Parents’ decisions on MMR vaccination for their children were based on personal experience rather than scientific evidence


What are the factors underpinning parents’ perceptions of risk in relation to measles, mumps, and rubella (MMR) vaccination? What are the determinants of the decision to vaccinate or not?

**DESIGN**
Qualitative study.

**SETTING**
5 general practices in the Leeds area, UK.

**PARTICIPANTS**
69 parents (mean age 34 y; 65 mothers) of children 4–5 years of age. 75% of parents had their children vaccinated (both doses).

**METHODS**
Parents participated in semistructured individual interviews, which explored their experiences in relation to information and decision support at the second MMR vaccine dose. Interview transcripts were analysed using the framework approach. The authors reviewed subsamples of transcripts to identify key themes for coding. Codes were then defined and validated by discussion among the research team. Overarching themes and deviant cases were identified.

**MAIN FINDINGS**
3 key themes were identified: decision determinants, practitioner influence, and support needs. (1) Decision determinants. The primary determinant of vaccination decision was a parent’s previous experience of children with autistic disorders or mumps, measles, or rubella, which informed judgments of the acceptability of alternative outcomes, and the perceived likelihood of a given outcome. Parents who refused vaccination knew children with autism or believed their own child to be autistic. They perceived that the long term effects of autism were far worse than those associated with mumps, measles, or rubella, which were seen as relatively mild, treatable, and even beneficial diseases (‘...it helps build up their natural immunity...’). Parents who vaccinated their children were more likely to have experienced the long term negative impact of mumps, measles, or rubella (eg, deafness or measles encephalitis) in their immediate family. Parents who agreed to a second vaccination dose despite strong reservations made their decisions based on assessment of outcome likelihood rather than impact. Parents assessed a low risk of autism if they observed no problems after the first dose and had no knowledge of autistic disorder in their immediate social sphere. For most parents, assessment of disease impact and risk was based on experiential knowledge rather than scientific evidence. (2) Practitioner influence and limits. General practitioners (GPs) and health visitors were most often identified as the most trusted sources of information on MMR vaccination. Despite this espoused trust, few parents said that practitioners influenced their decisions. Parents, particularly those who did not vaccinate, felt that GPs were biased in favour of vaccination because they were awarded target payments for each patient vaccinated. Parents were reluctant to initiate discussions during consultations because of unwillingness of practitioners to discuss concerns or dismissive, condescending, or coercive responses to questions. (3) Immediate support needs. For most parents, the decision to vaccinate (or to not vaccinate) was not an informed choice. Most received no information on the rationale, benefits, and risks of MMR vaccination before the second dose vaccination and could not recall being given information before the first dose.

**CONCLUSION**
Parents’ decisions to obtain MMR vaccination for their children were informed by assessments of the acceptability and likelihood of possible outcomes, which were based on their personal knowledge of children with autism or long term impairment after contracting mumps, measles, or rubella rather than scientific evidence.

**Commentary**

The study by McMurray et al provides evidence about influences on parental decisions regarding MMR vaccination, particularly personal experience with the diseases or perceived consequences of vaccination. The findings are consistent with those of other studies that evidence and commonly used educational strategies fail to convince parents of vaccination safety.1 Parents believed that practitioners should be an important source of information yet did not identify them as influencing their decisions. At the same time, a practitioner’s actions, or lack of action, were indeed a factor in decision making. Parents made uninformative or noninformative decisions and had inadequate contact with primary care providers. They were reluctant to initiate discussions and ask questions because of time pressures and the attitudes or responses of practitioners. They did not trust practitioners to provide unbiased information because of perceived vested interests of practitioners.

Nurses can address the problems suggested in these findings. Parents are not just looking for more information—they want to be able to integrate relevant information into their own experiences. Nurses can establish trust by engaging in respectful dialogue, asking parents about their information needs and their beliefs, perceptions, and experiences. Communications can be tailored to the parents’ level of understanding and take into account the realities of parents’ observations and experiences. Information provided to parents should be clear, graphic, accurate, and balanced, including real cases that present risks and benefits in a way that allows parents to interpret the evidence in light of their own contexts and experiences.

Policy makers should be concerned about the finding that bonus payments to physicians for each immunisation administered had the opposite effect of what was intended. Clearly, in addition to parental experience, policy and organisational or structural factors were also important. The necessary individualisation and trust building discussed above is time consuming and may require substantial alteration to care delivery structures and organisation, as well as funding mechanisms. Nurses have an important role, not only in relation to their interactions with parents but also as advocates for policy and organisational change.

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