The Breastfeeding Transition
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This paper proposes a conceptualization of “The Breastfeeding Transition” as a way of describing changes in global breastfeeding rates related to large-scale demographic changes shaping the status of women. There are four phases to The Breastfeeding Transition:

1. **Phase 1:** Lower status of women is associated with higher rates of breastfeeding: this is the historical norm in most societies—most women live in societies where their economic and social status is low and most women breastfeed.

2. **Phase 2:** Higher status of women is associated with lower rates of breastfeeding: alongside urbanization, women’s educational rates increase and more women become employed and breastfeeding declines among women with higher status, while remaining constant for lower status women.

3. **Phase 3:** Higher status of women is associated with higher breastfeeding: women’s status continues to rise and women of higher status return to breastfeeding while breastfeeding declines among women of lower status.

4. **Phase 4:** In this *projected (desirable) phase* breastfeeding increases among low wage, low education, minority women and is sustained/increasing among working women with higher education and income.

**What is meant by the status of women?**
Of some importance is the definition of the status of women that I am using when describing this transition. Because this articulation is based on a limited literature I am primarily defining the status of women by the key demographic factors discussed in most of the relevant studies: residence (urban or rural); educational attainment; income; and employment. Underlying these critical demographic factors are broader considerations. The International Food Policy Research Institute defined the status of women as “women’s power relative to men’s in the households, communities and nations in which they live.” Taken as a whole, the conceptualization of the status of women that is imbedded in this transition relies heavily on the idea that with increasing education, and secondarily with more income, reproductive control, and urban residence women gain more power and control over their own lives.

**Why is the breastfeeding transition important?**
1. It is global. It seems to occur all over the world and it seems to be predictable.
2. Phase 3 leads to significant disparities in breastfeeding rates by race, income, educational attainment and other factors that shape women’s status within and between countries.
3. Understanding may lead to improvement. By increasing our understanding of the factors that shape this transition we can enter into a 4th phase whereby there are high rates of breastfeeding across all populations of women while still seeing an increase in the status of all women.
4. Helps shape a macro understanding of the relationship between breastfeeding and the status of women.
Conclusion
The Breastfeeding Transition suggests that the status of women and gender equality (difference in status between women and men) play significant roles in global breastfeeding rates and needs to be seriously considered in how we approach breastfeeding protection, promotion and support efforts. Strategies need to consider: the degree of (in)compatibility between women’s reproductive and productive roles across different populations of women; the costs and benefits of motherhood, caregiving and breastfeeding; disparities in gender/social status across the population; the focus, scope and reach of breastfeeding activities across population groups; the (lack of) regulation regarding the marketing of human milk substitutes; personal preferences and social norms regarding infant feeding; and the availability and use of devises for milk expression.

Table 1: Major Studies related to “The Breastfeeding Transition”

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<tr>
<th>Author</th>
<th>Source</th>
<th>Findings</th>
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| Perez-Escamilla R., 1994 | Demographic and health surveys conducted in 23 countries between 1986 and 1990 | • Within countries breastfeeding  
  o Is more prolonged in rural than in urban areas  
  o More prolonged and among women with lower rather than higher levels of formal education  
  • Among countries, those with a higher proportion of their population living in rural areas present more extended breastfeeding when compared with more urbanized nations |
| Trussell, et al, 1992   | Review of literature plus analysis of  
  • Review of literature plus analysis of  
  • 62 WFS and DHS surveys from 47 countries b/n 1974-1989 | • Review of literature notes  
  o Breastfeeding rates higher in Africa than Latin American or Caribbean  
  o Breastfeeding rates lower in urban area:  
  o Mixed effects on how maternal education impacts feeding: breastfeeding associated in higher education in developed countries and mixed findings in developing countries  
  • Analysis  
  o Duration of breastfeeding always longer among rural women  
  o Nearly universal tendency for duration to decline with increased education  
  o Most “modernized” women (urban educated) are least likely to BF |
<p>| Grummer-Strawn, 1996    | World Fertility Survey: late 1970s Demographic and Health Survey: late | • Breastfeeding rates higher among women with lower education, those who had more children, who did not use modern contraception, who grew up in rural areas, and those whose husbands also had more income and education. |</p>
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|                                | 1980s in 15 developing countries                                     | - Did not find that women who ever worked outside the home were not less likely to breastfeed than those who had not.  
- Yet only assessed “ever” having worked since marriage not work since motherhood or current work and the type of work not assessed. |
| International Food Policy      | Demographic and Health Surveys in the South Asia, Sub-Saharan Africa, and Latin America b/n 1990-1998 | - Women’s relative decision-making power has a negative effect on the duration of breastfeeding in all three regions  
- Gender equality at the community level has an added negative effect in Latin American and the Caribbean.  
- Clear that increases in women’s status lead them to breastfeed less |
| Institute, 2003                |                                                                        |                                                                                                                                                                                                         |
| Perz-Escamilla, 2003           | Demographic and Health Surveys in 23 developing countries b/n mid 1980s-mid 1990s. | - Breastfeeding decreasing among women without formal education while it was increasing among women with at least secondary education.  
- Findings raise the concern that breastfeeding duration may be declining among the most disadvantaged groups (e.g., women with little schooling) that stand to lose the most in terms of maternal and child health when this form of infant feeding is abandoned |
| Smith, 2014                    | Fifty states in the US, 2009 CDC reported rates of breastfeeding and breastfeeding support, Institute for Women’s Policy Research data on Status of Women | - Breastfeeding associated with: higher economic status, including medial annual earnings and percent of women in the labor force; higher levels of social and economic autonomy, including percent of women with a college degree and percent of women living above poverty; and with a more supportive climate for reproductive rights.  
- State level measure of the status of women associated with state level breastfeeding support  
- Status of women more predictive than state level breastfeeding support of most breastfeeding outcomes |

Table 2: The Breastfeeding Transition: What is happening and why?
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<tr>
<th>Transition</th>
<th>What is happening</th>
<th>Hypothesized forces underling the transition</th>
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| Transition from Phase 1 to Phase 2* | - BF constant by women with lower education in rural areas  
- BF duration decreasing among women in urban areas, have more education, use contraceptive, married to men with more income and education | ✓ Separation of reproductive from production leading to an incompatibility between work and breastfeeding  
✓ Personal preferences for not breastfeeding  
✓ Bottle feeding seen as more convenient for women working outside the home  
✓ Ability to afford human milk substitutes  
✓ Lack of awareness of the benefits of breastfeeding  
✓ Exposure to media messages promoting formula  
✓ Widespread marketing of infant formula  
✓ Bottle-feeding is considered more modern and sophisticated (esp. as portrayed by mass media),  
✓ Fewer breastfeeding role models for young urban women to emulate. |
| Transition from Phase 2 to Phase 3** | - BF decreasing among women with lower education  
- BF increasing among women with more education | ✓ Increases in women’s status as related to: increased control over fertility; increased voice in political process; decreased numbers of women living in poverty; increases in personal income.  
✓ Well planned BF promotional efforts  
✓ Improved health care support for breastfeeding  
✓ BF promotional and support efforts more likely to reach educated and professional women  
✓ Workplace support for breastfeeding and lactation more available to professional women  
✓ More difficult for low wage than professional workers to combine work with BF  
✓ Better control over marketing of infant formula  
✓ Motherhood costly to vulnerable women  
✓ Higher status women have fewer children  
✓ Widespread use electric pump, allowing for separation of human milk feeding from breastfeeding  
✓ More mother-to-mother support |
| PROJECTED Transition from Phase 3 to Phase 4*** | - BF increasing among low wage, low education, minority women  
- BF sustained and increasing among working women, with higher education and income | ✓ Increases in gender equality across the population  
✓ Reductions in social inequities by race/ethnicity  
✓ Breastfeeding seen as infant feeding norm  
✓ Women across the population able to successfully integrate maternal and occupational roles  
✓ Expansion of breastfeeding friendly community initiatives BF efforts focus on low wage workers  
✓ BF efforts reach into diverse populations  
✓ BF efforts focus on duration  
✓ Caregiving more valued/rewarded thus motherhood becomes less costly |
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<td>✓ Mothers and babies able to be together at work and in community</td>
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<td>✓ Continued widespread use of electric pump, allowing for separation of human milk feeding from breastfeeding</td>
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*Reasons extrapolated from key studies (Table 1)
**Reasons extrapolated from key studies and general literature
***Reasons extrapolated from the key studies, general literature, and Smith, 2016

**Key References**