The Internet Is Our Breastfeeding Friend
Increasing exclusive breastfeeding through an Internet intervention in regional Western Australian (WA)

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# Breastfeeding statistics

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<thead>
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</thead>
<tbody>
<tr>
<td>Initiation</td>
<td>94%</td>
<td>98%</td>
<td>96%</td>
</tr>
<tr>
<td>Exclusive 6 mths</td>
<td>&lt; 1%</td>
<td>5.7%</td>
<td>15% (&lt;6mths)</td>
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<td></td>
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<td>2.1% (&lt;7mths)</td>
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Benefits of Breastfeeding

Breastfeeding is the optimal method of feeding infants and the benefits of breastfeeding are well recognised for both mothers and their babies. In the short-term it provides infants protection against respiratory and gastrointestinal tract infections and in the medium- and long-term through reduction in the risk of childhood obesity and chronic diseases in adulthood. For mothers, breastfeeding has been shown to protect against ovarian and breast cancers, reduce the risk of cardiovascular disease and type II diabetes, aid in postpartum weight loss and decrease maternal depression.
Overview

- The research study
- The website
- Results
- Take home message
Research Objective

- The objective of this research was to evaluate the effect of a breastfeeding support internet intervention on breastfeeding outcomes on women living in regional Western Australia.

In 2001 only 22% of nursing workers lived in inner regional areas, 10% in outer regional areas compared with 65% in major cities. In the same period there were 308 doctors per 100,000 population in the major cities compared with 175 doctors per 100,000 population in inner regional areas and 77 per 100,000 population in very remote areas.
Formative Results
Regional Women (n=31)

- Discussion Forums
  81% useful or very useful
- Education Sessions
  84% useful or very useful
- Webcams
  48% undecided 39% useful/very useful
- Interactive Breastfeeding Website
  97% useful or very useful
- Chat rooms
  74% useful or very useful
The Website

- Developed by a multi media student from School of Design and Technology at Curtin University
- Part of a student assignment
- Student developed the complete website framework and name
- Completed by the IT eResearch team (backend)
Although there are other breastfeeding Websites in existence (most obviously the Australian Breastfeeding Association) this intervention differs from other sites by providing:

- individualised feedback and information for women on their breastfeeding concerns in the absence of other support
- regional lactation consultant
- online education sessions
- the opportunity to breastfeed using webcam support with a lactation consultant
- a private and secure community
- an understanding of regional problems involving regional people
Control mothers accessed a website which redirected them to helpful parenting and infant feeding websites which had been assessed for accuracy of information.
The Research Study

- Recruitment in hospital or through the Child Health Nurses
- Women randomised to a control or intervention group for the website
- Women provided with a username and password
- Women complete a baseline survey when in hospital or first log on
- Women are then surveyed online at 4, 10, 16, 26, 32, 40 and 52 weeks

MASS MAILER PROGRAM which is automated to the database.
Women can be reminded about their surveys
Send reminder SMS through email2SMS
Initial beginnings

- Originally launched in March 2010
- Midwest region of WA; Geraldton Regional Hospital and St John of God Hospital, Geraldton
- PhD student living and working in Geraldton, Kylee Cox
- Cohort study in which the intervention was nested.
Results

- 489 women gave consent
- 427 completed the baseline (88%)
- 13 women no computer access

Randomly assigned
207 control,
207 intervention
Results

- Women in both intervention and control were homogeneous
The majority of women from both groups visited the commercial websites most often and consistently throughout the duration of the study. The ABA website was the second most visited website, however this was more popular in the early postpartum stage whereas the commercial sites maintained their popularity with the participants. There was no significant differences between the websites visited by the intervention group or the control group with the exception of week 32 when the intervention group reported visiting the ABA website more often than the control group; and the control group visited commercial sites more often than the intervention group.
Percentage of women exclusive breastfeeding in the intervention and control groups at discharge, 4, 10, 16 and 26 weeks

<table>
<thead>
<tr>
<th>Time point</th>
<th>Participant group</th>
<th>Remote participants¹</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>Intervention</td>
<td>Control</td>
</tr>
<tr>
<td>Discharge</td>
<td>345</td>
<td>82.1</td>
<td>84.5</td>
</tr>
<tr>
<td>4 weeks</td>
<td>233</td>
<td>66.9</td>
<td>61.5</td>
</tr>
<tr>
<td>10 weeks</td>
<td>187</td>
<td>57.8</td>
<td>50</td>
</tr>
<tr>
<td>16 weeks</td>
<td>142</td>
<td>48.5</td>
<td>38</td>
</tr>
<tr>
<td>26 weeks</td>
<td>10</td>
<td>5.9</td>
<td>0.6</td>
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¹In ARIA classification of moderately remote, remote and very remote mothers only

χ² test
Mothers who had experienced breastfeeding problems and accessed a parenting website in this time (%)

<table>
<thead>
<tr>
<th>Period during which mother accessed a parenting website</th>
<th>Period during which mother experienced breastfeeding problems (n=total no of women experiencing breastfeeding problems)</th>
<th>Accessed website</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Previous 10 weeks</td>
<td>Week 4 – 10 (n=83)</td>
<td>52</td>
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<td></td>
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<td></td>
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<tr>
<td>Previous 16 weeks</td>
<td>Week 11 – 16 (n=61)</td>
<td>38</td>
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<td></td>
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<td></td>
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<tr>
<td>Previous 26 weeks</td>
<td>Week 17 – 26 (n=39)</td>
<td>27</td>
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<td></td>
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<tr>
<td>Previous 32 weeks</td>
<td>Week 27 – 32 (n=28)</td>
<td>17</td>
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<td></td>
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<tr>
<td>Previous 40 weeks</td>
<td>Week 33 – 40 (n=25)</td>
<td>17</td>
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<td></td>
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<tr>
<td>Previous 52 weeks</td>
<td>Week 32 – 40 (n=13)</td>
<td>5</td>
</tr>
</tbody>
</table>

*χ² test

Mothers were asked at each survey time point commencing at week 10 if in the previous weeks they had ‘accessed any online websites about infant feeding or parenting in an effort to find information to help support them in their new role as a parent’. There was a significant difference in the number of women accessing websites who had experienced breastfeeding problems at each time point with the exception of week 52, compared to women who had not experienced any problems with breastfeeding.
Limitations

- Limited responses to internet questions
- Number of women exclusively breastfeeding long term
- Intervention fidelity unknown
Points of interest

- Competition with Facebook and commercial websites, and being busy with a new baby and with the household may all be factors limiting access to the intervention website and therefore reducing the effectiveness of the intervention.
Take Home Message

- This study positively demonstrated that an internet intervention specific to breastfeeding has the capacity to support regional women in their breastfeeding practice.
- Mothers enrolled in the internet intervention, and particularly those mothers living in a remote regional area were more likely to exclusively breastfeed than mothers in the control group.
Take Home Message

- Maintaining exclusive breastfeeding to the recommended six months postpartum has been difficult to achieve in many populations however this intervention demonstrated the potential of the internet to provide support for the desired period of breastfeeding in a rural population.
- Women potentially require breastfeeding support along the continuum of lactation.
- The internet but more importantly social media has an important part to play in supporting breastfeeding, at any intensity.
References


Evaluating the evidence-practice gap between the NHMRC alcohol and breastfeeding guideline (2009), clinician application and maternal uptake

▪ Investigating the knowledge, awareness and utilisation of the ‘Australian Guidelines To Reduce Health Risks from Drinking Alcohol’ (NHMRC, 2009) Guideline 4B by maternal practitioners (midwives, child health nurses, GPs obstetricians, paediatricians).

▪ Looking for participants from each group to be involved and contribute their experiences.

▪ Looking for you actually!
More information

- [http://alcoholpregnancy.telethonkids.org.au](http://alcoholpregnancy.telethonkids.org.au)
- Research Spotlight

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