

Childhood Vaccine Risk/Benefit Communication in Private Practice Office Settings: A National Survey

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FROM ABSTRACT

Communication about childhood vaccine risks and benefits has been legally required in pediatric health care for over a decade. However, little is known about the actual practice of vaccine risk/benefit communication.

Objectives.

This study was conducted to identify current practices of childhood vaccine risk/benefit communication in private physician office settings nationally.

Specifically, we wanted to determine what written materials were given, by whom, and when; what information providers thought parents wanted/needed to know, the content of nurse and doctor discussion with parents, and the time spent on discussion.

We also wanted to quantify barriers to vaccine risk/benefit discussion and to prioritize materials and dissemination methods preferred as solutions to these barriers.

Methods.

We conducted 32 focus groups in 6 cities, and then administered a 27 question cross-sectional mailed survey from March to September 1998, to a random national sample of physicians and their office nurses who immunize children in private practices.

Eligible survey respondents were active fellows of the American Academy of Pediatrics or American Academy of Family Physicians in private practice that immunized children and a nurse from each physician's office. After 3 mailings, the response rate was 71%.

Results.

Sixty-nine percent of pediatricians and 72% of family physicians self-reported their offices gave parents the Centers for Disease Control and Prevention Vaccine Information Statement, while 62% and 58%, respectively, gave it with every dose. In ~70% of immunization visits, physicians and nurses

reported initiating discussion of the following: common side effects, when to call the clinic and the immunization schedule.

However, physicians reported rarely initiating discussion regarding contraindications (<50%) and the National Vaccine Injury Compensation Program (<10%).

Lack of time was considered the greatest barrier to vaccine risk/benefit communication.

Nurses reported spending significantly more time discussing vaccines with parents than pediatricians or family physicians (mean: 3.89 vs 9.20 and 3.08 minutes, respectively).

Both physicians and nurses indicated an additional 60 to 90 seconds was needed to optimally discuss immunization with parents under current conditions.

Stratified analysis indicated nurses played a vital role in immunization delivery and risk/benefit communication.

To improve vaccine risk/benefit communication, 80% of all providers recommended a preimmunization booklet for parents and approximately one half recommended a screening sheet for contraindications and poster for immunization reference.

The learning method most highly endorsed by all providers was practical materials (80%).

Conclusions.

There was a mismatch between the legal mandate for Vaccine Information Statement distribution and the actual practice in private office settings.

The majority of providers reported discussing some aspect of vaccine communication but 40% indicated that they did not mention risks.

THESE AUTHORS ALSO NOTE:

"Vaccine risk/benefit communication is a legal requirement of the National Childhood Vaccine Injury Act of 1986."

"US health care providers must give parents/guardians the appropriate, current Centers for Disease Control and Prevention (CDC)-developed Vaccine Information Statement (VIS) and discuss, when appropriate, the risks and

benefits of each vaccine being offered before administration of every dose of a routinely recommended childhood vaccine.”

The 2000 guidelines from the American Academy of Pediatrics states, “the patient, parents and/or legal guardian should be informed about the benefits to be derived from vaccines in preventing disease in individuals and in the community and about the risks of those vaccines.”

METHODS

This survey was sponsored by the CDC (Centers for Disease Control and Prevention).

Participants

The target population was a broad range of primary care physicians who provided childhood immunizations and nurses who worked with these physicians. The final sample for the survey mailing were the 212 pediatricians and 298 family physicians.

RESULTS

“When are immunization materials given to parents in your setting?”

	PEDIATRICIANS	FAMILY PHYSICIANS	NURSES
EVERY VISIT	62%	58%	62%
WHEN REQUESTED	38%	34%	27%
NEVER	0%	1%	1%

Who Gives Immunizations?

The majority of immunizations were given by nurses, not doctors.

Who Gives Parents the Materials? Who Discusses the Materials?

“Reported activities indicated that physicians were likely to discuss materials but not give them, whereas nursing support staff both gave and discussed materials.”

“Physicians' reports of nursing activities significantly underestimated the frequency of discussion of risks/benefits reported by nurses.”

To ascertain the frequency with which specific vaccine issues were discussed, we asked, "What percent of the time do you initiate discussions of the following (risk/benefit items) when child immunizations are given?"

	PEDIATRICIANS	FAMILY PHYSICIANS	NURSES
COMMON SIDE EFFECTS	79%	69%	76%
SEVERE SIDE EFFECTS	62%	61%	54%
CONTRAINDICATIONS	0%	1%	1%
NATIONAL VACCINE INJURY COMPENSATION PROGRAM	12%	11%	14%
HOW TO CONTACT VACCINE ADVERSE EVENT REPORTING SYSTEM PROGRAM	12%	8%	15%

What Providers Think Parents Need/Want to Know

26% said that parents needed to know the statistical risk of vaccine side effects.

20% said parents needed information on the National Vaccine Immunization Compensation Program.

3% said that parents did not need to know anything.

Respondents were also asked, "What do you think parents want to know about immunizations?"

64% wanted to know about common side effects.

60% wanted to know why so many shots.

49% wanted to know when to call the doctor.

44% wanted to know the severe side effects.

36% wanted to know contraindications.

20% wanted to know the statistical risk of vaccine side effects.

11% wanted information about the National Vaccine Injury Compensation Program.

5% did not want to know anything.

Percent of Time Parents Initiate Questions About Side Effects/Risks

"Providers were asked to estimate the percent of visits (0%-100%) in which parents initiate questions about risks of mild side effects (low grade fever, fussiness, soreness) and risk of severe side effects (seizures, polio, death)."

Providers reported more parent questions about common side effects than about severe side effects.

Regarding mild side effects, pediatricians, family physicians, and nurses reported that parents asked 50%, 48%, and 62% of the time, respectively.

"Regarding severe side effects, providers reported that parents asked 28%, 24%, and 33% of the time, respectively."

Risk/Benefit Communication Barriers

"25% of pediatricians and 23% of family physicians believed that discussing vaccine risks / benefits would cause parents to be unnecessarily alarmed."

"Respondents apparently did not equate parent alarm with outright refusal, however, because a much lower proportion (8% and 5%, respectively) believed that parents might actually refuse."

Time Spent and Time Needed for Materials and Risk/Benefit Information Delivery

When asked how many minutes on average they currently spend discussing immunizations with parents, nurses self-reported spending significantly more time (9.20 min) than pediatricians (3.89 min) or family physicians (3.08 min).

DISCUSSION

"This study is the first to measure self-reported compliance with the 1986 National Childhood Vaccine Injury Act."

“The distribution of current VIS forms before every immunization as required by law is the most elemental form of childhood immunization risk/benefit communication.”

“Of major interest to us was the low self-reported compliance with the 1986 National Childhood Vaccine Injury Act, which requires distribution of the CDC VIS forms before every dose of each vaccine.”

“The current immunization information practices of more than one third of physicians fell short of the standard of care.”

“Despite the law becoming effective in 1988, 31% of pediatricians and 28% of family physicians in private practice reported that their offices were not using the VIS at all, and 38% and 42%, respectively, were not giving the VIS at every visit.”

“It is important to note that these data may overestimate compliance because they are based on self-report.” **[Important!]**

Parents in this focus group indicated that they were most interested in information they deemed relevant and practical, ie, what side effects to expect, how long such symptoms would last, how to treat side effects, when to call the clinic, etc.

Parents also wanted brief, simple information about rare, severe risks, ie., “there is a very small chance of something bad happening like brain damage.”

“It was important to parents that their primary provider give this information.” **[Important!]**

One of the few articles that focuses specifically on vaccine risk communication (1998), “stated that the responsibility for vaccine risk communication rests on the primary care provider who administers the vaccines; yet the literature reports that physicians say little to parents about immunizations.”

Perceived Parent Needs and Physician Practices

“Providers tended to discuss what they believed that parents needed to know; the exception was contraindications. Sixty-nine percent of providers believed that parents needed to know contraindications, yet physicians reported that they actually discussed contraindications in less than one half of visits.”

“Few respondents thought that parents needed to know the exact mathematical probability of rare but serious vaccine side effects or information about the National Vaccine Injury Compensation Program. Similarly, respondents reported

rarely discussing the National Vaccine Injury Compensation Program or how to contact the Vaccine Adverse Event Reporting System.”

Barriers to Immunization Risk/Benefit Communication

“Nearly 1 in 4 physicians indicated that ‘parents would be unnecessarily alarmed’ and a surprising number of providers believed ‘parents did not want to know’ vaccine risks/benefits.”

Issue of Time

“Physicians and nurses in our study reported spending slightly >3 minutes on average discussing vaccine risk/benefit information with parents.”

Another study revealed that primary providers (physicians and nurse practitioners) “devoted a median of 1.9 minutes to discussion of all aspects of vaccination.”

Limitations

The VIS distribution rates reported here may represent a best-case scenario of self-reported compliance with the 1986 National Childhood Vaccine Injury Act.”

ABBREVIATIONS

CDC Centers for Disease Control and Prevention

VIS Vaccine Information Statement.