Dismissing the Family Who Refuses Vaccines

A Study of Pediatrician Attitudes

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Background: Parent refusal or deliberate delay of their child’s vaccinations poses a challenge for pediatricians. Some pediatricians may choose to dismiss these families from their practice.

Objectives: To describe pediatricians’ responses to scenarios of vaccine refusal, identify reasons pediatricians cite for both parent refusal and family dismissal, and illustrate pediatrician attitudes about well-established vs newer recommended vaccines.

Design/Methods: We conducted a nationwide survey mailed to 1004 randomly selected American Academy of Pediatrics (Elk Grove Village, Ill) members.

Results: Fifty-four percent faced total vaccine refusal during a 12-month period. Pediatricians cited safety concerns as a top reason for parent refusal. Thirty-nine percent said they would dismiss a family for refusing all vaccinations. Twenty-eight percent said they would dismiss a family for refusing select vaccines. Pediatrician dismissers were not significantly different from nondismissers with respect to age, sex, and number of years in practice. Pediatrician dismissers were more likely than nondismissers to view traditional vaccines (diphtheria and tetanus toxoids and acellular pertussis; inactivated poliovirus; Haemophilus influenzae type b; measles, mumps, and rubella) as “extremely important,” but they were no more likely to view newer vaccines (7-valent pneumococcal conjugate, varicella-zoster virus, hepatitis B) as “extremely important.”

Conclusions: Pediatricians commonly face vaccine refusal that they perceive to be due to parent safety concerns. In response, many pediatricians say they would discontinue care for families refusing some or all vaccines. This willingness to dismiss refusing families is inconsistent with an apparent ambivalence about newer, yet recommended, vaccines. The practice of family dismissal needs further study to examine its actual impact on vaccination rates, access to care, and doctor-patient relations.

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During the last half century, vaccination programs have made a significant impact on the morbidity and mortality of children in the United States and worldwide. The suppression or disappearance of many vaccine-preventable illnesses in the United States, however, has changed the landscape of parental decisions to accept recommended immunization. For decades, pediatricians and parents have generally maintained a unified commitment to childhood vaccination; for the most part this continues to be true. Unfortunately, signs suggest a decline in the strength of this unity.1,4 The National Immunization Survey revealed that the rate of unvaccinated children has risen significantly since 1995; while most parents continue to believe that vaccination is important, a large number express concern about vaccine safety.5,6 Media attention to alleged vaccine-related adverse events has fueled parental fears, as have the visibility of antivaccination Web sites and recent vaccine recalls and modifications.5,7 Some parents now aggressively question pediatricians about vaccine safety. Pediatricians, in turn, may feel unwilling or unprepared to respond to such scrutiny. In addition, the number of recommended vaccinations has climbed. All this can make in-office communication about the benefits and risks of vaccines quite challenging.8,9

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Tension can rise during a typical health maintenance visit when parents assertively question vaccine use and especially when physicians feel parental worries stem from false or misleading information from the media or the Internet.5,7 Despite this tension, advice and counsel from pediatricians continue to play an important role in most parents’ decisions to vaccinate their children.10 Most parents look to physi-
cians to ease their fears about vaccination no matter how irrational the worries. Because disease prevention and immunization constitute such an essential part of the practice of pediatrics, pediatricians may view parental challenges as threats to their integrity, not simply a matter of discussion of the risks and benefits of vaccines. In our experience, when a parent refuses, some, or all vaccines, the relationship between that pediatrician and parent weakens. We hypothesized that some pediatricians respond by seeking to end their participation in the care of children whose parents refuse vaccination. Further, we theorized that factors such as age and years in practice as well as strength of conviction about vaccine importance would positively correlate with a pediatricians’ willingness to dismiss vaccine-refusing families. We had several objectives. First, we sought to characterize pediatricians’ attitudes toward dismissing vaccine-refusing families. We were interested both in the explanations pediatricians may provide for family dismissal as well as the pediatricians’ perceptions about the most common reasons for parent refusal. We sought demographic information about pediatricians who indicated a willingness to dismiss families to see if older, more established pediatricians (those in practice >10 years) were more likely to dismiss vaccine-refusing families than younger physicians. Further, we wanted to know if pediatricians distinguished between families who refuse all vaccines and those who refuse or delay selected vaccines. If the physicians do make such a distinction, does that affect their willingness to discontinue care? Finally, we sought to learn more about whether pediatricians feel as committed to the use of newer recommended vaccines as they do to immunizations in use for many decades.

Study participants consisted of 1003 physicians randomly selected from the 2002 American Academy of Pediatrics (Elk Grove Village, Ill) directory of active members in the United States. The list was provided and randomized by a data management service employed by the American Academy of Pediatrics. The study ran from May 2002 to August 2002. Each physician received a mailed cover letter explaining the study, a 16-item survey including demographics, and a stamped, addressed return envelope. Physicians were asked whether they currently provide routine vaccinations in a primary care setting. Only physicians who answered affirmatively were instructed to complete the remainder of the survey. Nonresponders received 2 reminders, for a total of 3 mailings.

Statistical analyses were conducted using SPSS 11.5.0 (SPSS Inc, Chicago, Ill). Comparisons in responses on dichotomous and categorical variables were completed using nonparametric techniques. Continuous variables were analyzed using t tests. Categorical variables were analyzed using χ² and Fisher exact tests when tables had less than 5 in a cell. Experience with parents refusing all vaccines compared with those refusing some or delay selected vaccines. The 4 questions were: (1) “Have you encountered a parent who refuses (some or all) vaccines during the past 12 months?” If so, (2) “What are the most important reasons parents give for refusal?” (Respondents could choose from a number of reasons provided or provide their own) (3) “If after numerous attempts at vaccine counseling and education, a parent continues to refuse, would you dismiss them from your practice?” (4) “What would be your reasons for dismissing a refusing family?” Those pediatricians who responded that they would dismiss families for vaccine refusal were asked to rate the importance of 6 different factors in their decision. These factors were: (1) fear of litigation, (2) lack of trust between the patient and doctor, (3) decreased reimbursement, (4) type of vaccine refusal (specific vaccine refusal question only), (5) lack of shared goals for the child’s care, and (6) lack of shared religious/cultural values. Participants had the opportunity to provide their own reason(s) for dismissal if different from the choices provided.

The questionnaire was pilot tested with 10 pediatricians to evaluate face validity, content, and clarity of each question. Feedback was incorporated into the survey prior to the initial mailing.

The initial mailing and 2 follow-up reminders yielded 452 returned surveys (45%) with 23 returned as undeliverable. Subsequent analyses were conducted on the 302 physicians (70% of returned surveys) who indicated they currently provide routine vaccinations in a primary care setting. Table 1 presents the demographic characteristics of the sample.

**RESULTS**

Pediatricians’ perceptions of the importance of each vaccine varied across vaccines as presented in Table 2. We found that an overwhelming number of pediatricians rated traditional vaccines (DTaP, Hib, MMR, and IPV) as “extremely important” (95.7%, 94.0%, 94.7%, and 83.5%, respectively). A substantial proportion rated newer vaccines (PCV7, HBV, and VZV) as only “somewhat important” (27.8%, 25.5%, and 36.1%, respectively). A relatively small proportion rated particular vaccines, such as the PCV7, Hib, VZV, and IPV as “optional” (4.6%, 2.3%, 6.6%, and 0.99%, respectively).

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EXPERIENCE WITH VACCINE REFUSALS AND PEDIATRICIANS’ PERCEPTION OF THE REASON FOR REFUSAL

Eighty-five percent (256/302) of sampled pediatricians reported encountering partial vaccine refusal during the preceding 12 months. Fifty-four percent (162/302) of pediatricians reported encountering a parent who refused all vaccines. Pediatricians’ perceptions of the reason parents refuse vaccines were similar in the 2 cases. For refusal of specific vaccines, a substantial majority perceived parents refused based on safety concerns (73%), multiple vaccines at once (22%), philosophical objections to vaccination (13%), and religious beliefs about immunization (7%). For complete vaccine refusal, the perceived reasons for refusal were similar: safety concerns (79%), philosophical objections (41%), and religious beliefs (17%).

PEDIATRICIANS’ WILLINGNESS TO DISMISS FAMILIES FROM A PRACTICE AND THE REASON FOR DISMISSAL

In the case of parents refusing specific vaccines, 82 (28%) said that they would ask the family to seek care elsewhere; for refusal of all vaccines, 116 (39%) of pediatricians said that they would refer the family. Factors important to pediatricians in the decision to dismiss families who refuse some vs all vaccines were similar. Seventy-eight percent (facing refusal of some vaccines) vs 82% (facing refusal of all vaccines) regarded lack of shared goals as “extremely important.” Seventy-three percent vs 70% regarded lack of trust as “extremely important.” Fear of litigation was regarded as “extremely important” by 70% versus 82% (facing refusal of some vaccines) vs 82% who refuse some vs all vaccines were similar. Seventy-three percent versus 82% (facing refusal of all vaccines) regarded lack of shared goals as “extremely important.” Fear of litigation was regarded as “extremely important” by 70% versus 82% (facing refusal of some vaccines) vs 82% who refuse some vs all vaccines were similar.

COMMENT

How individual health care professionals and public health authorities respond to the problem of vaccine refusal may affect the health and welfare of our communities for generations to come. Experience from Europe as well as published studies in the United States suggest that increasing numbers of vaccine refusals pose public and individual health threats, endangering both unimmunized and immunized populations.12-14

In our study, 85% of sampled pediatricians report having encountered a parent who refused vaccinations within...
the past year. In a recent study by Fredrickson and colleagues, focus groups and physician surveys were used to estimate vaccine refusal rates based on physician recollection. From their responses, the authors estimated a mean refusal rate of some or all vaccines to be 7.2 per 1000 children immunized. The most common reason for refusal, according to physicians in the study, was fear of adverse effects, a finding confirmed by our study.

Data are available on the epidemiology of parental claims of personal (nonmedical) exemption from vaccination. In general, most indicators still point to low rates of total vaccine refusal. In 2001, the National Immunization Survey reported that an estimated 17 000 children (0.3%) aged 19 to 35 months were unvaccinated, and 2.1 million children (36.9%) were undervaccinated in the United States in 2001. In their analysis of National Immunization Survey results, Smith and colleagues describe a notable racial and socioeconomic difference between the unvaccinated child and the undervaccinated child. They found that undervaccinated children tend to be black and living below the poverty line, while unvaccinated children tend to be white, living above the poverty line. Further, they confirmed other studies that have shown the existence of unvaccinated populations in geographic clusters, thereby creating the potential for concentrated points of disease transmission.

In this study, we sought to describe an additional aspect of vaccine refusal. In the wake of recent controversies regarding autism and thimerosal, parents may request that certain vaccines (such as MMR or HBV) be avoided or delayed until a certain point, such as after the

### Table 3. Demographic Features of Dismissers Compared With Nondismissers*

<table>
<thead>
<tr>
<th>Feature</th>
<th>Families Refusing Select Vaccines</th>
<th>Families Refusing All Vaccines</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dismiss Family (n = 81)</td>
<td>Continue With Family (n = 214)</td>
</tr>
<tr>
<td>Male</td>
<td>No. (%)</td>
<td>No. (%)</td>
</tr>
<tr>
<td>Female</td>
<td>46 (56.8)</td>
<td>113 (52.8)</td>
</tr>
<tr>
<td>Age, y</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Years in practice</td>
<td>15.2 (10.8)</td>
<td>13.7 (10.7)</td>
</tr>
<tr>
<td>Patients seen per week</td>
<td>112.4 (40.7)</td>
<td>99.8 (54.8)</td>
</tr>
</tbody>
</table>

*Total less than 302 owing to missing data.

### Table 4. Pediatrician Emphasis on Traditional Vaccines as Related to Response to Vaccine Refusal

<table>
<thead>
<tr>
<th>No. of Traditional*</th>
<th>Dismiss Total Refuser (n = 116)</th>
<th>Continue With Total Refuser (n = 182)</th>
<th>P Value†‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>“extremely important”</td>
<td>4</td>
<td>102 (87.9)</td>
<td>139 (76.4)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10 (8.6)</td>
<td>32 (17.6)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>2 (1.1)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1 (0.8)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>9 (4.9)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. of Traditional*</th>
<th>Dismiss Partial Refuser (n = 82)</th>
<th>Continue With Partial Refuser (n = 214)</th>
<th>P Value†‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>“extremely important”</td>
<td>4</td>
<td>74 (90.2)</td>
<td>166 (77.6)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>6 (7.3)</td>
<td>35 (16.3)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0</td>
<td>2 (0.9)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>1 (0.5)</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>1 (1.2)</td>
<td>10 (4.7)</td>
</tr>
</tbody>
</table>

*Traditional vaccines include diphtheria and tetanus toxoids and pertussis vaccine; Haemophilus influenzae type b vaccine; measles, mumps, and rubella vaccine; and inactivated poliovirus vaccine.
†Total less than 302 owing to missing data.
‡2 × 2 χ² test (dismiss vs continue) × (number of vaccines extremely important).

### Table 5. Pediatrician Emphasis on Newer Vaccines and Response to Total and Partial Vaccine Refusal

<table>
<thead>
<tr>
<th>No. of Newer Vaccines*</th>
<th>Dismiss Total Refuser (n = 116)</th>
<th>Continue With Total Refuser (n = 182)</th>
<th>P Value†‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>“extremely important”</td>
<td>3</td>
<td>49 (42.2)</td>
<td>86 (47.3)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>29 (25.0)</td>
<td>36 (19.8)</td>
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<tr>
<td></td>
<td>1</td>
<td>21 (18.1)</td>
<td>30 (16.5)</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>16 (13.8)</td>
<td>30 (16.5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No. of Newer Vaccines*</th>
<th>Dismiss Partial Refuser (n = 82)</th>
<th>Continue With Partial Refuser (n = 214)</th>
<th>P Value†‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>“extremely important”</td>
<td>3</td>
<td>33 (40.2)</td>
<td>99 (46.3)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>21 (25.6)</td>
<td>44 (20.5)</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>19 (23.2)</td>
<td>33 (15.4)</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>8 (9.7)</td>
<td>38 (17.8)</td>
</tr>
</tbody>
</table>

*Newer vaccines include hepatitis B vaccine, varicella-zoster virus vaccine, and 7-valent pneumococcal conjugate vaccine.
‡Total less than 302 owing to missing data.
period of highest risk for sudden infant death syndrome or after the achievement of major language milestones. For this reason, we sought to include a category of vaccine refusal that involved delaying or avoiding some or all vaccines over a prolonged period, not just the rejection of all.

Because disease prevention through vaccination plays such an integral role in the philosophy and practice of pediatrics, pediatricians may have difficulty dealing with parents who question or criticize childhood vaccination.

Responses to our survey suggest that some pediatricians, faced with vaccine refusal, may seek to end their relationships with refusing families, citing a breakdown in trust, fear of litigation, or lack of common commitment to "standard" medical care for children. In our sample, 39% of physician respondents indicated they would dismiss a family who refused all vaccinations, and 28% would dismiss a family refusing selected vaccination(s). To our knowledge, this is the first study to examine the practice of family dismissal in pediatrics owing to vaccine refusal.

Few discussions of patient "termination" exist in the adult literature. In the United States, it is viewed as something that happens infrequently, but there are no data on actual prevalence. “Firing” the patient represents a last resort when all other attempts at patient compliance have failed or difficult patient behavior makes it impossible to maintain a relationship.14 Stokes and colleagues15 have published several interview-based studies in which they examined the practice of patient dismissal among general practitioners in the United Kingdom. They found dismissal to be an "overwhelmingly negative and distressing experience for patients"16 based on patient interviews in the weeks following dismissal. However, their interviews with physicians revealed dismissal to be a right that physicians very much value when faced with patients who are noncompliant or difficult long-term.18

As expected, we found that more than 90% of pediatricians rated the older vaccines (DTP/DTaP, Hib, and MMR) as extremely important. Respondents were more likely to rate newer vaccines (VZV, PCV7, and HBV) as somewhat important or optional.

We found a positive correlation between degree of importance placed on traditional vaccines and willingness to dismiss a vaccine-refusing family. This relationship, however, did not hold for newer vaccines; dismissers and nondismissers were not significantly different in their attitude toward the importance of newer vaccines. In other words, some pediatricians expressed a willingness to dismiss families who refused vaccines the pediatrician may view as somewhat important or optional. Finally, we found that the willingness to dismiss a family who refuses vaccination was not higher among older, more experienced pediatricians; younger pediatricians also adopt this practice. Therefore, we speculate that acceptance of patient dismissal as a means of dealing with vaccine refusal will not diminish in the future.

There are several limitations to our study. First, our response rate of 45%, though quite typical for a mailed questionnaire,19 was smaller than we hoped. Second, our survey questions regarding family dismissal asked pediatricians to indicate what they might do if faced with a vaccine refusal. We did not measure actual practice. While attitudes reported in the survey probably reflect pediatricians' experience with refusing families, we cannot infer actual behavior in the office. Our goals were (1) to assess the prevalence of attitudes among pediatricians about vaccine importance, (2) to learn how pediatricians interpret the reasons parents give for vaccine refusal, and (3) to gain an indication of the willingness of pediatricians to terminate care of vaccine-refusing families. Future studies should examine the actual prevalence of family dismissal and the repercussions the practice may have for both public health and access to care for particular children.

As studies have shown, a significant gap in knowledge and understanding separates parents and pediatricians regarding childhood vaccination.2,20 However, in a recent study by Gust and colleagues,21 parental attitudes about vaccination were not found to be "all or nothing." Rather, the authors describe 5 types of parents with respect to vaccines: the "immunization advocate," the "go along to get along," the "health advocate," the "fence-sitter," and the "worried." The fence-sitters and the worried were the 2 smallest groups. They also confirm what other studies have shown, that health care professionals continue to be parents' most important source of vaccine information.10,11,21 Pediatricians need to enhance the quality of their vaccine-risk communication and forge strong partnerships with parents about childhood vaccination to promote the best care for patients and the protection of the entire population. Vaccines are neither 100% effective nor 100% safe. Parents need education and guidance as they try to decipher between truth and fiction in vaccine information. However justified family dismissal may or may not be, dismissing a family from a practice ends further opportunities to provide meaningful patient/family education on vaccines and other aspects of high-quality pediatric care. Vaccine refusal is a challenge we should meet, not avoid. Pediatricians, individually and collectively, should examine how much time and effort to spend on education and advocacy or frank persuasion before asking a family to seek care elsewhere.

Does the practice of family dismissal, in fact, promote or undermine immunization for particular children or children as a group? Might family dismissal generally damage relationships between pediatricians and families such that parents become less likely to seek or successfully obtain other needed primary preventive services or care for acute or chronic illness? Given the changing climate of confidence in childhood vaccination, future research should address these and other potential implications of practice dismissal in the face of parental vaccine refusal. The answers obtained may provide insight into the influence physician behavior has on the health and welfare of children and communities for many years to come.

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REFERENCES


Poetry in Pediatrics

Indicative or Declarative Pediatric Titles

Anthropoids surprise local children’s ward.
Or, Six secular, pretend apes loped through local pediatric hospital.
Students and sick children.
Or, Six staggered-height, costumed, muddy students suggest an evolutionary condensation while distributing acorns to children on chemotherapy.
Monkey business on children’s ward.
Or, Crippled children puzzled by four-foot, costumed, club-carrying imitations of Homo habilis plus five progressively taller, less-hairy progeny distributing acorns.
Cro-Magnons on pediatrics.
Or, Art school with good name-recognition sends hairy-costumed students of staggered heights, mumbling, burping, and slobbering through children’s rehab ward, leaving a trail of pretend feces, soft persimmons, real Baby Ruth, and many smiles.1

Ed Spudis, MD