Evidence assessment: Summary of a systematic review

Who is this summary for?

This summary is for vaccine programmanagers, policymakers andother decisionmakers.

Face-to-face interventions for informing or educating parents about early childhood vaccination

Key findings

Face-to-face communication is a widely-used strategy for sharing information, preferences, and decisions between providers and consumers.When used for childhood vaccination, it may be more effective ifit is incorporated into a health care encounter, rather than conducting it as a separate activity.

Background

Vaccination is a beneficial and cost-effective public health measure, however over 22million children worldwidedo not receive their vaccinations as recommended. Information or education interventions have the potential to increase consumer demand for vaccinationby addressing barriers related to knowledge, beliefs or attitudes (mis-information; parental fear about safety; lack of awareness about vaccine schedule, doses, or vaccine-preventable diseases).

Question

Are face-to-face interventions effective for informing or educating parentsabout early childhood vaccination ?

Face-to-face interventions for informing or educating parents about early childhood vaccination in Cameroon:

The relatively low rates of immunization coverage in Cameroon, often associated with low levels of maternal education suggest that face-to-face information and education of parents may enhance coverage.

Summary of systematic review		
	What the review authors searched for	**What the review authors found**
Studies	Randomized controlled trials (RCTs) and cluster RCTs	Six RCTs and one cluster RCT
Participants	Children (less than 1 year) or preschool-aged children (1 to 5 or 6 years).Parents, guardians or others fulfilling the parental role, alone or in groupsVaccine program organizers	- 2978 participants; - The majority of interventions were directed to mothers. The intervention in one study was directed to expectant parents, three studies targeted mothers for whom additional barriers to accessing vaccination existed
Interventions	Face-to-face communication interventions directed to parents to inform or educate them about routine childhood vaccinations	Six included studies assessed face-to-face interventions directed to individuals, but the intervention intensity varied.A cluster RCT examined face-to-face interventions directed to groups of parents
Controls	Usual care or passive intervention, i.e. no intervention	Telephone contact, home visits, usual care and vaccination information cards.
Outcomes	**Primary outcomes** 1. Children: Immunization status of child (i.e. immunization status up-to-date, or receipt of one or more vaccines) 2. Parents: Knowledge or understanding of vaccination **Secondary outcomes** 1. Parents: Intention to vaccinate child 2. Parents: Parent experience of intervention (e.g. satisfaction, assessment of communication) 3. Vaccine program managers: Cost of implementing intervention	Immunisation status was measured in six of the seven included studies; the cluster RCT did not contribute usable data to the review.
Date of the most recent search: August 2012		
Limitations: This is a good systematic review with limitations coming from the studies included		
Review citation: Citation: Kaufman J, Synnot A, Ryan R, Hill S, Horey D, Willis N, Lin V, Robinson P. Face-to-face interventions for informingor educating parents about early childhood vaccination. Cochrane Database of Systematic Reviews 2013, Issue 5. Art. No.: CD010038.DOI: 10.1002/14651858.CD010038.pub2.		

Summary of qualitative findings table

Patient or population: Mothers or soon-to-be parents
Settings: Clinics, antenatal classes or the mother's home
Intervention: Face-to-face information or education session
Comparison: No intervention or non-face-to-face intervention

Outcomes	Effect of intervention	No of participants (studies)	Quality of the evidence (GRADE)
Immunisation status measured3 months after a single-session intervention	Effect is uncertain. Four comparisons from 3 studies showed in-consistent results. Studies withhigher risk of bias were associated with greater increase in immunisation, compared withcontrol, while study with lower risk of bias showed no or little evidence of effect	2101 (3 studies)	⊕⊕⊖⊖ low
Immunisation status measuredat the conclusion of a multi-session intervention	Effect is very uncertain. Results were statistically insignificant, ranging from reduced to no evidence of effect, and had wide confidence intervals	328 (2 studies)	⊕⊖⊖⊖ very low
Knowledge or understanding of vaccination	Effect is very uncertain. Two eligible studies with multi-session interventions showed non-significant increases in	489 (2 studies)	⊕⊖⊖⊖ very low

	knowledge scores compared with control		
Cost (Monetary, resource and indirect costs of intervention)	Effect is very uncertain. A single studyreportedthattheestimatedmean cost of usual care per fullyimmunised child was $US1587, or $US1273 for children defined as high-risk. The estimated additional cost per fully immunised child for intervention was approximately 8 times higher thanusual care for all children and 4 times higher for high risk children	365 (1 study)	⊕⊖⊖⊖ very low

Applicability

Four studies were conducted in three high-income countries (Australia, Canada and the United States). Two studies were conducted in Pakistan (low-middle income country; LMIC) and one in Nepal (low-income). Only one study took place in a rural setting; the rest were in urban or peri-urban locations. However, in some comparisons, the majority of included trials were conducted in LMICs. On the other hand, face-to-face interventions may be challenging in resource limited settings.

Conclusions

There is insufficient evidence to inform decisions about face-to-face interventions to educate parents about early childhood vaccination. However, given the apparently limited effect of this intervention, it may be more appropriate to introduce communication about vaccination into a health care encounter, rather than conducting it as a separate activity.

Acknowledgements:

This evidence assessment is supported by the Effective Health Care Research Consortium which is funde d by UKaid from the Department for International Development.

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September 2013