

Understanding Factors Associated with Breastfeeding Initiation and Duration

Emily Blue

Advanced Research

Dr. Joshua Tom

March 16, 2023

Introduction

Intensive mothering, the hegemonic ideology of motherhood in the United States, holds the belief that women are primarily responsible for childrearing which should be emotionally, physically, and financially expensive (Kirksey 2021). Hays (1996) argues that the contemporary era is characterized by ‘intensive mothering’, an idealized image of motherhood advocated by experts and internalized and reinforced by mothers and the public (Afferlack et al 2013). Experts such as the US Department of Health, The American Academy of Pediatrics, and the CDC have all taken strong stances, recommending that women practice exclusive breastfeeding for at least six months (Kirksey, 2021).

As one component of intensive mothering, mothers are predominantly responsible for purchasing and preparing food for their families. Breastfeeding is considered an integral part of intensive mothering and is intensely moralized, as breast milk is proclaimed to be the healthiest substance for all infants, creating a moral imperative for mothers to breastfeed (Afflerback et al, 2013). Marshall et al. (2007) state that “.

Infant feeding is viewed as a critical choice for the mother to make, the decision is believed to have irreversible consequences for the child's long-term health and wellbeing (Afflerback et al, 2013). “Intensive mothering hold mothers independently responsible for childrearing and accountable for each and every facet of their children’s well-being, including protecting their children and families from potential harms caused by industrialization and modernization” (Afferlack et al, 2013). Social and expert pressures to breastfeed focus solely on nutrition but reflect the need for mothers to give up their own needs, desires, and bodily autonomy in order to reduce risks for their child.

In the United States, over half of families are dual income and women commonly financially support their families (U.S. Bureau of Labor Statistics, 2020). Still, women have remained primarily held responsible for childrearing. In the US, women are given up to 12 weeks of unpaid maternity leave after the birth of a child. Women make extensive preparations to continue exclusive breastfeeding after returning to work including buying expensive equipment, prepping caregivers on how to handle expressed milk, and expressing milk early to store (Al-Attas and Shaw, 2020). When women cannot live up to exclusive breastfeeding standards, they often experience immense guilt or feelings of failure (Avishai, 2007).

Not all women have equal opportunities to practice exclusive breastfeeding for six months. Previous literature has shown that women who have minority statuses have significant barriers to breastfeeding. Through intensive mothering ideologies, breastfeeding has been linked with ‘good mothering’ and carries heavy societal pressures to breastfeed. I am interested in what demographics of mothers are disproportionally breastfeeding at lower rates and factors that affect that group's likelihood to breastfeed.

Literature Review

Employment

Employment has been found to have significant effects on both breastfeeding initiation and duration in previous studies. Fein and Roe (1998) found that in full time, but not part time workers, employment was negatively associated with breastfeeding initiation. Additionally, there was a complex relationship between leave and breastfeeding duration. Women with no maternity leave allotted had similar breastfeeding durations to nonworking women, however, mothers with any amount of maternity leave had shorter durations of breastfeeding. This may be attributed to the extensive preparations necessary for mothers while on maternity leave, with one qualitative

study finding that women planning on returning to work after birth have to make extensive preparations such as buying equipment, expressing milk early to store, and training caregivers to handle expressed breastmilk (Al-Attas and Shaw, 2020). Although all participants were married and these tasks could be shared, the women were viewed as independently responsible for these preparations. Additionally, once these women returned to work they continued to face difficulties expressing milk. The women expressed milk at work discreetly during lunch and tea breaks in bathrooms, empty meeting rooms or office spaces, and prayer rooms as most employers had no allocated space for breastfeeding. The women stated while at work, they prioritized being a worker before being a mother and when there was not enough time to express milk they continued to work with engorged and sometimes painful breasts (Al-Attas and Shaw, 2020).

Similar treatment towards breastfeeding workers was reported in qualitative interviews of employers and human resource personnel responsible for maternity issues. All participants in the study understood the benefits of breastfeeding for both mother and child, however, another analysis found that despite positive attitudes towards infant breastfeeding, only 35% (N = 85) saw any value in promoting breastfeeding (Libbus & Bullock, 2002). Employees reported that none of the companies had a breastfeeding policy and instead accommodated breastfeeding on an as-needed basis, allowing empty office spaces and bathrooms to express milk. Some employers stated they believed bathrooms were acceptable lactation facilities and most were hesitant about installing lactation rooms due to cost (Brown et al, 2001).

Employer concern about time spent away from work expressing milk was seen in both employers and breastfeeding employees. Employed women reported rushing through expressing milk to avoid 'playing truant' and one woman compared their time breastfeeding to other employees taking breaks to browse the internet or play computer games (Al-Attas and Shaw,

2020). Employers also expressed concern over time spent expressing milk and concerns over employee productivity and financial issues. Some employees wondered if coworkers would become jealous of breastfeeding workers' breaks and if they should allow similar time off for nonbreastfeeding employees, while simultaneously admitting to allowing time off to employees for other personal activities such as smoking (Brown et al, 2001). All the employed women in the study reported they were supported by their workplaces but did not receive proactive support but rather an absence of disapproval (Al-Attas and Shaw, 2020). The women were not allocated additional time or lactation facilities to express milk and may feel pressure from employers to minimize their time doing so. The women expressed milk quickly and discreetly during lunch breaks and some participants viewed expressing milk as a similar privilege to doing personal activities during work. One employer was unable to express milk at work in empty office rooms due to coworkers being grossed out (Brown et al, 2001). The literature demonstrates barriers for women to express milk and breastfeed for longer durations, even when they are allotted maternity leave.

Socioeconomic Status

Previous literature has demonstrated that there are significant relationships between breastfeeding and factors associated with socioeconomic status. Higher income has been shown to have significant effects, with one systematic review of studies finding that although the effect of magnitude varied, the direction was consistent with higher incomes having a higher likelihood of both breastfeeding initiation and continuation (Cohen et al, 2018). This meta-analysis also found that lower maternal age was similarly associated with decreased probability of breastfeeding and continuation. Another quantitative study of 10,519 women in California found

that there was a marked socioeconomic gradient in breastfeeding, with women with lower education and lower incomes being less likely to initiate breastfeeding (Heck et al, 2006).

Ericson et al. (2018) also found that lower maternal education and social welfare were individually associated with lower breastfeeding continuation.

Insurance status has also been shown to have a significant relationship with breastfeeding initiation, with women on Medicaid or government insurance being less likely to breastfeed than women with private insurance (Mercier et al, 2018; Gallagher et al, 2015). Mercier et al (2018) found that women with Medicaid were more likely to be younger, African American, and less likely to be married or have attended college, all of which are factors shown to be attributed to lower odds of breastfeeding. However, Medicaid-insured women were significantly less likely to breastfeed than commercially insured women even when adjusting for race, education, and marital status (Mercier et al, 2018). Although White women were the most likely to breastfeed overall compared to Asian, Hispanic, and African American women, out of the sample of women on Medicaid, White women were the least likely of any groups to initiate breastfeeding, and the greatest differential by insurance was among White women (Mercier et al, 2018).

Race

Previous literature and data have shown that Black women are less likely to initiate breastfeeding than all other races. In 2015, the CDC reported breastfeeding initiation rates stood at 69.4% for Black infants compared to 85.9% for White infants. (Beauregard et al, 2018). They also stated that Black women were also “more likely than were white women to have incomes <100% of the poverty level, receive Special Supplemental Nutrition Program for Women, Infants, and Children benefits, and to be unmarried” as well as less have lower education levels

and be younger” (Beauregard et al, 2018). All these factors have been attributed to lower odds of breastfeeding initiation.

Some scholars have linked breastfeeding disparities between Black and White women to the lasting effects of slavery as well as mainstream breastfeeding movements excluding women of color. During slavery, enslaved women were used as financial commodities as breeders, laborers, concubines, and wet nurses (Devane-Johnson, 2022). Enslaved women were often forced to care for the master's children, including forced wet nursing. Forced wet nursing caused less breastmilk and time to spend with their own children resulting, in high mortality rates for slave babies and the natural act of breastfeeding was now degraded to a task that benefited the slave masters' children (Devane-Johnson, 2022). The natural act of breastfeeding was now a task to benefit, forced wet nurses had significantly less milk and time to spend with their own children resulting in high mortality rates for slave babies (Devane-Johnson, 2022). Enslaved women did not have control over their reproduction and cared for the slave masters children, in addition to having biological children as a result of sexual encounters with the slave master. Devane-Johnson (2022) suggests the association of breastfeeding with oppression may have had multigenerational ramifications on African American health and breastfeeding practices. Viewing breastfeeding rates in the context of social history may also help explain why large disparities for between Black and White women exist.

Kristen Kirksey (2021) conducted a binary logistic regression analysis on breastfeeding rates from 1973-2015 using the National Survey of Family Growth (NSFG), putting the results in the context of the federal policies and social movement during that period. Results showed that between 1973 and 1982, breastfeeding rates climbed dramatically for White mothers, while rates increased marginally for Black women (Kirksey, 2021). Between 1995 and 2006, rates of

breastfeeding climbed dramatically for Black mothers, while increasing only marginally for White mothers (Kirksey, 2021). Between 2006 and 2015, breastfeeding disparities between Black and White women began to level off.

Breastfeeding rates were at an all time low in the early 1970's, but by 1982 the reclamation of bodily autonomy heralded by mainstream feminist movements caused breastfeeding rates to increase for White women (Kirksey 2021; 17). Devane-Johnson details how enslaved Black women were stripped of their bodily autonomy including through the act of breastfeeding. This movement was led by mostly White women and their focus on bodily autonomy through breastfeeding did not relate to Black women's experiences. Mainstream feminism has been critiqued by Black feminist scholars for its limited perspective and exclusionary nature, thus it is not surprising the improvements experienced by White women were not experienced in the same way for Black women (Kirksey 2021). Additionally, alternative childbearing practices increased in this era and were a significant predictor of breastfeeding initiation. La Leche League was a key leader in this movement and established much of the narrative around breastfeeding promotion. The homogenous demographics of La Leche League and their focus on intensive mothering ensured alternative childbirth movement did not effectively reach Black women in this decade. Between 1973 and 1982, White women experienced a 22% increase in rates of breastfeeding compared to an increase of 8% for Black women; the marginal gains by Black women were primarily high income women (Kirksey 2021).

However, between 1995 - 2006, racial disparities narrowed due to an increase in breastfeeding rates for Black women not experienced by White women. During this period, breastfeeding initiatives were established through WIC. Black women and children are

overrepresented in the WIC and in 2006, WIC covered a third of pregnant women and children in the US. Throughout the late 1980s and early 1990s, WIC heavily invested in breastfeeding promotion and education activities, and in 2004, began its Breastfeeding Peer Counselor initiative (Kirksey, 2021). Additional studies have shown that peer counselor groups are significant in increasing breastfeeding among low-income women and Black women (Kirksey, 2021). In this era, white women saw an increase of 8% and Black women saw an increase of 21%, these gains were most substantial for Black women of low and lower middle class income (Kirksey 2021; 18, 19).

Breastfeeding rates increased for both races between 2006 - 2015 and began to slightly level off but the disparity remained constant, with White women being 1.7 times more likely to breastfeed than Black women. In this period, white women saw an increase of 8% and Black women saw an increase of 11%. Kirksey (2021) states the leveling out can be attributed to the changing nature of the social movement surrounding breastfeeding as it began to address structural and institutional barriers to breastfeeding for other mothers. A number of breastfeeding promotion and support groups specifically for Black women emerged in this period as well. In this era, the most significant gains were experienced by women of both races with a high school degree or less, as well as women of lower middle income.

I will be analyzing whether previous findings on breastfeeding initiation and duration hold up with the most recent data from the 2017 - 2019 National Survey of Family Growth. Kirksey used NSFG files from 1973 - 2015 to find that breastfeeding race disparity seems to be shrinking over time. I am interested if the trend is continuing in recent data. I am interested if recent data also shows that employment has a negative effect on breastfeeding initiation and

duration as demonstrated in previous studies. I will also be analyzing factors related to socioeconomic status to see what disparities continue to exist for new mothers to breastfeed.

Hypothesis and Methodology

Hypotheses

1. I hypothesize that women who work full time and women on family leave will be less likely to initiate breastfeeding and more likely to breastfeed for the shortest duration
2. I hypothesize that White women will be more likely to initiate breastfeeding and breastfeed for longer durations when compared to minority groups
3. I hypothesize that women who have completed higher levels of education and women who have higher incomes will initiate breastfeeding at higher rates than women with fewer levels of education and income
4. I hypothesize that women with private insurance will initiate breastfeeding at higher rates than women with Medicare or no insurance.

Methods

I conducted a binary logistic regression of breastfeeding initiation rates and a linear regression analysis on breastfeeding duration using the 2017 - 2019 National Survey of Family Growth (NSFG). All variables were weighted. The sample is large with a valid number of 10022 (Table 1). The NSFG has been conducted by the CDC since 1973 and surveys a probability-based, nationally representative sample of the household population aged 15- 49. I used the dataset from 2017 - 2019 using the Female Pregnancy File to conduct my analysis. The Female Pregnancy File includes women interviewed for the NSFG who reported ever being pregnant. The Female Pregnancy File (2017 - 2019) has a total sample of 10,215 respondents.

The dependent variables of interest were breastfeeding initiation and breastfeeding duration. The variable calculating breastfeeding initiation asked respondents “When [baby] was

an infant, did you breastfeed them at all?” and only applied to their first child. Responses were included if the child was currently 18 years or younger and included 5,721 respondents. The variable calculating breastfeeding duration was measured using a continuous variable asking mothers at what age (in months) the child was first fed something other than breastmilk. Answers applied to their first child who had been breastfed for women who had initiated breastfeeding and if the child had ever been fed something other than breastmilk. Answers were coded from less than 1 month to 7 months or more.

Independent variables of interest were selected based on previous literature. Race was coded into four categories - Hispanic, White, Black, and Other or Multiple Race. The variable for race is not comprehensive with limited categories. Asian and Native women are not categories included and are categorized into the ‘other’ category. This limits my analysis and I have chosen to focus on disparities between White and Black races specifically.

The variable of employment asked respondents about their labor force status. Categories included working full time, working part time, working temporarily, maternity leave, not working but looking for work, school, keeping house, and caring for the family. I recorded respondents who reported working temporarily and part time into a single binary variable labeled part time. I recoded respondents who reported being on maternity leave and not working but looking for work into a single binary variable of family leave.

Education included fifteen categories ranging from 9th grade or less to doctorate and professional degrees. I recoded respondents who reported 9th grade or less, 10th grade or less, 11th grade or less, 12th grade (no diploma or GED) into a single binary variable of ‘less than Highschool’. Respondents who reported a highschool diploma or GED were coded as ‘Highschool’. Those who reported some college education or an associated degree were recoded

into a single variable of ‘some college’. Respondents who reported a bachelor's degree were just recoded into a single binary variable labeled ‘bachelor’. Respondents who reported a master's degree, doctorate degree, or professional degree were recoded into a single binary variable labeled ‘higher education’.

To calculate income, I used variables measuring poverty level income and a variable asking whether respondents had received public assistance in the past year. Poverty level was left as a continuous variable and public assistance was recoded into a binary variable. Insurance status was calculated with a variable asking respondents how their delivery bill was paid. Respondents who reported co-payment or out of pocket payment were coded into a binary variable labeled ‘no insurance’. Respondents who reported Medicaid were coded into a singular binary variable of ‘Medicaid’. Respondents who reported private insurance were also coded into a singular variable of ‘Private Insurance’.

**Table 1. Descriptive Statistics,
2017-2019**

Variables	Mean	Standard Deviation	Minimum Value	Maximum Value	N
Age at pregnancy outcome	25.52	6.057	11	49	122962378
White	0.05052	0.49997	0	1	124989921
Hispanic	0.241	0.42766	0	1	124989921
Black	0.1624	0.36881	0	1	124989921
Multi-Race or Other	0.0915	0.28826	0	1	124989921
Stay at Home	0.2337	0.42317	0	1	124989921
Full-Time	0.4473	0.49722	0	1	124989921

Part-Time	0.2371	0.4253	0	1	124989921
Temporary Unemployed	0.0562	0.2303	0	1	124989921
In School	0.0257	0.15829	0	1	124989921
No Highschool diploma or GED	0.1316	0.33811	0	1	124989921
Highschool diploma	0.2905	0.45389	0	1	124989921
Some College Education	0.3022	0.45921	0	1	124989921
Bachelors Degree	0.1852	0.38846	0	1	124989921
Masters, Doctorate, or Professional Degree	0.0905	0.28687	0	1	124989921
Poverty Level Income	246.22	175.788	50	700	124989921
Received Public Assistance in Last Year	1.65	0.478	0	1	124989921
Private Insurance	0.5705	0.495	0	1	
Medicaid	0.2352	0.4241	0	1	124989921
Single Service Plan or No Insurance	0.1422	0.34927	0	1	124989921

Valid N 10022

Data: National Survey of Family Growth, 2017-2019, 2006; All values weighted

Results

Breastfeeding Initiation Model

The results from the binary logistic regression analysis predicting any breastfeeding were all statistically significant. Results showed that being older during pregnancy is attributed to higher odds of initiating breastfeeding. White women had lower odds of initiating breastfeeding compared to Hispanic women and women who reported being of multiple races or other. Black women only had slightly lower odds of initiating breastfeeding compared to White women with an odds ratio of 0.962. Hypothesis 4 stating that White women will be the most likely group to initiate breastfeeding was not supported by this result.

Temporarily unemployed women (either family leave or not working but looking for work) had the lowest odds of initiating breastfeeding, followed by full time workers. Women who were in school or part-time workers had the highest odds, closely followed by stay at home mothers.

Level of education had a positive linear effect with odds of initiating breastfeeding increasing for every higher level of education. The largest disparity in breastfeeding rates was in education. The analysis showed that women with a highschool diploma had an odds ratio of 1.164 compared to an odds ratio of 4.900 for women with a Masters, Doctorate, or Professional degrees.

Table 2: Binary Logistic Regression Predicting Any Breastfeeding 2017 - 2019

	Any Breastfeeding		
	Parameter Estimate	Odds Ratio	P
Age at pregnancy outcome	0.006	1.006	***
Race (White contrast)			
Hispanic	0.804	2.235	***
Black	-0.039	0.962	***
Multi-Race or Other	0.944	2.570	***
Employment (Stay at Home contrast)			
Full-Time	-0.231	0.793	***
Part-Time	0.185	1.203	***
Temporary Unemployed	-0.511	0.600	***
In School	0.279	1.322	***
Education (less than HS grad contrast)			

Highschool diploma	0.152	1.164	***
Some College Education	0.685	1.984	***
Bachelors Degree	1.185	3.269	***
Masters, Doctorate, or Professional Degree	1.589	4.900	***
Poverty Level Income	0.000	1.000	***
Received Public Assistance in Last Year	0.162	1.176	***
Insurance (private insurance contrast)			
Medicaid	-0.171	0.843	***
No Insurance	-0.062	0.940	***
Constant	0.396	1.485	***

Data: National Survey of Family Growth, 2017-2019, 2006; All values weighted; * $p < .05$, ** $p < .01$, *** $p < .001$

Breastfeeding Duration Model

The linear regression model showed that older age was also correlated with longer breastfeeding duration. Results showed that Black women were the most likely to breastfeed for a longer duration, followed by Hispanic women. White women were the least likely to breastfeed for longer durations.

The analyses on employment showed that stay-at-home mothers were the most likely to breastfeed for a longer duration and part time workers were also very likely to. Full time workers and women on family leave or looking for work were the least likely to breastfeed for longer durations. Women in school were more likely than stay-at-home mothers and temporarily unemployed women to breastfeed for a longer duration. This finding supports hypothesis 1.

Hypothesis 3 was also supported through this analysis. Education had a positive linear correlation with breastfeeding duration, with higher education correlated with longer

breastfeeding duration. There was one exception as women with no highschool diploma or GED were less likely than women with a highschool diploma to breastfeed for longer durations.

Income and receiving public assistance in the last year were also correlated with lower likelihoods of longer breastfeeding duration. However, women with private insurance were the least likely to breastfeed for longer durations compared to women who were on Medicaid and single service plans or had no insurance.

Table 3: Linear Regression Predicting Breastfeeding Duration

	Unstandardized B	Std. Error	P
(Constant)	2.738	0.003	***
Age at pregnancy outcome	0.019	0.000	***
Race (White contrast)			
Hispanic	0.658	0.001	***
Black	0.845	0.001	***
Multi-Race or Other	0.462	0.001	***
Employment (Stay at Home contrast)			
Full-Time	-0.403	0.001	***
Part-Time	-0.051	0.001	***
Temporary Unemployed	-0.451	0.002	***
In School	-0.338	0.003	***
Education (less than HS grad contrast)			
Highschool diploma	-0.176	0.001	***
Some College Education	0.283	0.002	***
Bachelors Degree	0.620	0.002	***
Masters, Doctorate, or Professional Degree	0.850	0.002	***
Income			

Poverty Level Income	-0.001	0.000	***
Received Public Assistance in Last Year	-0.160	0.001	***
Insurance (private insurance contrast)			
Medicaid	0.187	0.001	***
Single Service Plan or No Insurance	0.530	0.001	***

Data: National Survey of Family Growth, 2017-2019, 2006; All values weighted; *p<.05,**p<.01,***p<.001

Discussion

Race

The findings on age while pregnant and breastfeeding initiation and duration correlated with previous literature, with older women having higher odds of both initiating breastfeeding and longer durations. White women had lower odds of initiating breastfeeding compared to women who reported being Hispanic or of multiple races and other. Black women were only slightly less likely to initiate breastfeeding compared to White women with an odds ratio of 0.962. This is a surprising finding, as previous literature has demonstrated a clear disparity between breastfeeding initiation between Black and White women. However, Kirksey's (2021) analysis of breastfeeding initiation using the NSFG from 1973 - 2015 found that the breastfeeding disparity has been shrinking over time and her analysis from 2006 - 2015 showed that racial disparities were beginning to narrow. There are limitations to comparing results as Kirksey's sample only included breastfeeding rates for children two years or younger at the time of the survey whereas my analysis includes children 18 years or younger at the time of the survey. However, my results suggest that in terms of initiation, the disparity between Black and White women is continuing to shrink. This is significant, as Black women have trod behind in

breastfeeding rates for over a century. This result suggests that efforts to reduce disparities and address structural barriers may be effective and are continuing to reduce disparities.

The results of race on breastfeeding duration model supported did not support hypothesis 2 which stated that White women would breastfeed for the longest durations. The model shows that White women were likely to breastfeed for the shortest duration when compared to minority groups. In fact, Black women had the highest likelihood to breastfeed for longer durations. Although women who stated they were multiple or other race had the highest odds of initiating breastfeeding, Hispanic and Black women were both more likely to breastfeed for longer durations. This finding is significant, as it suggests White women may be the least likely to breastfeed for longer durations despite previous literature stating otherwise. Breastfeeding is often calculated through initiation rather than duration, it would be significant to continue studying why breastfeeding rates for initiation versus duration differ significantly for racial groups.

Employment

Results show that part time workers and women in school had the highest odds of initiating breastfeeding. Stay-at-home mothers had slightly lower odds in comparison. Hypothesis 1 was supported as women who were on family leave or looking for work, and full time workers were the least likely initiate breastfeeding. These results are supported by previous literature, which shows that full time but not part time workers are negatively associated with breastfeeding initiation (Fein and Roe, 1998). Previous literature has also shown that when women are on family leave, they must make extensive preparations to continue exclusive breastfeeding. There are additional barriers for women to express milk at work including a lack of designated space and time (Al-Attas and Shaw, 2020). Women may hesitate to initiate

breastfeeding if they are aware of the preparations necessary before returning to work as well as additional constraints once working, knowing exclusive breastfeeding may not be plausible for them.

Temporarily unemployed and full time workers were also the least likely to breastfeed for long durations. Stay-at-home mothers were much more likely to breastfeed for longer durations than women who were employed, temporarily unemployed, or in school. Along with barriers at work, employees reported putting being a worker before being a mother while at work (Al-Attas and Shaw, 2020). Full time employees likely pressure to dedicate their time to working rather than expressing milk. If employed women do decide to initiate breastfeeding, time and location constraints as well as unsupporting employers and coworkers may contribute to a lower likelihood for women to breastfeed for longer durations.

Socioeconomic Status

Level of education showed a positive linear effect with both breastfeeding initiation and duration. This is compatible with previous literature showing there is a strong effect on breastfeeding by education level (Cohen et al). Women closer to the poverty level and women who received public assistance in the last year were also less likely to both initiate breastfeeding, however, women closer to the poverty line did not have a significant effect on breastfeeding duration and women who received public assistance were slightly more likely to breastfeed for a longer duration. This goes against previous literature which has suggested that women of higher income are more likely to both initiate and continue breastfeeding for longer durations (Flacking et al, Cohen et al).

Previous literature has shown that women on Medicaid are less likely to breastfeed than women with private insurance. In my analysis, women with private insurance were the most likely to initiate breastfeeding and women with Medicaid were the least likely. However, women on Medicaid and women with a single service plan or no insurance were both more likely than privately insured women to

breastfeed for longer durations. In fact, women with a single service plan or no insurance were much more likely to breastfeed for longer durations than comparison groups. This is a very interesting finding and the reasons why breastfeeding initiation and duration differ for insurance groups should be further studied.

Conclusion

Women are pressured to perform breastfeeding by societal forces due to its ties with the hegemonic ideology of intensive mothering. Women are pressured and often expected to breastfeed exclusively for 6 months, as medical experts recommend. Literature has demonstrated that women who work full time or expect to return to work are responsible to make full preparations to continue breastfeeding and once returning to work, often have constraints at their workplace to express milk. Employers understand the significance of breastfeeding on health outcomes but did not have breastfeeding protocols for their employees and can concern over the cost in providing facilities and equipment for employees to express milk more conveniently. Black women are also less likely to initiate breastfeeding than other races, however, this disparity appears to be shrinking over time. This is a significant finding and suggests that barriers for Black women to breastfeed are being addressed. Women with lower socioeconomic statuses, both education and income are less likely to initiate breastfeeding and breastfeeding duration.

Women who are on Medicaid also initiate at lower odds but are likely to breastfeed for longer durations. It was found that women who are on Medicaid also initiate at lower odds but are likely to breastfeed for longer durations. It was also found that White women were the most likely to initiate breastfeeding, but the least likely to breastfeed for longer durations. Many studies on breastfeeding focus on initiation only and there is a need to study why some groups

initiate breastfeeding at higher rates but do not continue duration. There may be additional barriers for these women to continue breastfeeding once they have initiated.

There are structural barriers for women of lower socioeconomic status to breastfeed. These barriers must be addressed to offer all women equal opportunity to choose if they would like to breastfeed. Breastfeeding is inextricably tied to images of good motherhood, when structural barriers discourage minority groups from breastfeeding they may be labeled as a bad mother or have feelings of guilt. For this reason, as well as beneficial health outcomes, it is important to understand structural barriers that exist for women to breastfeed in order to make it accessible to all those who wish to do so.

Bibliography

- Afflerback, Sara, Shannon Carter, Amanda Anthony, and Liz Grauerholz. 2013. "Infant-feeding consumerism in the age of intensive mothering and risk society." *Journal of Consumer Culture* Volume Number (3): 387-405.
- Al-Attas, Sh Fatimah and Rhonda M. Shaw. 2020. "Expressing Breastmilk While on Break and in Private: A Qualitative Study of Malaysian First-Time Mothers." *Community, Work & Family* 25(4):492–507.
- Anon. 2020. "Comparing Characteristics and Selected Expenditures of Dual- and Single-Income Households with Children : Monthly Labor Review." Retrieved March 27, 2023.
- Avishai Orit. 2007. "Managing The Lactating Body: The Breast-Feeding Project and Privileged Motherhood." *Qualitative Sociology* Volume Number (30): 135–152.
- Beauregard, Jennifer et al. 2019. "Racial Disparities in Breastfeeding Initiation and Duration among U.S. Infants Born in 2015." *Centers for Disease Control and Prevention*. Retrieved March 24, 2023.
- Brown, Christopher A, Susan Poag, and Catherine Kasprzycki. 2001. "Exploring Large Employers' and Small Employers' Knowledge, Attitudes, and Practices on Breastfeeding Support in the Workplace." *Journal of Human Lactation* 17(1):39–46.
- Cohen, Sarah S. et al. 2018. "Factors Associated with Breastfeeding Initiation and Continuation: A Meta-Analysis." *The Journal of Pediatrics* 203.
- Devane-Johnson, Stephanie, Ronald Williams, and Cheryl Woods Giscombe. 2022. "Historical Research: The History of African American Breastfeeding in the United States." *Journal of Human Lactation* 38(4):723–31.
- Ericson, Jenny, Mats Eriksson, Pat Hoddinott, Lena Hellström-Westas, and Renée Flacking. 2018. "Breastfeeding and Risk for Ceasing in Mothers of Preterm Infants—Long Term Follow Up." *Maternal & Child Nutrition* 14(4).
- Fein, S. B. and B. Roe. 1998. "The Effect of Work Status on Initiation and Duration of Breast-Feeding." *American Journal of Public Health* 88(7):1042–46.
- Gallagher, L., C. Begley, and M. Clarke. 2015. "Determinants of Breastfeeding Initiation in Ireland." *Irish Journal of Medical Science (1971 -)* 185(3):663–68.

Heck, Katherine E., Paula Braveman, Catherine Cubbin, Gilberto F. Chávez, and John L. Kiely. 2006. "Socioeconomic Status and Breastfeeding Initiation among California Mothers." *Public Health Reports* 121(1):51–59.

Kirksey, Kristen. 2021. "A Social History of Racial Disparities in Breastfeeding in the United States." *Social Science & Medicine* Volume Number (289).

Libbus, M. Kay and Linda F. Bullock. 2002. "Breastfeeding and Employment: An Assessment of Employer Attitudes." *Journal of Human Lactation* 18(3):247–51.

Marshall, Joyce, Mary Godfrey, and Mary Renfrew. 2007. "Being a 'good mother': managing breastfeeding and merging identities." *Social Science & Medicine* Volume Number (10): 2147-2159

Mercier, Rebecca J., Theresa Adeliyi Burcher, Rachel Horowitz, and Abigail Wolf. 2018. "Differences in Breastfeeding among Medicaid and Commercially Insured Patients: A Retrospective Cohort Study." *Breastfeeding Medicine* 13(4):286–91.