Analysis of media coverage on breastfeeding policy in Washington State

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Abstract

Analysis of media coverage on breastfeeding policy in Washington State

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Chair of the Supervisory Committee:

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Department of Health Services

Background: Framing of messages about breastfeeding policy in the media can foster or hinder interpretations of policy’s potential benefits and may ultimately influence important policy decisions in institutions and legislative bodies.

Objectives: To evaluate how breastfeeding policies were framed in print and web-based newspaper in Washington State; To identify voices of frames and examine the balance of media coverage in support or against breastfeeding policy adoption.

Methods: Print and web-based newspaper articles published from January 2000 through June 2014 specifically discussing breastfeeding policy were analyzed and coded (n= 131). A sample of (n= 46) were double coded. Inter-coder agreement was acceptable (Krippendorff α coefficient 0.83).

Results: The number of articles about breastfeeding policy grew overall between 2000 ad 2014 and peaked during periods of specific policy development. Seventy-four articles had a neutral
tone, 49 supported breastfeeding policy and four were in opposition. Nine distinct supporting frames were identified and six distinct opposing frames. Common supporting frames were health benefits of breastfeeding and challenges of breastfeeding in public. The most common opposing frame was indecency of breastfeeding in public. Many framed messages did not reference a source of information.

Conclusions: There is limited but growing media coverage of breastfeeding policies. For the most part, coverage is supportive of the need for policies. Breastfeeding advocates can apply information about using message framing to craft effective policy development strategies.
**BACKGROUND:**

It is well understood that human milk provides the best nourishment for ensuring newborn health and immunity and has health and economic benefits for mothers, families and communities.\(^{1-8}\)

Many factors influence a mother’s ability to initiate and sustain breastfeeding, including knowledge about breastfeeding and social and logistical support available from her family, friends, medical providers, employer, childcare provider, and community.\(^{1,8,9}\) Despite overwhelming evidence in support of exclusive breastfeeding, many women capable of breastfeeding do not sustain breastfeeding over time.\(^{1,8}\) Inadequate family, social, and policy support interfere with successful breastfeeding.\(^{1,8}\) Policies that affect mother’s physical and social environments, are effective strategies for creating population-wide improvements in breastfeeding rates.\(^{10-14}\)

Media attention to breastfeeding can reduce barriers to breastfeeding and influence legislation, government, and institutional policymakers to create environments that support breastfeeding.\(^{1,15-19}\) News media coverage can influence readers through multiple processes, including the manner in which messages are framed.\(^{20,21}\) A message frame refers to the mode in which information is presented to focus attention on certain events or issues and to place these ideas within a field of meaning for the audience.\(^{22,23}\) Political actors, including health and breastfeeding advocates can influence policy outcomes by providing framed messages to news media.\(^{22,24}\) While these actors may influence the content of news media, editorial decisions and reporters’ own preferences can also play an important role in framing policy debates.\(^{25,26}\) Frames used by the media and the media’s choice to cover particular topics can shape opinions about which issues are important and can emphasize particular ways of thinking about an issue by
calling attention to specific concepts. Likewise, the sources of information in the media and the manner in which messages about breastfeeding are framed may ultimately influence policy decisions on breastfeeding by altering the beliefs of politicians and other policy actors who often heavily rely on the media for information.

Public discourse about health is highly influenced by the media, and although media analysis research has been conducted in other areas of health, few studies have analyzed the manner in which breastfeeding policies have been framed in the media and the sources of these frames. The purpose of this study was to examine the news medias’ framing of breastfeeding policies across Washington State. Because media messages that depict the breastfeeding policy landscape and illustrate the need for structural change can pave the way for structural and environmental changes to support breastfeeding, understanding current message frames is a critical first step for discovering the role these frames may play in influencing public opinion and breastfeeding policy adoption and crafting successful media advocacy strategies.

The primary aim of this study was to evaluate how breastfeeding policies were framed in local web-based and print newspapers in Washington State from January 2000 through June 2014. The secondary aims were to identify voices and sources of frames, and examine the balance of media coverage in support or against breastfeeding policy adoption.

**METHODS:**
A time frame of January 2000 to June 2014 was chosen to encompass local media produced during a time when bills were proposed in the Washington State legislature to support
breastfeeding. To create a representative sample of all local Washington newspaper media published for both large and small community newspaper readership, media articles from all newspapers published in Washington State were included.

**Search Terms**

A number of search terms were tested to create a precise set of terms that would generate a large collection of articles relevant to the study objectives. Articles were captured from the news database Access World News\(^{46}\) that were published from January 2000 to June 2014, designated as Washington print or web-based articles, and included the following terms: "policy" or "policies" or "law" or "rule" or "legislature" or "legislation" or "legislative" or "regulation" or "bill" or "ruling" or "legal," cross-references with “breastfeeding” or "breast feeding" or "breastfed" or "breastfeed" or “baby-friendly.” Seven hundred and forty eight media samples were initially found using these search criteria.

**Determination of Final Sample**

Media samples were excluded if they did not include discussion about breastfeeding policies or breastfeeding support initiatives, if they were corrections of previous articles, or if they were book reviews, event announcements, calendar reports, or requests by the newspaper for public response. Using these criteria, one member of the research team screened the initial media sample and removed all those media samples meeting the exclusion criteria. Figure 1 represents a flow diagram of the sample selection process.

**Data Analysis:**

Once the final selection of articles were identified, a coding instrument was developed to explore the content of the sample and examine how arguments supporting or opposing breastfeeding policy were depicted.\(^{16}\) Message frames were created, verified, and clarified during the pilot
coding processes through frequent discussion and comparison by the research team (A.D., G.R., D.J.). Initial codes for message frames were based on frames used in the Berkeley Media Studies Group 2010 analysis of the portrayal of breastfeeding in the media.\textsuperscript{29} New codes were developed as necessary to ensure relevant arguments were not omitted. Multiple codes were applied to articles for presence of framed messages and sources of message,\textsuperscript{47-49} and each article was cross coded across several domains including author type, news section type, and article attitude; Microsoft Excel\textsuperscript{50} and IBM SPSS\textsuperscript{51} software were used to catalogue and analyze all codes.

To strengthen the accuracy of coding, 46 documents (35.1\%) were double coded. Discrepancies were resolved through analysis, discussion, and mutual agreement between investigators.\textsuperscript{16,52} Inter-coder agreement of double coded articles was measured using Krippendorff $\alpha$ coefficient.\textsuperscript{53,54} Inter-coder agreement met the conventional standard for adequate reliability with an $\alpha$ coefficient of 0.83.
RESULTS:

Sample Characteristics

The study sample included 131 print and web-based newspaper articles published between January 2000 and June 2014; articles came from a total of 27 different sources. Table 1 shows articles by source, article type, author type, and newspaper section. The majority of articles were from print-based sources as compared with web-based (72% and 28%, respectively).
TABLE 1: Characteristics of Washington State newspaper stories discussing breastfeeding policies between January 2000 and June 2014 (n=131)

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>Count</th>
<th>Article Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seattle Examiner</td>
<td>28</td>
<td>News Story</td>
<td>83</td>
</tr>
<tr>
<td>Seattle Post-Intelligencer</td>
<td>18</td>
<td>Op-ed / Editorials / Commentary</td>
<td>39</td>
</tr>
<tr>
<td>The Seattle Times</td>
<td>12</td>
<td>Letter to Editor</td>
<td>9</td>
</tr>
<tr>
<td>The Spokesman-Review</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Columbian</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tri-City Herald</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NBC - 5 KING</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The News Tribune</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Daily Herald</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Olympian</td>
<td>4</td>
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<td></td>
</tr>
<tr>
<td>Yakima Herald-Republic</td>
<td>3</td>
<td></td>
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<tr>
<td>The Chronicle</td>
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<td></td>
<td></td>
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<tr>
<td>Kitsap Sun</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily Record</td>
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<tr>
<td>King County Journal</td>
<td>2</td>
<td></td>
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<td>Spokane Examiner</td>
<td>1</td>
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<td>Renton Reporter</td>
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<tr>
<td>Bonney Lake &amp; Sumner Courier-Herald</td>
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<tr>
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<tr>
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<tr>
<td>Kirkland Reporter</td>
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<tr>
<td>Columbian Basin Herald</td>
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<td>The Bellingham Herald</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>The Wenatchee World</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CBS - 2 KREM</td>
<td>1</td>
<td></td>
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<td>FOX - 13 KCPQ</td>
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<td>Daily World</td>
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Author Type

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<td>Staff</td>
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<td>Wire Service</td>
<td>17</td>
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<tr>
<td>Reprint Paper</td>
<td>9</td>
</tr>
<tr>
<td>Editorial</td>
<td>9</td>
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<tr>
<td>Other</td>
<td>9</td>
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<tr>
<td>Not Available</td>
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Newspaper Section Type

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<th>Newspaper Section Type</th>
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<td>General or Local News</td>
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<tr>
<td>Lifestyle</td>
<td>41</td>
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<tr>
<td>Opinion</td>
<td>18</td>
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<tr>
<td>Health</td>
<td>5</td>
</tr>
<tr>
<td>Business</td>
<td>5</td>
</tr>
<tr>
<td>Feature</td>
<td>3</td>
</tr>
<tr>
<td>Not Available</td>
<td>1</td>
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</table>

Portrayal of Breastfeeding Policy over Time

Figure 2 categorizes media coverage over the period of 2000 to 2013. Many articles [n=74 (56%)] had a neutral tone in which the authors themselves did not provide an opinion on statements or facts in the article, even if they were reporting on supporting messages for breastfeeding policy. Forty-nine articles supported breastfeeding policy while only four articles were in opposition. Three articles had both strong support and strong opposition for the policies. In general, newspaper coverage of breastfeeding policy has grown over time and during periods of specific policy developments or events. Only five articles that discussed breastfeeding policy were published in 2000, while 14 articles were published in 2013. There were spikes in coverage,
which are associated with specific historical events: Increased breastfeeding policy coverage in 2001 and 2002 corresponds with increased media coverage of the Washington Senate voting to protect nursing mothers from indecent-exposure laws following an arrest at a shopping center. Similarly, higher levels of media coverage in 2005 and 2006 parallel the proposed Washington legislation to incentivize “infant friendly” worksites and create a task force to study breastfeeding and breastfeeding accommodations in the workplace, while media coverage in 2009 corresponds to the inclusion of breastfeeding in Washington’s anti-discrimination law. Media coverage of breastfeeding policy in 2010 parallels a combination of the passing of the Affordable Care Act as well as the launch of a column called the “Breastfeeding Examiner” in the Seattle Examiner web-based newspaper. Media coverage in 2012 reflects the passing of a Seattle breastfeeding ordinance. Opposing articles and those with multiple perspectives, showing both supportive and opposing opinions, also tend to appear during periods of greater policy action, such as in 2003, 2006, 2009, and 2012.
*Data from 2014 not presented as data was collected for only half the year

Framed Messages

In total, in all of the 131 articles, there were 600 separate messages that could be categorized with a specific positive frame and 82 that could be categorized with a negative frame. Table 2 categorizes the framed messages that supported and opposed breastfeeding policy. The most frequent supporting message frame (24% of supporting messages) was that maternal and infant health is an important reason to support breastfeeding and breastfeeding policy. This health frame was applied to messages emphasizing breastfeeding’s role in ensuring healthy babies as well as in preventing disease for both mother and baby. Articles that described policies as ways to remove challenges of breastfeeding in public frequently highlighted personal stories of
women’s challenges breastfeeding in public. Articles that described the role of policy in removing challenges for working women also focused on personal stories of women’s problems breastfeeding at work when there was a lack of supportive policies. Six percent of supporting messages were categorized as miscellaneous frames about the general benefits of breastfeeding policy and the need for strengthened policies as a way to increase breastfeeding rates. In general the supporting message frames increased in prevalence proportionately with other frames during specific policy events. Prevalence of articles that described the evidence supporting the need and utility of breastfeeding policy appeared to be higher after 2010. Messages framed around the idea that policy removes challenges to breastfeeding women spiked in 2005 and again in 2013, coinciding with activities around proposed breastfeeding policies designed to increase working women’s ability to breastfeed after returning to work (2005-2006: Infant friendly employers study; 2013: Washington Wellness Worksite Designation Program; 2013-2014: Breastfeeding-friendly Washington designation for hospitals, health care providers, employers, and child day care centers).

The most frequently mentioned opposing frame (41.5% of opposing messages) focused on concerns about the indecency of public breastfeeding. Opposing frames also tended to spike over periods of breastfeeding policy introduction. Articles describing policies infringing on individuals’ rights did not appear until 2007, while the number of articles about breastfeeding being indecent was fairly consistent overtime, with an increase in occurrence in 2006. Table 3 displays the sources of information in supporting and opposing framed messages in Washington State print and web-based articles published between January 2000 and June 2014.

<table>
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<tr>
<td>Supporting Frames</td>
<td>200</td>
<td>34</td>
<td>67</td>
<td>90</td>
<td>34</td>
<td>78</td>
<td>85</td>
<td>12</td>
<td>600</td>
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<td>Maternal and infant health is an important reason to support breastfeeding and</td>
<td>43</td>
<td>5</td>
<td>24</td>
<td>26</td>
<td>5</td>
<td>18</td>
<td>21</td>
<td>3</td>
<td>145</td>
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<td>breast feeding and breastfeeding policy</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>There are challenges to breastfeeding in public when breastfeeding support</td>
<td>47</td>
<td>11</td>
<td>12</td>
<td>11</td>
<td>10</td>
<td>22</td>
<td>15</td>
<td>4</td>
<td>132</td>
</tr>
<tr>
<td>policies are not in place</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Breastfeeding support policies are need to support a healthy breastfeeding</td>
<td>34</td>
<td>9</td>
<td>15</td>
<td>7</td>
<td>4</td>
<td>12</td>
<td>5</td>
<td>2</td>
<td>88</td>
</tr>
<tr>
<td>culture and to help create a cultural shift that accepts breastfeeding as</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>normal behavior rather than indecency</td>
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<td></td>
<td></td>
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<tr>
<td>Breastfeeding support policies are needed in the workplace to remove</td>
<td>28</td>
<td>2</td>
<td>2</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>14</td>
<td>0</td>
<td>60</td>
</tr>
<tr>
<td>challenges for women trying to continue breastfeeding after returning to work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Breastfeeding support policies are needed to protect the right of mothers and</td>
<td>11</td>
<td>3</td>
<td>8</td>
<td>8</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>0</td>
<td>45</td>
</tr>
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<td>infants to breastfeed.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Breastfeeding and breastfeeding policies support healthy economies and</td>
<td>17</td>
<td>2</td>
<td>3</td>
<td>7</td>
<td>0</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>38</td>
</tr>
<tr>
<td>businesses, especially for those businesses employing breastfeeding women.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is evidence to support the need and utility of policies.</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>10</td>
<td>2</td>
<td>6</td>
<td>9</td>
<td>0</td>
<td>37</td>
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<tr>
<td>Breastfeeding support policies play an important role in removing harmful</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>marketing of breastfeeding substitutes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Breastfeeding and breastfeeding policies help protect a healthy environment</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>through decreased waste produced in processing, packaging, shipping, and</td>
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<td></td>
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<td></td>
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<tr>
<td>distributing infant formula.</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Support-Miscellaneous</td>
<td>9</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td>36</td>
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</table>
Breastfeeding is indecent and women should not breastfeed in public.  
Breastfeeding support policies create a nanny state and infringe on an individual’s right to not have to view breastfeeding women or a businesses’ right to ask a woman to cover-up while breastfeeding.  
Breastfeeding support policies are not needed, as women are able to breastfeeding in private spaces such as their home or a dressing room, and women can also cover up while breastfeeding.  
It would be too difficult to implement breastfeeding policies, especially for businesses and workplaces.  
Breastfeeding, human milk, and breastfeeding mothers are not medical interventions per se so they don’t require or need special protection or consideration like other medically necessary interventions.  
Breastfeeding support policies can cause maternal guilt among mothers who are unable to breastfeed.  

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Opposing Frames</td>
<td>38</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>8</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>82</td>
</tr>
<tr>
<td>Breastfeeding is indecent and women should not breastfeed in public.</td>
<td>20</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>34</td>
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<td>Breastfeeding support policies create a nanny state and infringe on an individual’s right to not have to view breastfeeding women or a businesses’ right to ask a woman to cover-up while breastfeeding.</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>19</td>
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<td>Breastfeeding support policies are not needed, as women are able to breastfeeding in private spaces such as their home or a dressing room, and women can also cover up while breastfeeding.</td>
<td>8</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>13</td>
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<td>It would be too difficult to implement breastfeeding policies, especially for businesses and workplaces.</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Breastfeeding, human milk, and breastfeeding mothers are not medical interventions per se so they don’t require or need special protection or consideration like other medically necessary interventions.</td>
<td>1</td>
<td>0</td>
<td>0</td>
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<td>1</td>
<td>2</td>
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<td>0</td>
<td>7</td>
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<td>Breastfeeding support policies can cause maternal guilt among mothers who are unable to breastfeed.</td>
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<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>1</td>
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<td>Total Framed Messages</td>
<td>238</td>
<td>36</td>
<td>71</td>
<td>98</td>
<td>42</td>
<td>90</td>
<td>92</td>
<td>15</td>
<td>682</td>
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TABLE 3: Sources of information in framed supporting and opposing messages in Washington State print and web-based newspapers between January 2000 and June 2014.

<table>
<thead>
<tr>
<th>Source Type</th>
<th>Supporting Message</th>
<th>Opposing Message</th>
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<tbody>
<tr>
<td>Advocacy Groups and Individual Advocates</td>
<td>115</td>
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<tr>
<td>Author's Opinion</td>
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<td>Government Representatives</td>
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<td>Health Care Expert</td>
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<tr>
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<tr>
<td>Other</td>
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DISCUSSION:

This analysis found that there appeared to be a trend toward increased coverage of breastfeeding policies over time coinciding with an increase in federal, state, and local breastfeeding policy activity. Based on the number of supporting messages for breastfeeding and breastfeeding policy, as well as attitudes expressed in the majority of articles, it seems that in Washington State print and web-based newspaper, coverage is largely in support of breastfeeding policy adoption. Washington State newspapers focused on a variety of supporting messages. Health benefits of breastfeeding and breastfeeding policies as well as the challenges faced by mothers trying to breastfeed in public were clearly considered news-worthy by Washington’s newspapers. Opposing message frames describing the indecency of breastfeeding were more common than typical frames used to oppose public health policy in other health arenas such as the concern that policies restrict freedom of choice and create undo government interference; although these issues were raised as well.\textsuperscript{34,38,55} In terms of sources of frames, our media analysis reconfirmed previous results showing that journalists often don’t mention their source of information when reporting on health issues.\textsuperscript{56}
In alignment with previous media analyses, the results of this study show that the quantity of media coverage appears to be linked to specific events. These findings can be explained by the newsworthiness of an event and the influence of external opinions from public elites, interest groups, and the general public on media coverage. As others have reported for television content, coverage of breastfeeding in the media increased from 2000 to 2013, relating to increased breastfeeding rates in the population. Increased focus of the media on breastfeeding and breastfeeding policy may also reflect the impact of breastfeeding policy actions on increasing public awareness on the importance of breastfeeding. Additionally, as more women join the workforce, including the journalism workforce, and have experiences breastfeeding their own children, their experiences with breastfeeding and motherhood may be reflected in the news issues they choose to cover.

News media covering breastfeeding has not always predominantly contained supporting messages. A previous content analysis of the representation of infant feeding in British media (2000) found that the media rarely presented positive information on breastfeeding. Similarly, a 2015 analysis of public opinions of financial incentives to encourage breastfeeding in the UK found that a majority of messages from readers opposed the implementation of this policy. Our result showing a greater percentage of supportive messages as compared to opposing messages for breastfeeding and for breastfeeding policy may reflect changing norms and a cultural shift in the acceptance of breastfeeding in the United States and Washington State as compared to the UK, or greater acceptance for policies implemented in Washington State as compared to the financial incentive policy in the UK. Increased breastfeeding rates in Washington State and the United States may reflect changing attitudes towards greater acceptance of breastfeeding and
coincide with increased recognition by public health and medical experts that breastfeeding is a public health issue.¹

Similar to research on the framing of tobacco policies,³⁵,³⁹,⁴⁰ breastfeeding policy strongly relies on the core value of health, and breastfeeding is commonly framed as a health issue.⁸ A recent content analysis of national media on breastfeeding from 2006 through 2009 found health messaging in almost all material examined.²⁹ Representation of health benefits of breastfeeding in our sample may be a result of the combination of increased research about health benefits of breastfeeding, increased advocacy work on the need for breastfeeding policy, and cultural acceptance of breastfeeding as the norm in Washington State where breastfeeding initiation rates are very high.

Much news media on health and health policy focuses on stories about personal hardship.⁴¹,⁴² According to Henderson and associates, in the past British newspapers focused on the challenges of breastfeeding, portraying it as problematic, embarrassing, and funny as compared to bottle feeding, which is portrayed as normal and lacking difficulty.¹⁸ Washington State news stories also frequently focus on the hardships associated with breastfeeding in public, fitting with the beliefs of Nelkin, who states that the news media often support the use of imagery and report the news as a series of dramatic events.⁶⁰

The top two message frames opposing breastfeeding policies were that breastfeeding was “indecent” and that breastfeeding policies infringe on the rights of individuals. These findings align with previous studies.³⁴,³⁸ Bylaska-Davies reported that the portrayal of breasts as sexual
objects rather than for nurturing an infant is ubiquitous in the media and can effect a woman’s choice to breastfeed.\textsuperscript{61} Giles and associates’ study of public opinions toward financial incentives for breastfeeding found that the public often argued against the policy because they were concerned that the government was interfering with everyday life and the policy reinforced a feeling of failure or guilt in mothers unable to breastfeed.\textsuperscript{55} Arguments opposing tobacco policies often frame the issue as restrictions on freedom of choice as well as unnecessary government interference.\textsuperscript{34,38} Studies of public health policy have found that Americans often value and adamantly defend the freedom of choice, even unhealthy choices.\textsuperscript{62,63}

Expert opinion is a more common source of evidence for public health focused media than peer-reviewed studies.\textsuperscript{56} Journalists may rely on health experts and author’s opinions over peer-reviewed research because of time pressures or difficulties understanding or accessing published research manuscripts.\textsuperscript{56,64,65} Journalists may also have the perception that research is boring and dry.\textsuperscript{56} According to Albaek, journalists are increasingly using expert opinions as a source of evidence,\textsuperscript{66} even though newspapers produce higher quality stories when there is a higher level of evidence used in health reporting.\textsuperscript{67} The voice of parents in news media is likely influenced by the reliance of the media on spokespersons who can supply drama and emotion and who can provide the media with memorable and quotable opinions.\textsuperscript{68} Gearhart and Dinkle also found parents to be a prominent source of messages in the content analysis of breastfeeding in television news.\textsuperscript{58} It is good journalistic practice to quote a variety of spokespersons to provide balance and interest to stories.\textsuperscript{68}
This analysis suggests several potential opportunities for improving media advocacy for breastfeeding policy development.\textsuperscript{24} Despite trends toward more breastfeeding policy coverage over time, fewer than 20 news stories per year covered this topic during the study period. A greater number of articles in the press in general would be helpful to make the case for policies at state and local levels and in settings like worksites, child care, clinics, and hospitals. Although there was an emphasis on the personal health benefits of breastfeeding in many of the articles, few of the articles included a focus on the benefits of breastfeeding policies to the health of future populations, as a way of protecting a mother’s right to breastfeed in her community or when she returns to work, or as a way of reducing disparities in breastfeeding rates in low-income and other vulnerable populations. Awareness of the hardships of breastfeeding in public may grab the attention of readers, but a disproportionate focus on what other people think about a mother’s breastfeeding may perpetuate perceptions about the difficulties of breastfeeding in public.\textsuperscript{18,61,69} Just as stories about success in quitting smoking may increase smokers’ behavioral intentions to quit,\textsuperscript{70} increasing the number of positive breastfeeding narratives and stories about the positive impacts of breastfeeding policies, may influence the intentions and behaviors of those in a position to enact and implement breastfeeding policies.

The restriction of our media sample to print and web-based newspapers is acknowledged as a limitation as there is increasing reliance on blogs and other electronic communication media as a news source for Americans.\textsuperscript{71} As our sample only includes newspapers published in Washington State, our results are also not generalizable to breastfeeding policy coverage in the United States. We are also unable to draw conclusions about which messages have impacted public opinions of
breastfeeding policy as our study was only designed to measure the volume of messages and not to assess the extent to which the news media in our sample was read or understood.

As the public begins to increasingly rely on non-newspaper media, future media analyses of breastfeeding policy should include a variety of media including broadcast, internet, and social media. A sample that includes media from popular news sources throughout the United States could further our understanding of breastfeeding policy coverage. Additional research could add to our understanding of the impact of the media on public opinion and how to best design framed messages to increase support for breastfeeding policy.

**CONCLUSION:**

There is limited, but growing, coverage of breastfeeding policies by newspapers in Washington State. Although most newspaper articles are positive about breastfeeding in general, and to a certain degree positive about breastfeeding policies, there is room for improvement in the use of media as a way of advancing effective breastfeeding policies. Information about the negative messages that have been applied to breastfeeding policies – most notably the framing of breastfeeding as “indecent exposure” – can be useful in framing effective messages to counteract negative perceptions. Media messages that frame breastfeeding policies as a way to enhance mothers’ freedom to choose breastfeeding, rather than as something that restricts the rights of citizens and as a way to improve population health for future generations and to reduce health disparities, could make important contributions toward long term improvements in breastfeeding outcomes.
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CONFLICTS OF INTEREST:

No conflict of interest exists.

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