Title: Factors influencing uptake of childhood vaccination in the United Kingdom: a thematic synthesis.

Authors: Alice S Forster, PhD^a; Amanda J Chorley, MSc^a; Lauren Rockliffe, MSc^a; Laura AV Marlow, PhD^a; Helen Bedford, PhD^b; Samuel G Smith, PhD^c; Jo Waller, PhD^a.

Authors' affiliations:

^a Health Behaviour Research Centre, UCL, Gower Street, London, WC1E 6BT, United Kingdom

^b Institute of Child Health, UCL, 30 Guilford Street, London, WC1N 1EH, United Kingdom

^c Wolfson Institute of Preventive Medicine, Queen Mary University of London, Charterhouse Square, London, EC1M 6BQ, United Kingdom

Corresponding author:

Alice S Forster

0044 203 108 3293

Alice.Forster@ucl.ac.uk

Abstract

Background

Vaccination is a vital public health intervention and high uptake is crucial for disease prevention. Although uptake of childhood immunisations is high in the UK, it is not complete and disease outbreaks occur. Systematic reviews and narrative reviews have been conducted to understand vaccination uptake, but novel systematic methods have rarely been used when reviewing the qualitative literature. We conducted a qualitative systematic review of UK studies to understand factors that affect parental decisions about vaccination.

Methods

We searched PsycINFO, Medline, CINAHL plus, Embase, Social Policy and Practice, and Web of Science for studies published in English at any time using the terms "UK" and "vaccination" and "qualitative methods" (and variations of these). Thematic synthesis methods were used to develop descriptive and then higher order themes.

Findings

38 papers were included; they were published between 1999 and 2014 and comprised a cumulative total of 2395 participants. Most participants (>85%) were mothers with children under the age of 5 years. Most studies used interviews (n=19) or focus groups (12). The synthesis identified two types of decision making that parents had adopted: deliberative and less deliberative. Less deliberative decisions were those where parents felt that they had no choice but to vaccinate, were happy to comply, or relied on social norms. Deliberative decisions involved weighing up the risks and benefits of vaccination, considering others' advice or experiences, and social judgment. Parents felt judged for not immunising or they judged others who did not immunise, and some felt a social responsibility to protect the community. Trust was integral to both less deliberative decision making, and this was also sometimes influenced by the media. Finally, practical issues (eg, lack of time) affected parents who intended to vaccinate their children.

Interpretation

Our synthesis highlighted two different approaches to decision making about childhood vaccinations. Future research should consider the demographic profile of parents adopting these approaches. By understanding the psychological processes underpinning parents' vaccination behaviour and who these individuals are, we can better design interventions to enhance uptake.

Funding

ASF and LR are funded by a Cancer Research UK – BUPA cancer prevention Fellowship awarded to ASF (C49896/A17429). JW, LAVM, and AJC are funded by a Cancer Research UK Career Development Fellowship awarded to JW (C7492/A17219). HB is funded by the Higher Education Council for

England. SGS is funded by a Cancer Research UK post-doctoral Fellowship (C42785/A17965). None of the funders had any role in the study design; in the collection, analysis and interpretation of data; in the writing of the article; and in the decision to submit for publication.