

Co-design of a decision aid for travellers considering Japanese encephalitis vaccination

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Background: Japanese encephalitis (JE) vaccine uptake rates remain low among travellers, with barriers including low risk perception and cost. Previous research indicates that reliable and engaging digital resources may improve vaccine decision-making and uptake. We aimed to co-design a decision aid with consumers and health professionals to support informed vaccine decision-making for Japanese encephalitis.

Materials and methods: Using a co-design approach, we recruited travellers and healthcare providers (GPs, nurses and pharmacists) for three workshops over four months. Workshops explored 1) vaccine decision-making processes and information needs, 2) content preferences, 3) JE-specific considerations and 4) risk-benefit communication. Inductive thematic analysis of workshop transcripts informed the creation of a PDF decision aid prototype, which was then refined based on participant feedback.

Results: Nine travellers and seven healthcare providers engaged with researchers in co-design. Thematic analysis underscored the importance of relevance, accessibility, engagement, and credibility in the decision aid. Visual appeal, readability and applicability were paramount, along with different format options (PDF and web-based) catering to various needs. Transparent risk-benefit comparisons and including information on alternatives to vaccination were deemed essential. Feedback on the final decision aid prototype and co-design process was positive.

Conclusion: Through co-design, we successfully developed a prototype patient-centred vaccine decision aid for Australian travellers to JE-endemic areas. We are now testing the prototype with consumer groups, healthcare professionals and experts, using feedback for optimisation and adaptation to a web-based format. We see this novel approach as a prototype for supporting decision-making for a range of vaccines.