the parent as meaning that the clinician also has reservations about vaccines or thinks that either choice is acceptable. One Somali interpreter described an interaction this way: "When the mother told the doctor that she did not want her child to get the triple-letter vaccine, the doctor said, 'OK.'" The interpreter was worried that the parent thought the doctor agreed that the MMR vaccine wasn't needed or that he, too, was worried about its effects.

There are a number of evidence-based approaches to addressing vaccine hesitancy. Studies show parents prefer to get vaccination information before their visit with the doctor.<sup>8</sup> A small study by Williams et al. suggests that a brief discussion about vaccines during the two-week well-child visit improved parents' attitudes about vaccines.<sup>9</sup> In Burke's work, Somali

parents acknowledged the importance of vaccinating infants but wanted to understand why their babies were receiving so many vaccines.<sup>6</sup>

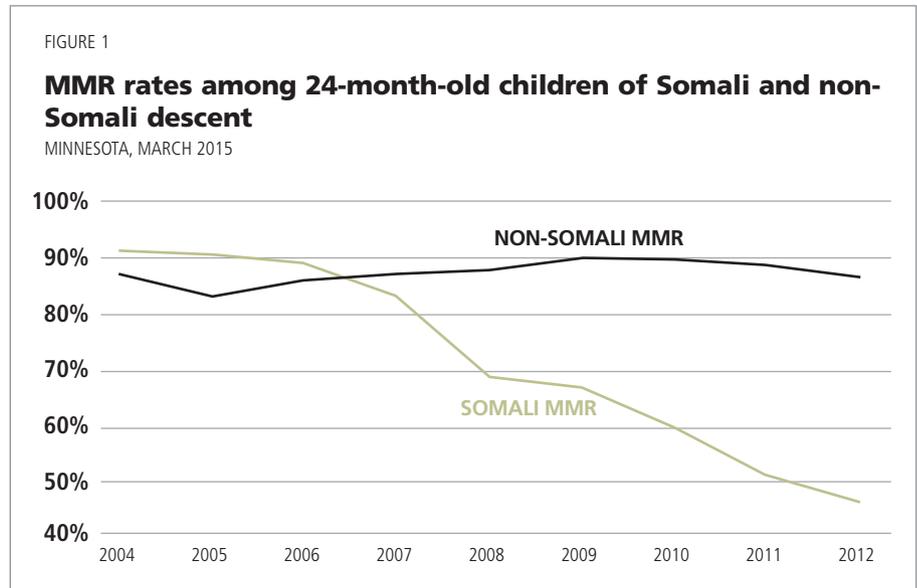
Considering this, we propose explaining vaccines using a pictorial tool that shows when certain vaccines are due (Figure 2). The idea is to start the MMR conversation at the 6- or 9-month visit. This may ease the parent into allowing their child to receive timely vaccinations. It also provides the opportunity to invite the other parent to the 12-month visit for further conversation and decision-making, if the one parent is hesitant about MMR vaccination.

Opel's work highlights the importance of pursuing the recommendation when a parent indicates hesitancy or resistance.<sup>10</sup> When a parent is refusing the MMR vaccine, clinicians can follow up by asking:

- What triple-letter vaccine do you mean?
- Tell me your concern about this.
- What have you heard about this?
- What do you know about autism?

A professional interpreter can facilitate the relationship between clinician and patient/parent. Expectations about the ethical and professional behavior of interpreters working in the exam room are clearly defined, but their influence may extend beyond the exam room. Some interpreters may be put into the position of advising. In particular, they may be asked if they gave their child the MMR vaccine. It may be helpful to ask the interpreter about his or her understanding of autism and developmental milestones as well as his or her beliefs about vaccines and any concerns he or she may have about them, and to provide training where gaps are identified. Having interpreters share correct information outside the exam room can be a powerful extension of the health care provider's influence.

In our pilot informational sessions, parents who changed their mind about MMR vaccination asked if it was too late for their child to receive it. This is a reminder to assess for vaccinations at every visit and to continue to offer the MMR vaccine even when parents initially refuse it, letting them know that "it's not too late." Doing this illustrates the importance of the MMR



vaccination and the clinician's continued concern about the child's vulnerability to a dangerous disease.

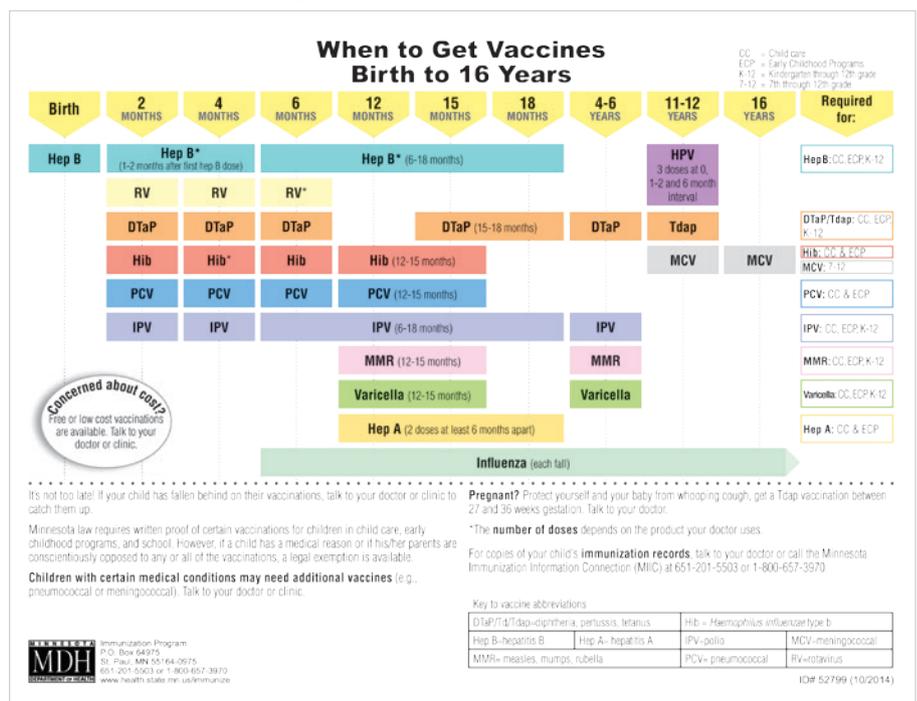
### Conclusion

For the last two years, Minnesota Department of Health staff have been seeking ways to address the low MMR vaccination rate among children in Minnesota's Somali community. Staff members have had conversations with parents, interpreters,

educators and community leaders about the issue. Insights gleaned from these conversations have helped guide clinicians as they attempt to educate parents about the safety and efficacy of vaccinating their children. Perhaps the most important points to remember are to never stop inquiring about patients' vaccine status and to take time to address a parent's concerns. Although Somali Minnesotans are influ-

FIGURE 2

### Pictorial vaccination schedule



This schedule is available at: [www.health.state.mn.us/immunize](http://www.health.state.mn.us/immunize)

enced by their friends and family when it comes to information about the MMR vaccine, they respect advice from their physicians and other health care providers. Therefore, clinicians have an important role to play in helping ensure that Minnesota children aren't at risk for preventable diseases. **MM**

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