Stakeholders’ Views on Mobile Applications to Deliver Infant and Toddler Feeding Education to Underserved Hispanic Mothers
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Abstract

Background: Infant and toddler feeding (ITF) practices are critical to long-term health and chronic disease prevention. Using mobile applications (apps) to promote desirable ITF practices shows promise as most Hispanics own smartphones (98%) and health-related apps are accepted among mothers. However, the viability of ITF apps for low-income Hispanic mothers is unclear.

Objective: Characterize stakeholders’ views on underserved Hispanic mothers’ capability, motivation, & barriers to using ITF apps.

Methods: In-depth interviews were conducted with New York City (NYC)-based health professionals who engage with low-income Hispanic mothers. A directed content analysis approach, using the Capability, Opportunity, Motivation, and Behavior (COM-B) framework, guided analysis.

Results: The following themes were identified: 1) Mothers are tech-savvy (i.e., high capability and use of smartphones and apps); 2) Apps are an appealing way to deliver ITF education; 3) Challenges to using apps must be addressed (e.g., home Internet access, literacy barriers, and multiple Spanish dialects; capturing and maintaining interest). The following themes were identified: 1) Mothers are tech-savvy (i.e., high capability and use of smartphones and apps); 2) Apps are an appealing way to deliver ITF education; 3) Challenges to using apps must be addressed (e.g., home Internet access, literacy barriers, and multiple Spanish dialects; capturing and maintaining interest).

Conclusion: Overall, ITF apps are a viable option as skills and use appear high among low-income Hispanic mothers. Key considerations for app development include targeted app promotion; detailed instructions for obtaining and using app; more visuals, less text for low literacy & multiple dialects; making key features available offline.

Objective

Characterize stakeholders’ views on underserved Hispanic mothers’ capability, motivation, & barriers to using ITF apps.

Methods

Study Design: In-depth interviews with NYC-based health professionals (n=17) who engage with underserved Hispanic mothers of infants (0-2 years old).

Data Collection & Analysis: Brief survey and online/phone interviews (n=17). Directed content analysis using COM-B framework, guided analysis.

Results

Mothers are tech savvy
Stakeholders viewed most mothers as capable and experienced with using smartphones & apps. Mothers who did not speak English or had lower literacy were perceived as being less tech-savvy.

Apps appealing for delivering education
Most voiced apps provided easy access to valuable information that mothers could use on their own time. Stakeholders believed Hispanic mothers were eager to learn about desirable ITF practices.

Challenges to using apps exist
Stakeholders noted challenges for mothers to use apps: ●Capturing & maintaining interest ●Mothers overwhelmed ●Literacy barriers ●Multiple Spanish dialects ●Limited home Internet access

Table 1. Stakeholder Characteristics (n=17)

<table>
<thead>
<tr>
<th>Profession</th>
<th>n (%)</th>
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<tbody>
<tr>
<td>Nutrition Educator</td>
<td>3 (18)</td>
</tr>
<tr>
<td>Physician (MD, DO, PA, RNP)</td>
<td>5 (29)</td>
</tr>
<tr>
<td>Registered Dietitian (RD, RDN)</td>
<td>9 (53)</td>
</tr>
<tr>
<td>Smartphone ownership</td>
<td>17 (100)</td>
</tr>
<tr>
<td>Use of ≥1 popular apps*</td>
<td></td>
</tr>
<tr>
<td>Almost constantly/several times a day</td>
<td>11 (65)</td>
</tr>
<tr>
<td>About once a day/several times a week</td>
<td>4 (24)</td>
</tr>
<tr>
<td>Less often</td>
<td>1 (6)</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>1 (6)</td>
</tr>
</tbody>
</table>

*Popular apps: Facebook, Twitter, Instagram, Reddit, Snapchat, WhatsApp, Pinterest, YouTube

Conclusion

Apps are a viable option for delivering ITF education to underserved Hispanic mothers.

Key considerations for app development:
- Targeted app promotion
- Detailed instructions for how to obtain and use app
- More visuals & less text to accommodate low literacy, multiple Spanish dialects, & help mothers feel less overwhelmed
- Make key features available offline

References:

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