Have we left some behind? Trends in socio-economic inequalities in breastfeeding initiation: A population-based epidemiological surveillance study

Nathan C. Nickel, MPH, PhD,^{1,2} Patricia J. Martens, MSc, PhD,^{1,2} Dan Chateau, MA, PhD,^{1,2} Marni D. Brownell, MA, PhD,^{1,2} Joykrishna Sarkar, MSc,¹ Chun Yan Goh, MSc,¹ Elaine Burland, MSc, PhD,¹ Carole Taylor, MSc,¹ Alan Katz, MBChB, MSc,¹⁻³ the PATHS Equity Team¹

ABSTRACT

OBJECTIVES: Breastfeeding is associated with improved health. Surveillance data show that breastfeeding initiation rates have increased; however, limited work has examined trends in socio-economic inequalities in initiation. The study's research question was whether socio-economic inequalities in breastfeeding initiation have changed over the past 20 years.

METHODS: This population-based study is a project within PATHS Equity for Children. Analyses used hospital discharge data for Manitoba mother–infant dyads with live births, 1988–2011 ($n=316,027$). Income quintiles were created, each with ~20% of dyads. Three-year, overall and by-quintile breastfeeding initiation rates were estimated for Manitoba and two hospitals. Age-adjusted rates were estimated for Manitoba. Rates were modelled using generalized linear models. Three measures, rate ratios (RRs), rate differences (RDs) and concentration indices, assessed inequality at each time point. We also compared concentration indices with Gini coefficients to assess breastfeeding inequality vis-à-vis income inequality. Trend analyses tested for changes over time.

RESULTS: Manitoba and Hospital A initiation rates increased; Hospital B rates did not change. Significant inequalities existed in nearly every period, across all three measures: RRs, RDs and concentration indices. RRs and concentration indices suggested little to no change in inequality from 1988 to 2011. RDs for Manitoba (comparing initiation in the highest to lowest income quintiles) did not change significantly over time. RDs decreased for Hospital A, suggesting decreasing socio-economic inequalities in breastfeeding; RDs increased for Hospital B. Income inequality increased significantly in Manitoba during the study period.

CONCLUSIONS: Overall breastfeeding initiation rates can improve while inequality persists or worsens.

KEY WORDS: Health status disparities; social determinants of health; social class; breast feeding

La traduction du résumé se trouve à la fin de l'article.

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Evidence regarding the maternal/child health and economic outcomes associated with infant feeding practices has led to increased support for breastfeeding.¹⁻³ Systematic reviews have identified several factors that predict whether a mother–infant dyad initiates breastfeeding: socio-economic status, maternal age, employment, prenatal intentions, breastfeeding self-efficacy and hospital practices.^{4,5} Much intervention research aims to address barriers and increase initiation rates overall, rather than to reduce breastfeeding inequalities.⁶⁻⁹ These studies have focused on antenatal education and implementing hospital practices that support breastfeeding. Few have studied the impact of interventions on breastfeeding inequalities,^{10,11} and although overall breastfeeding rates have increased,¹² inequalities in countries like Canada and the US persist.^{11,13}

Monitoring trends in health inequalities is important for public health.¹⁴ A recent study found that racial disparities in breastfeeding were decreasing.¹¹ However, research has not examined trends in socio-economic inequalities in breastfeeding. Our epidemiological surveillance study addressed this gap by examining trends in socio-economic inequalities in breastfeeding initiation at both hospital and provincial levels.

Our study had two research questions: 1) Did breastfeeding initiation rates change between 1988 and 2011? and 2) Did socio-economic

Author Affiliations

1. Manitoba Centre for Health Policy, Faculty of Health Sciences, University of Manitoba, Winnipeg, MB
2. Department of Community Health Sciences, College of Medicine, Faculty of Health Sciences, University of Manitoba, Winnipeg, MB
3. Department of Family Medicine, College of Medicine, Faculty of Health Sciences, University of Manitoba, Winnipeg, MB

Correspondence: Nathan C. Nickel, Manitoba Centre for Health Policy, Faculty of Health Sciences, University of Manitoba, 408-727 McDermot Ave, Winnipeg, MB R3E 3P5, E-mail: Nathan_Nickel@cpe.umanitoba.ca.

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Table 1. Descriptive statistics for analytic cohort by time period, 1988-2011

	1988/89- 1990/91	1991/92- 1993/94	1994/95- 1996/97	1997/98- 1999/00	2000/01- 2002/03	2003/04- 2005/06	2006/07- 2008/09	2009/10- 2010/11
Manitoba								
No. of mother–infant dyads	46,344	45,268	42,579	38,759	37,292	37,325	40,516	27,944
Mean maternal age (95% CI)	25.54 (25.49, 25.59)	25.04 (24.99, 25.09)	24.81 (24.76, 24.86)	24.62 (24.57, 24.68)	24.50 (24.45, 24.56)	24.56 (24.50, 24.62)	24.46 (24.40, 24.51)	24.66 (24.60, 24.73)
Infant's sex								
Male, % (95% CI)	50.89 (50.43, 51.34)	50.93 (50.47, 51.39)	51.02 (50.54, 51.49)	51.32 (50.82, 51.82)	51.23 (50.72, 51.73)	50.90 (50.40, 51.41)	50.59 (50.11, 51.08)	51.08 (50.49, 51.66)
Female, % (95% CI)	49.11 (48.66, 49.57)	49.07 (48.61, 49.53)	48.98 (48.51, 49.46)	48.68 (48.18, 49.18)	48.77 (48.27, 49.28)	49.10 (48.59, 49.60)	49.41 (48.92, 49.89)	48.92 (48.34, 49.51)
Hospital A								
No. of mother–infant dyads	3157	3007	3064	2790	2936	3042	3624	2643
Mean maternal age (95% CI)	25.23 (25.07, 25.39)	25.03 (24.85, 25.21)	24.78 (24.61, 24.95)	24.60 (24.42, 24.78)	24.35 (24.17, 24.53)	24.53 (24.35, 24.71)	24.47 (24.31, 24.64)	24.59 (24.40, 24.78)
Infant's sex								
Male, % (95% CI)	50.81 (49.06, 52.55)	51.11 (49.33, 52.90)	49.22 (47.45, 50.99)	51.04 (49.18, 52.89)	52.59 (50.78, 54.39)	52.14 (50.36, 53.91)	50.14 (48.51, 51.77)	51.95 (50.04, 53.85)
Female, % (95% CI)	49.19 (47.45, 50.94)	48.89 (47.10, 50.67)	50.78 (49.01, 52.55)	48.96 (47.11, 50.82)	47.41 (45.61, 49.22)	47.86 (46.09, 49.64)	49.86 (48.23, 51.49)	48.05 (46.15, 49.96)
Hospital B								
No. of mother–infant dyads	1153	1064	902	859	833	865	827	552
Mean maternal age (95% CI)	24.19 (23.91, 24.46)	22.89 (22.60, 23.18)	22.37 (22.06, 22.68)	22.27 (21.93, 22.61)	22.41 (22.07, 22.75)	22.25 (21.91, 22.58)	21.98 (21.66, 22.30)	22.38 (21.96, 22.80)
Infant's sex								
Male, % (95% CI)	49.00 (46.12, 51.89)	54.04 (51.05, 57.04)	49.33 (46.07, 52.60)	54.37 (51.03, 57.70)	52.34 (48.95, 55.73)	49.48 (46.15, 52.81)	48.85 (45.44, 52.26)	51.81 (47.64, 55.98)
Female, % (95% CI)	51.00 (48.11, 53.88)	45.96 (42.96, 48.95)	50.67 (47.40, 53.93)	45.63 (42.30, 48.97)	47.66 (44.27, 51.05)	50.52 (47.19, 53.85)	51.15 (47.74, 54.56)	48.19 (44.02, 52.36)

inequalities in breastfeeding initiation change between 1988 and 2011? We examined provincial initiation rates in Manitoba to inform future efforts to support breastfeeding and reduce socio-economic inequalities in breastfeeding.¹⁵ Additionally, we studied trends in initiation in two Manitoba hospitals – one rural and one urban – since many interventions designed to support initiation, including those enumerated in the Manitoba Provincial Breastfeeding Strategy, target hospital practices.^{6,7,10,15} Hospital-level analyses serve both as illustrative case studies on the importance of monitoring trends at the facility level and may inform future interventions to reduce breastfeeding initiation inequalities.

DATA AND METHODS

This study was conducted as part of the PATHS Equity for Children program of research (PATHS). PATHS is a program of research being conducted in Manitoba that focuses on child health equity. PATHS was approved by the University of Manitoba Health Research Ethics Board (H2011:294) and the Manitoba Government Health Information Privacy Committee (2011/2012 – 24 and 2011/2012 – 24c).

Data

Data came from the PATHS Data Resource at the Manitoba Centre for Health Policy.¹⁶ The PATHS Data Resource contains health information for nearly every child registered with Manitoba's universal health care system.^{16,17} Data came from three sources: the Manitoba Health Insurance Registry (containing mother–infant dyads' postal code of residence), the hospital discharge abstract database (containing data on breastfeeding initiation) and Canadian census data (containing data on income).

Analytic cohort

The Registry and hospital discharge abstracts were used to create the study's analytic cohorts for the provincial- and two hospital-level analyses: all mother–infant dyads with live births and infant gestational age ≥ 37 weeks (i.e., full term) born in Manitoba and in the two study hospitals between April 1, 1988, and March 31, 2011.

Hospital A serves an urban population with a median household income $\sim \$50,000$. Hospital B serves a rural population with a median household income $\sim \$45,000$.

Exclusion criteria were 1) gestational age < 37 weeks (33,626 records); 2) child born out of province (1 record); 3) missing hospital identification (1 record); 4) missing mother's Public Health Insurance Number (211 records); and 5) missing breastfeeding data (3,839 records). Provincial analyses included 316,027 mother–infant dyads, hospital A 24,263 and Hospital B 7,055.

Measures

Breastfeeding initiation data came from the hospital discharge abstract database. Discharge abstracts report infant feeding status at hospital discharge as either a) exclusively formula-fed during the hospital stay or b) breastfed during the hospital stay. Breastfeeding initiation was defined as a dichotomous variable: the dyad did or did not initiate breastfeeding during birth hospital stay. Initiation during the birth hospital stay was chosen because reducing inequalities in hospital initiation is a provincial goal,¹⁵ and evidence suggests that delayed initiation is associated with reduced breastfeeding duration.¹⁸

Income data came from the Canadian census. The average household income for the census dissemination area (DA) where the dyad lived provided a proxy for the dyad's socio-economic status. A DA includes ~ 400 –700 individuals and is the smallest geographic area for which census data are disseminated. DA average income has been validated as a measure for individual socio-economic status.¹⁹ DAs were categorized as rural or urban. Within each category, DAs were sorted from lowest to highest average income, then divided into income quintiles, each containing $\sim 20\%$ of the population: Q1–Q5. Q1 designated the lowest income quintiles and Q5, the highest. Rural and urban quintiles were combined to create five overall income quintiles to use in provincial analyses.

Approximately 1.5% of dyads had missing data for average DA income. Income data were missing for the following reasons: the

Table 2. Overall breastfeeding initiation rates, 1988-2011

	1988/89- 1990/91	1991/92- 1993/94	1994/95- 1996/97	1997/98- 1999/00	2000/01- 2002/03	2003/04- 2005/06	2006/07- 2008/09	2009/10- 2010/11
Manitoba (<i>n</i> =316,027)								
Initiation rate, *† %	72.04	75.97	75.73	77.32	80.52	81.52	77.78	79.64‡
(95% CI)†	(69.78, 74.37)	(73.84, 78.17)	(72.64, 78.95)	(74.12, 80.65)	(77.29, 83.90)	(78.26, 84.92)	(74.36, 81.35)	(76.06, 83.39)
Hospital A (<i>n</i> =24,263)								
Initiation rate, † %	74.69	76.39	80.58	79.86	83.21	83.66	84.69	84.30‡
(95% CI)	(73.17, 76.21)	(74.87, 77.91)	(79.18, 81.98)	(78.37, 81.34)	(81.86, 84.56)	(82.35, 84.98)	(83.51, 85.86)	(82.91, 85.69)
Hospital B (<i>n</i> =7055)								
Initiation rate, %	76.24	75.75	74.17	73.11	71.07	74.91	73.76	76.09
(95% CI)	(73.78, 78.69)	(73.18, 78.33)	(71.31, 77.03)	(70.14, 76.07)	(67.99, 74.15)	(72.02, 77.80)	(70.76, 76.76)	(72.53, 79.65)

* Adjusted for maternal age at first birth.

† Statistically significant linear trend in breastfeeding initiation rates, over time ($p < 0.001$).‡ Breastfeeding initiation rate in 2009/10-2010/11 statistically significantly different from breastfeeding initiation rate in 1988/89-1990/91 ($p < 0.05$).

dyad resided in an institution (e.g., ward of Public Trustee); one or both dyad members' addresses were recorded as a Child and Family Services office; or the dyad's census area did not report income.

Statistical analyses

Breastfeeding Initiation Rates

Initiation rates were defined as the ratio of the number of breastfeeding dyads to the total number of dyads. We estimated rates, comprising summarized counts within populations, for each three-year period, 1988-2011. All rates were modeled using generalized linear modelling (GLM) with a Poisson distribution and a log-population offset to account for differential population sizes.

We estimated overall initiation rates at provincial and hospital levels for all of Manitoba (*n*=316,027) and two Manitoba hospitals, Hospital A (*n*=24,263) and Hospital B (*n*=7,055). Provincial initiation rates were adjusted for maternal age at first birth to account for differences in maternal age over time. Modeling age-adjusted rates has been used in other studies examining trends in population-level health inequalities.²⁰

We estimated initiation rates for each income quintile; income-specific rates were estimated at provincial and hospital levels. Age-adjusted rates were estimated at the provincial level. GLMs used to estimate age-adjusted rates at the hospital level failed to converge (not shown).

Measures of Inequality

Rate ratios (RRs) measured inequality as the ratio of the initiation rate in the lowest income quintile to the initiation rate in the highest income quintile. Rate differences (RDs) measured inequality as the absolute percentage point difference in initiation rates between the highest and lowest income quintiles. RRs and RDs were estimated for each three-year period, 1988-2011. RRs and RDs were calculated using GLM at provincial and hospital levels. Standard errors from the models were used for precision measures and significance tests.

Both RRs and RDs measured health equality by making pairwise comparisons. We also used the concentration index, which ranges from -1 to +1, to measure the distribution of breastfeeding initiation across the socio-economic gradient.^{21,22} A value of 0 would indicate that breastfeeding was equally distributed across the entire socio-economic gradient. A Concentration Index approaching +1 would indicate that breastfeeding is concentrated among the wealthy and a value approaching -1 that breastfeeding is concentrated among the poor. Methods for estimating a concentration index for health are explained elsewhere.²¹⁻²³

We estimated the concentration index for breastfeeding for each three-year period (1988-2011) at both the provincial and hospital levels. The provincial-level concentration index for breastfeeding was estimated using adjusted rates; hospital-level indices used crude rates.

Changes in the concentration index for breastfeeding may be related to changes in underlying income inequality. Therefore, it is informative to examine changes in the concentration index for breastfeeding vis-à-vis changes in income inequality. To do this, we estimated the Gini Coefficient (Gini) on income to examine changes in income inequality over the study period.

The Gini quantifies inequality in the distribution of income across the population. Ginis range from 0 to +1. A value of 0 indicates that income is distributed equally across the population. A Gini of 1 indicates that all income belongs to a single individual: absolute inequality. Methods for estimating the Gini are presented in detail elsewhere.²¹⁻²³

We estimated the Gini to quantify equity in the distribution of family income across mother-infant dyads with a live birth, 1988-2011, using household income data from the Canadian census. We estimated three-year Ginis for 1988-2011 for all of Manitoba (i.e., the distribution of income across all mother-infant dyads with a live birth in Manitoba for each three-year period, 1988-2011) and for each hospital (i.e., the distribution of income across mother-infant dyads within each hospital).

Measures of precision (e.g., standard errors, 95% confidence intervals) for concentration indices and Ginis were estimated using bootstrapping.²⁴

Time Trends

Trends in RRs, RDs, concentration indices and Ginis were analyzed using linear contrasts. Ratios were used to measure whether inequality in 2009-2011 was different than in 1988-1990 for each of these measures. Two-sided *z* tests were used to test statistical significance. A significance level of $p < 0.05$ was used in all analyses.

We used Version 9.2 of the SAS System for Windows to conduct analyses (SAS Institute, Cary, NC).

RESULTS

Descriptive results

Table 1 presents descriptive data for the analytic population. Average maternal age at first birth for each time period at the provincial level ranged between 24.46 and 25.54 years. Average maternal age for each time period at Hospital A ranged from 24.35 to 25.23 years and at Hospital B from 21.98 to 24.19 years.

Figure 1. Breastfeeding and socio-economic inequality indices for Manitoba ($n=316,027$): 1988-2011

Breastfeeding initiation trends

Table 2 presents the breastfeeding trends from 1988 to 2011 for all of Manitoba and for Hospitals A and B. Trend analyses showed that Manitoba had a statistically significant increase in both crude ($p<0.001$) and adjusted ($p<0.001$) breastfeeding initiation rates over this period. Hospital A showed a statistically significant increase in initiation rates ($p<0.001$). Hospital B rates failed to show a trend ($p=0.58$).

Trends in inequalities

Manitoba

Figure 1 (panel a) presents trends in initiation rates, by income quintile, for all of Manitoba. Trend analyses of provincial data showed that initiation rates by quintile increased significantly over time ($p<0.001$ for each income quintile). Significant inequalities existed at each time point when measured by both the RR and RD ($p<0.001$). We failed to find changes in inequality over the study period using both trend tests and two-sided z tests comparing 1988-91 with 2009-11.

Figure 1 (panel b) presents trends in the Gini for income and concentration index for breastfeeding. Trend tests on the Gini showed that socio-economic inequality increased significantly over the study period ($p<0.05$). We failed to find differences in inequality over the study period using the concentration index for breastfeeding.

Hospital A – Urban

Figure 2 (panel a) presents trends in initiation rates for Hospital A. Trend analyses showed increases in initiation rates for quintiles Q1 ($p<0.001$), Q2 ($p<0.001$), Q3 ($p<0.01$) and Q4 ($p<0.05$). Trend analyses failed to show a significant increase in initiation for quintile Q5 ($p=0.63$).

Hospital A had significant inequality, as measured by the RR, at the first time period only; the RR was not statistically significant at all other time periods. There was a statistically significant absolute difference (RD) between Q1 and Q5 at each time period. We failed to find differences in RR and RD when comparing 1988-91 with 2009-11. Trend tests showed decreasing inequality for both measures: RR ($p<0.001$) and RD ($p<0.001$).

Figure 2 (panel b) presents trends in the Gini and concentration index for Hospital A. Analyses showed that the Gini increased over time ($p<0.001$) and that the Gini at 2009-2011 was significantly larger than the Gini at 1988-91 ($p<0.001$); income inequality among dyads at Hospital A increased significantly during the study period. Trend tests on the concentration index showed decreasing breastfeeding inequality ($p<0.01$); two-sided z tests failed to show a difference between 1988-91 and 2009-11.

Hospital B – Rural

Trend analyses by income quintile failed to show a change in initiation rates for quintiles Q2-Q5 (Figure 3, panel a). The lowest quintile had a significant decrease in breastfeeding ($p=0.01$). Quintile regression further showed that the trend in the lowest quintile was significantly different from the trends in the other four quintiles ($p<0.05$). There was significant inequality in rates between the highest and lowest quintiles, as measured by the RD, at each time period (Table 1). The RR failed to show significant inequality during the first three time periods. We failed to find a difference in RR and RD when comparing 1988-91 with 2009-11. Trend tests on both RR ($p<0.01$) and RD ($p<0.01$) suggested increasing inequality over the study period.

Figure 3 (panel b) presents trends in the Gini and concentration index for Hospital B. The Gini on income showed increasing income inequality with both the trend test ($p<0.01$) and testing difference between 1988-91 and 2009-11 ($p<0.001$). Trend tests on the concentration index showed that breastfeeding inequality also increased significantly ($p<0.01$); furthermore, the concentration index in 2009-11 was significantly larger than in 1988-91 ($p<0.001$).

DISCUSSION

This article contributes to research on breastfeeding in three ways: 1) it demonstrates that overall breastfeeding initiation rates can improve while inequalities persist or worsen; 2) it highlights the utility of considering changes in underlying socio-economic inequalities when monitoring trends in health inequalities; and 3) it provides a comparison of measures with respect to monitoring trends in health inequalities.

Figure 2. Breastfeeding and socio-economic inequality indices for Hospital A (urban) ($n=24,263$): 1988-2011

Figure 3. Breastfeeding and socio-economic inequality indices for Hospital B (rural) ($n=7055$): 1988-2011

Interpretation

Trends in overall breastfeeding initiation rates in North America show recent improvement.²⁵ Similarly, both Manitoba overall rates and Hospital A's overall rates increased over the study period, although Hospital B's rates failed to show any change. Additionally, both provincial-level and Hospital A analyses indicated that rates within each quintile improved, including rates among lower-income dyads. These increasing rates could reflect recent increased attention in Manitoba to support breastfeeding:¹⁵ emphasis on implementing hospital practices to support breastfeeding (i.e., Baby Friendly^{15,26}) and on prenatal education.¹⁵ Indeed, Manitoba has been working extensively on increasing the number of Baby Friendly facilities (i.e., provide the care practices outlined in the Ten Steps to Successful Breastfeeding²⁶).¹⁵ The Ten Steps have been shown to increase breastfeeding initiation^{6,27} and duration.^{6,18,27}

Our observed increases in low-income populations are similar to the findings of recent studies of improvement among racial/ethnic minorities.¹¹ The exception was Hospital B, where rates among the lowest income quintile decreased over the study period. Future qualitative research interviewing mothers and health care staff from

this hospital could help illuminate the reasons for the decrease and identify strategies to support this population.

Although improvements were observed across the socio-economic gradient, inequalities persisted throughout the observation period. Indeed, we found that initiation followed a socio-economic gradient across the study period, which mirrors other published findings.^{13,28} Furthermore, breastfeeding inequality did not decrease in our provincial-level analyses, and inequality increased in Hospital B; this is in contrast to a recent study in the US that found decreasing inequalities across racial/ethnic groups.¹¹

Our results suggest a possible explanation for the minimal-to-no decreases in socio-economic inequalities in breastfeeding: income inequality increased significantly in Manitoba over our study period, 1988-91 to 2009-11. Failing to consider the changing socio-economic landscape may only provide half the story. Indeed, given the widening gap between the wealthy and the disadvantaged, one may expect socio-economic breastfeeding inequalities to also increase. However, contrary to this expectation, we failed to find changes in breastfeeding inequalities in our provincial analyses and observed decreasing inequalities in Hospital A. Contextual factors may be mitigating the impact of increasing income inequality vis-

à-vis socio-economic inequalities in breastfeeding. Increasing income inequality may also partially explain why we found little decrease in breastfeeding inequalities whereas the US study found decreasing racial inequalities in breastfeeding.¹¹

That breastfeeding inequality did not decrease may also suggest that efforts targeted to vulnerable populations are required to close the inequality gap between high- and low-income populations. A recent study from Belarus found that a population-based strategy, i.e., Baby Friendly Initiative, did not reduce breastfeeding inequalities between highly educated and less educated mothers.¹⁰ That being said, the hypothesis that Baby Friendly does not reduce income inequalities in breastfeeding has not yet been tested; moreover, the Belarus findings may not generalize to high-income countries. To our knowledge the Belarus study is the first to study the impact of policies on breastfeeding inequalities. Future research exploring the impact that Baby Friendly has on breastfeeding inequalities in high-income countries is required to assess the generalizability of the Belarus findings. More broadly, research is required that identifies whether targeted strategies, universal strategies or a combination of both are best suited to reduce income inequalities in breastfeeding.¹⁴

Limitations and strengths

A limitation of this study is that income was recorded at the area level. However, research shows that area-level measurement provides a good approximation of individual-level socio-economic status.¹⁹ Our measure for breastfeeding initiation came from administrative data, which may misclassify dyads' infant feeding status. For example, a dyad may attempt to breastfeed but have unsuccessful latch during the hospital stay; such a dyad could be classified as "breastfed" in administrative data. However, our initiation rates are comparable to, and slightly lower than, those reported in the Canadian Community Health Survey.²⁹ Additionally, we do not have population-level measures for duration. Trends in initiation inequalities may not generalize to trends in breastfeeding duration inequalities. Other covariates are known to predict breastfeeding at the individual level;^{4,5} stratifying on these characteristics may yield differing trends in breastfeeding inequalities over the study period.^{20,23} Observed trends in inequalities are not generalizable. Other studies using different populations will likely find differing trends.

A strength of this study is its use of data capturing breastfeeding information for nearly every live birth within Manitoba. This facilitates study of initiation rates among occasionally hard-to-reach individuals, such as dyads from low-income areas. The data also allowed examination of initiation rates across a 20+ year period, facilitating the identification and analyses of trends.

CONCLUSION

Monitoring trends in socio-economic inequalities in breastfeeding is important in order to ensure that less advantaged people are not left behind. Our results showed that improvements in overall rates can be achieved even while inequality persists. We also demonstrated that consideration of changes in income inequality is important when studying trends in socio-economic inequalities in health. We showed that presenting more than one indicator provides a more complete picture of changes in health inequalities.^{14,23,30} Using multiple measures may facilitate progress

towards reducing socio-economic inequalities in breastfeeding.³⁰ Finally, we identified situations in which marginalized populations (i.e., low-income dyads) may need focused support to reduce health inequalities.

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RÉSUMÉ

OBJECTIFS : L'allaitement est associé à une meilleure santé. Selon les données de surveillance, les taux d'initiation de l'allaitement maternel augmentent, mais peu d'études examinent les tendances des inégalités socioéconomiques dans l'initiation de l'allaitement. Notre question de recherche était de savoir si les inégalités socioéconomiques dans l'initiation de l'allaitement maternel ont changé au cours des 20 dernières années.

MÉTHODE : Cette étude populationnelle s'inscrit dans le programme PATHS Equity for Children. Nos analyses ont utilisé les données de sortie d'hôpital du Manitoba pour les dyades mère-nourrisson avec naissances vivantes de 1988 à 2011 (n=316 027). Des quintiles de revenu ont été créés, contenant chacun ~20 % des dyades. Les taux d'initiation de l'allaitement maternel sur trois ans, globaux et par quintile, ont été estimés pour l'ensemble du Manitoba et pour deux hôpitaux. Des taux ajustés selon l'âge ont été estimés pour le Manitoba. Les taux ont été modélisés à l'aide de modèles linéaires généralisés. Trois indicateurs, les ratios des taux (RT), les différences de taux (DT) et les indices de concentration, ont permis d'évaluer l'inégalité à chaque point dans le temps. Nous avons aussi comparé les indices de concentration aux coefficients de Gini pour évaluer l'inégalité dans l'allaitement par rapport à l'inégalité des revenus. Des analyses des tendances ont servi à déceler les changements au fil du temps.

RÉSULTATS : Les taux d'initiation du Manitoba et de l'hôpital A ont augmenté; les taux de l'hôpital B n'ont pas changé. Des inégalités significatives étaient présentes dans pratiquement toutes les périodes et pour les trois indicateurs : RT, DT et indices de concentration. Les RT et les indices de concentration ont fait état de changements faibles ou nuls dans l'inégalité de 1988 à 2011. Les DT pour le Manitoba (comparant l'initiation du quintile de revenu supérieur au quintile inférieur) n'ont pas significativement changé au fil du temps. Les DT ont diminué pour l'hôpital A, ce qui pourrait signaler une baisse des inégalités socioéconomiques dans l'allaitement; les DT ont augmenté pour l'hôpital B. L'inégalité des revenus a significativement augmenté au Manitoba sur la période de l'étude.

CONCLUSIONS : Les taux d'initiation de l'allaitement maternel peuvent s'améliorer globalement alors que l'inégalité subsiste ou s'aggrave.

MOTS CLÉS : disparités d'état sanitaire; déterminants sociaux de la santé; classe sociale; allaitement maternel