Recommendations to Health Care Providers for Responding to Parents’ Vaccine Safety Concerns

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Introduction

Public confidence in vaccines appears to be waning.1 In a 2009 National Immunization Survey of 11,206 parents, 25.8% reported to have delayed their children’s vaccines and 8.2% to have refused them.2 Moreover, vaccine safety concerns appear to have increased. According to a 2015 Gallup poll of 1,015 U.S. adults, 9% of respondents believed that vaccines are more dangerous than the diseases they prevent. In addition, 6% believed that vaccines cause autism, while 52% reported to be unsure.3 Meanwhile, in 2014, the United States experienced 667 cases of measles, the greatest number of cases since 2000 when measles was declared to have been eliminated from the U.S.4 Health care providers (HCPs) are considered to exert a large influence on a parent’s decision to vaccinate his or her child.5,6 Nevertheless, it is believed that physicians and nurses are not adequately prepared to answer vaccine-related questions from patients.7 The aim of this project was to identify recommendations to HCPs for responding to parents’ vaccine safety concerns through a review of published literature. By characterizing these recommendations, it is hoped that the training of HCPs may be modified to improve public perceptions of vaccines and increase vaccine uptake.

Search Strategy

A systematic literature search was conducted in August 2015 using PubMed/Medline and Embase. Search terms were designed to represent the following: 1) “Vaccine” and “Immunization”, 2) “Autism” and “Child Pervasive Developmental Disorders”, and 3) “Anti-vaccine.” The goal was to perform a broad search of articles describing and responding to the safety concern that vaccines cause autism. Articles written in English were identified, de-duplicated, and screened for relevance based on the title and abstract. Articles unrelated to vaccines and autism, sympathetic to autism-related vaccine safety concerns, absent of specific recommendations to HCPs in the clinical context, or published before 1998, were eliminated.

Conclusions

The study has several limitations. First, 150 sources could not be found. Second, the study was conducted by a single investigator, which may have biased the screening of articles. Third, only articles written in English and available through PubMed and Embase were searched and reviewed. Despite these limitations, a few conclusions may be drawn:

- Fact- and science-based appeals to parents are most consistently recommended to HCPs, suggesting that either the medical/scientific community assumes that the cause of parents’ vaccine safety concerns is usually a lack of information, or it assumes that fact- and science-based appeals at least do no rhetorical harm.
- Contrary to the author’s initial hypothesis, HCP recommendations do not change greatly in kind from 2001 to 2015. (All articles published in 2008 make a “5” recommendation because only 1 article published in 2008 was considered.) However, that recommendations have not changed as public confidence in vaccines has waned suggests:

1) Recommendations in the literature are ineffective;
2) Recommendations are effective, but physicians are failing to follow them;
3) Large-scale public education efforts are necessary in concert with HCP recommendations to improve vaccine uptake. In other words, there must be intervention between the HCP-patient encounter to disabuse parents of their vaccine safety concerns and/or ‘immunize’ them against the logical and psychological fallacies of reasoning likely to give rise to anti-vaccine sympathies.

References

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Results

Chart: Kind of Recommendation by Year of Publication

Of the 52 articles included in the final analysis, 33 recommended that HCPs appeal to facts and science-based arguments to persuade parents to vaccinate their children. Twenty-five urged HCPs to engage with parents in non-confrontational, respectful dialogue about the latter’s vaccine safety concerns. Avoiding technical language was suggested by 8 articles to improve the communication of the risks and benefits of vaccinating. Interestingly, 15 articles recommended that HCPs appeal to parents’ emotions through graphic imagery of vaccine-preventable diseases, anecdotes, ‘bandwagoning’—“everyone else is vaccinating!”—and accusing vaccine-critical websites of conflicts of interest. Eighteen articles recommended that HCPs individualize the content and style of their response to the individual family. Moreover, of the 10 articles that discussed discontinuing medical care as a consequence of a parent’s vaccine refusal, 8 clearly discouraged HCPs from dismissing families from the practice, while 2 equivocated and 3 acknowledged the benefits of discontinuing care, such as removing unvaccinated children from the doctor’s office.

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