

Research on Vaccine Safety Knowledge, Attitudes and Beliefs

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Overview

- IOM efforts in Vaccine Risk Communication
- Public Perceptions about vaccine safety
- Health Care Provider Knowledge and Beliefs
- Media and vaccine safety

IOM Workshop on Vaccine Risk Communication 1996

- Risk communication is a dynamic two way process
- Goal should be informed decision making
- Often there is uncertainty about estimates of risk that should be acknowledged

Parent Perceptions of Vaccine Safety

Telephone Surveys

- Assessment of Parents understanding of vaccine info(1600) (Gellin 2000)
 - Immunization requirements important
 - MD recommendations most influential
 - 20% question if vaccines weakened the immune system
- Analysis of vaccine safety calls to the National Immunization Information Hotline (429) (Scott, 1999)
 - use multiple sources of information (1.25)
 - interested in detailed info on vaccine safety topics of interest
 - Personal experience with vaccine safety issue

Public Perceptions of Vaccine Safety

Focus Groups

- Vaccine risk /benefit communication (22) (Davis 1997)
 - 4 cities Shreveport, Rochester, Wichita, Albuquerque
 - Parent needs for info on side effects, contraindications and actions to be taken
 - Parents prefer short simply written pamphlets with graphics
- Emerging issues in Immunization (6) (Nowak 2000)
 - 3 cities San Jose, Kansas City, Houston
 - Safety Questions are generated from news media, friends/family,Internet, medical journals,
 - Parents desire info on side effects, additives, vaccine improvements, risk/benefit

Public Perceptions of Vaccine Safety Interviews

- Maternal responses to intro of Hib (23) (Harrington 1999)
 - Barriers to adopting a new vaccine
 - suspicion, fear of vaccine overload, distress about # shots
- Texas survey on vaccines issues (4832) (Prislin 1998)
 - Factors in predicting immunization status
 - beliefs about vaccines ability to prevent disease
 - contraindications,
 - safety concerns
 - distrust of MD
 - natural immunity better

Public Perceptions of Vaccine Safety

Written Surveys

- HCP (1446) reasons for vaccine refusal in patients (Fredrickson 2000)
 - Fear from TV/media/word of mouth at 52%
 - Religious objections 28%
 - Philosophical objections 26%
 - Disease not harmful 26% (Fredrickson 2000)
- Mothering Magazine (294) (Meszaros 1996)
 - Common perceptions of a select group
 - Perceived ability to control children's susceptibility to disease.
 - Doubts about the reliability of vaccine safety information.
 - Preference for not immunizing
 - Recognition of community immunity benefits for unvaccinated

Health Care Providers

- MD survey 1500 Physicians (Freed 2000)
 - report parental interest in vaccine safety has increased
 - concerns voiced by parents = pain and short term reactions.
 - 85% MDs had not submitted a VAERS report in past year.
 - Physicians would like to see further vaccine safety research into
 - Additives in vaccines 69%, neuro effects of new vaccines 61%; chronic diseases 51%
 - Concern about liability issues were not significantly associated with most immunization behaviors. (Freed1998)



Health Care Providers (cont)

- Survey MD on safety perceptions (1500) (Bostrom 1998)
 - Estimated 80% had not seen or had reported to them a vaccine adverse event over 3 months.
 - Time spent discussing with patients
 - Contraindications 1.3 minutes (Average)
 - Adverse reactions 1.7 minutes (Average)
- Telephone survey of 1236 physicians on litigation concerns (Zimmerman 1998)
 - Most physicians encourage vaccination even if the parent was concerned about possible adverse effects.

The Media and Vaccine Safety

Media telephone survey of 21 Reporters (NPI 2000).

- focus on new vaccines, scientific studies, clinical trails, side effects/allergic reactions, controversies and shortages
- Prefer to receive information via e-mail or fax.
- Want information sources who respond immediately, can address a broad range of vaccine topics

The Media and Vaccine Safety (cont)

- Analysis of negative press reportage in Australia on vaccines 2440 news clips (Leask 1998)
 - Eight major themes were identified in Australian news stories 1)Cover-up,2) Excavation of facts, 3)Unholy alliance for profit ; 4)Towards totalitarianism; 5)Us vs. them; 6)Poisons; 7)Cause of idiopathic ills; 8)Back to nature
- Analysis of impact of news media (8 countries) (Gangarosa 1998)
 - Negative news coverage =decrease immunization = outbreaks of disease.

Conclusions

- The vast majority of people support immunization practices and requirements
- Most persons rely on their physician for information
- Most parents are interested in general vaccine safety information.
- Providers want to be able to address questions and communicate issues relating to vaccine safety.
- The media are attracted to vaccine safety stories but may find it difficult to put stories into perspective.

CDC Ongoing Efforts

- Focus groups
- National Immunization Survey of parent KABs
- Vaccine Risk/Benefit Quantification Modeling
- Education Activities
- Communication
 - Partners
 - Vaccine Information Statements
 - National Immunization Information Hotline
1-800-232-2522
 - Web Page

