

Pediatrics

pediatrics.aappublications.org

Published online March 3, 2014

(doi: 10.1542/peds.2013-2365)

Article**Effective Messages in Vaccine Promotion:
A Randomized Trial**Brendan Nyhan, PhD^a, Jason Reifler, PhD^b, Sean Richey, PhD^c, and
Gary L. Freed, MD, MPH^{d,e}

+ Author Affiliations

ABSTRACT**OBJECTIVES:** To test the effectiveness of messages designed to reduce vaccine misperceptions and increase vaccination rates for measles-mumps-rubella (MMR).**METHODS:** A Web-based nationally representative 2-wave survey experiment was conducted with 1759 parents age 18 years and older residing in the United States who have children in their household age 17 years or younger (conducted June-July 2011). Parents were randomly assigned to receive 1 of 4 interventions: (1) information explaining the lack of evidence that MMR causes autism from the Centers for Disease Control and Prevention; (2) textual information about the dangers of the diseases prevented by MMR from the Vaccine Information Statement; (3) images of children who have diseases prevented by the MMR vaccine; (4) a dramatic narrative about an infant who almost died of measles from a Centers for Disease Control and Prevention fact sheet; or to a control group.**RESULTS:** None of the interventions increased parental intent to vaccinate a future child. Refuting claims of an MMR/autism link successfully reduced misperceptions that vaccines cause autism but nonetheless decreased intent to vaccinate among parents who had the least favorable vaccine attitudes. In addition, images of sick children increased expressed belief in a vaccine/autism link and a dramatic narrative about an infant in danger increased self-reported belief in serious vaccine side effects.**CONCLUSIONS:** Current public health communications about vaccines may not be effective. For some parents, they may actually increase misperceptions or reduce vaccination intention. Attempts to increase concerns about communicable diseases or correct false claims about vaccines may be especially likely to be counterproductive. More study of pro-vaccine messaging is needed.**Key Words:**vaccines myths MMR autism false misperceptions
misinformation

Accepted December 20, 2013.

Copyright © 2014 by the American Academy of Pediatrics