Background: Safer Care Victoria (SCV) partners with consumers, clinicians and health services to support continuous improvement. SCV’s Clinical Networks promote clinician engagement, collaboration and leadership to achieve this aim. The Maternity and Newborn Clinical Network is developing the Maternity eHandbook, supported by funding from VMIA, to reduce unnecessary variation in maternity care. The project subcommittee, with multidisciplinary membership representing all regions and service capability levels, is tasked with developing content and supporting its dissemination and evaluation.

Methods: A survey was developed to evaluate the subcommittee’s experience of participation in the project. Questions focused on their motivation to participate; barriers and facilitators to participation; impact of the work on future plans for engagement in health service and sector activities; what they valued and would change about the experience; and the perceived value of the project to the sector. The survey was circulated to all 22 subcommittee members, using a web-based survey tool. Responses were collected anonymously.

Results: Subcommittee members’ experiences of engagement and participation will be evaluated using quantitative and qualitative survey data.

Conclusions: Results will identify potential barriers and facilitators to clinician participation and engagement in the eHandbook project. These findings may provide useful insights into mechanisms to support clinician involvement in future projects.

The Effect of Mobile Application Interventions on Influencing Healthy Maternal Behaviour and Improving Perinatal Health Outcomes: A Systematic Review

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Background: Mobile health strategies have the potential to improve access to information, modify demand for services and enable provision of targeted care. This systematic review assessed the effect of mobile application interventions, used by women during pregnancy, on influencing behaviour and improving perinatal health outcomes.

Methods: We included randomised and non-randomised studies, published in peer-reviewed publications, reporting effects of mobile application-based interventions designed to influence maternal knowledge or behaviour during pregnancy, with no date or language restrictions.

Results: Four studies were eligible for analysis, all reporting outcomes from randomised controlled trials. All studies reported some benefit of the intervention on the primary outcome of change in maternal behaviours, by specific intervention goals. No meta-analysis was performed due to heterogeneity. No statistically significant differences between groups were reported for pregnancy complications, delivery or infant outcomes.

Conclusions: For future trials, authors recommend a standard set of perinatal outcome measures alongside those specific to the intervention. This review is limited by the few studies that met inclusion criteria, small sample sizes and heterogeneity of interventions, comparators and outcome measures.

Investigating Side-Lying for Bottle-Feeding Infants Who Are Receiving Respiratory Support

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Background: Infants who have chronic lung disease, can have difficulty establishing suck feeding. Our aim was to compare physiological stability during and immediately after bottle feeds in infants receiving non-invasive respiratory support using an alternative position.

Methods: Randomised cross-over study in infants <34 weeks gestation at birth, ≥34 weeks postmenstrual age, who were receiving at least 2 suck feeds/day AND on respiratory support (High Flow (HF) or low flow (LF), or nasal continuous positive airway pressure (nCPAP)) during bottle feeds. Infants received two feeds, 24 hours apart, one in side-lying the other in the cradle-hold position. The order of the feeding position was randomised.

Results: 25 study infants mean (SD) 27(2) weeks gestation and 849 (2340)g at birth and 39(2) weeks corrected age and 3217(570)g at time of study. Respiratory support during feeds; 16 LF, 10 HF, 1 nCPAP.

Table 1

<table>
<thead>
<tr>
<th>During feeds</th>
<th>Side</th>
<th>Cradle</th>
<th>P=</th>
</tr>
</thead>
<tbody>
<tr>
<td>SpO2 mean (SD)</td>
<td>93 (7)</td>
<td>91 (7)</td>
<td>0.31</td>
</tr>
<tr>
<td>SpO2 &lt;80% % of all measurements</td>
<td>5.2 %</td>
<td>7.71 %</td>
<td>0.06</td>
</tr>
<tr>
<td>Heart rate mean (SD)</td>
<td>155 (12)</td>
<td>161(12)</td>
<td>0.85</td>
</tr>
<tr>
<td>HR &lt;100bpm % of all measurements</td>
<td>0.17</td>
<td>0.14</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Conclusions: There was little difference in infants’ physiological stability between the two bottle feeding positions. Both methods may be appropriate for the transition from gastric tube to suckling feeds in preterm infants receiving respiratory support.

Preterm Piglets Are a Model of Human Preterm Infant Sulphate Deficiency

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