## Vaccine Safety Info: Parents Trust Physicians

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FROM PEDIATRICS

ost parents trust their children's doctor as the primary source for vaccine safety information, but those who feel physicians do not provide enough information may look to untraditional sources of safety information, including celebrities and parents who believe their own child was harmed by a vaccine, results of one study has shown

Major Finding: The majority (76%) of parents report trusting their child's doctor "a lot," with the next most likely sources to be trusted other health care providers (26%) and government experts (23%). Family and friends, as well as parents who believe vaccines harmed their children, were considered to be somewhat trustworthy sources by 67% and 65% of the respondents, respectively, whereas celebrities were trusted a lot by 2% and somewhat by 24%.

**Data Source:** A national online study of 1,552 parents of children aged 17 years or younger.

Disclosures: Dr. Freed and his colleagues involved in the study of sources of vaccine safety information disclosed having no relevant financial disclosures. Dr. Nicola P. Klein of Stanford (Calif.) University, a coinvestigator in the study of the timing of immunization information to mothers, has received research support from GlaxoSmith-Kline, Merck, Sanofi Pasteur, Wyeth, Novartis, and MedImmune. Ms. Vannice was supported in part by a National Institutes of Health Training Grant in International Maternal and Child Health. None of the other investigators in that study said they had any relevant financial disclosures. The study was performed in collaboration between the CDCfunded Vaccine Attitudes and Risk Perception (VARP) and Clinical Immunization Safety Assessment (CISA) groups.

As part of a larger study of parents and nonparents recruited for a national online panel, 1,552 of 2,521 (62%) parents of children aged 17 years or younger responded to a survey about trust of vaccine safety information sources, Dr. Gary L. Freed and his colleagues at the University of Michigan, Ann Arbor, reported in a supplement to the May issue of Pediatrics.

The survey asked parents if they place "a lot" of trust, "some" trust, or "no" trust in certain individuals or groups who provide vaccine safety information, including their children's doctor, other health care providers, government vaccine experts or officials, family and friends, parents who claim their child was harmed by a vaccine, and celebrities

"The great majority [76%] of parents report trusting their child's doctor a lot," the authors wrote, noting that the next most likely sources to be trusted were other health care providers (26%) and government experts (23%).

Family and friends, as well as parents who believe vaccines harmed their children, were considered to be somewhat trustworthy sources by 67% and 65% of the respondents, respectively, whereas celebrities were trusted a lot by 2% and somewhat by 24%, Dr. Freed and his

colleagues reported (Pediatrics 2011; 127:S107-12).

Although approximately 27% of the respondents reported trusting Web sites from doctor groups, such as the American Academy of Pediatrics, "many parents reported that they do not use or view several potential sources of vaccine-safety information," including government Web sites, magazines and news articles, television programs, pharmaceutical company Web sites, and the Web sites of antivaccine advocates, Dr.

Freed and his associates said.

When the data wereassessed by gender, there were significant differences.

"Mothers differed from fathers in that mothers were more likely to report some or a lot of trust in vaccinesafety information provided by parents who claim their child was injured by vaccines, celebrities, television shows, and magazines/news articles," the investigators stated.

With respect to race/ethnicity, white and Hispanic parents were more likely than black parents were to place a lot or some trust in family and friends, while Hispanic parents were more likely than white or black parents were to trust celebrities

a lot or some, they wrote.

"Other investigators have found that a significant number of parents feel that physicians do not provide enough information and that public health officials are not trustworthy," Dr. Freed and his associates said. These parents' beliefs may be seen in the fact that they were more likely to trust celebrities or parents who claim their child was injured by vaccines. Usually, these sources use anecdotal information or personal accounts rather than population-based data or large clinical studies on which to base their perspectives.

The dissonance between health professionals and non-health professionals as trusted sources of vaccine safety information "is shaping the national dialogue on the issue," the authors wrote, noting that the dissemination of information by untraditional sources is often not in the public's best interest. For example, the finding that 26% of the survey respondents trust celebrities as sources of vaccine safety information "is sobering," Dr. Freed and his colleagues said.

"Celebrities are rarely trained in the ability to discern and critique the scientific literature, and they are not often expert in epidemiology, immunology, or toxicology."

It is important that public health officials take note of the study findings when designing vaccine information media, they added.

"Those who design public health efforts to provide evidence-based information must recognize that different strategies may be required to reach some groups of parents who are currently using other information sources. In particular, because the parents of many of today's infants are more facile with electronic means of communication and social networking websites, newer methods of promulgation should be explored."

One promising communication strategy may be to target parents who have voiced concerns about vaccine safety with a comprehensive information packet and vaccine information statements before or even at the first vaccination visit, according to a study reported in the same issue of Pediatrics by Kirsten S. Vannice of the U.S. Department of

Health and Human Services and her colleagues.

In that study, the investigators provided 272 mothers who had indicated concerns about vaccine safety with a new vaccine-information pamphlet and Vaccine Information Statements from the Centers for Disease Control and Prevention at one of three time points (prenatal visit, 1-week post partum well child visit, or 2-month vaccine visit), and used written surveys to assess their attitudes and beliefs about immunization before and after the review of materials. At all time points, distribution of the information "significantly improved attitudes about vaccination," the authors wrote. "Allowing adequate time to review vaccine information at any visit may benefit concerned mothers," they said (Pediatrics 2011;127:S120-6). However, the mothers indicated that they preferred receiving the information in advance of the 2-month vaccination

## Talk to Vaccine-Hesitant Parents

Inasmuch as the best defense is a good offense, the antidote to the plethora of vaccine safety misinformation from nonexpert sources is the targeted dissemination of accurate, evidence-based information to parents from their child's health care providers, vaccine experts suggested.

"[Health care providers] have the greatest influence on a parent's decision to vaccinate his or her child," wrote Dr. C. Mary Healy and Dr. Larry K. Pickering (Pediatrics 2011;127:S127-33). For this reason, "establishing ongoing, nonconfrontational dialogue from the initial [physician]-parent interaction is essential when dealing with vaccine-hesitant parents," said Dr. Healy of the Center for Vaccine Awareness and Research at Texas Children's Hospital, Houston, and Dr. Pickering of the CDC's National Center for Immunization and Respiratory Diseases.

Toward this end, health care providers should take the following steps, the authors wrote:

- Make an effort to understand parental concerns about vaccination. "Although parental vaccine concerns vary according to knowledge and personal experience, the underlying premise remains remarkably consistent: fear that vaccines (and/or their additives) are unsafe, will give the immunized person the infection against which they are designed to protect, or that somehow getting the 'natural' disease is healthier."
- ▶ Individualize each parent's set of concerns and avoid making assumptions about their attitudes.
- ► Establish an open, honest dialogue from the outset and provide Vaccine Information Statements as well as understandable summaries of re-

- search that address some of the common concerns, particularly those that have received media attention.
- ► Acknowledge the potential adverse events and balance them against disease risk.
- ▶ Provide personal anecdotes and visual imagery that highlight the dangers of refusing vaccination. "These stories are available in publications from reputable sources and online, where parent advocacy groups describe serious consequences of not vaccinating, or from organizations that specialize in vaccine education."
- ▶ Ensure ongoing communication with parents, and deviate from the recommended childhood and adolescent immunization schedule only when other options have failed. Rather than discontinuing care for families who refuse or delay immunization, the physician "should reopen a nonconfrontational dialogue, continue to discuss risks and benefits of immunization during subsequent patient encounters, and document these discussions during each visit."

"As physicians, we have a responsibility to provide guidance to parents," Dr. Healy said in an interview, acknowledging the occasional difficulty of doing so when competing with other sources of information, including celebrities, non–health care providers, and very vocal antivaccine lobbies. "We have to be cognizant of the various factors that influence parents' perceptions about vaccine safety," she said.

DR. HEALY disclosed she has a research grant from Sanofi Pasteur and has served on a scientific advisory board for Novartis Vaccines. DR. PICKERING disclosed having no relevant financial disclosures.