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FACILITATING WORKING MOTHERS' ABILITY TO BREASTFEED: GLOBAL TRENDS IN GUARANTEEING BREASTFEEDING BREAKS AT WORK, 1995-2014

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SCHOLARONE™
Manuscripts

Review

Well Established: Providing breastfeeding breaks is one of the important workplace policies that can facilitate mothers’ ability to breastfeed at work. Studies have shown an association between legislation in support of breastfeeding and breastfeeding rates.

Newly Expressed: Legislation from 193 countries was compiled, reviewed and analyzed to present the change in the share of countries guaranteeing breastfeeding breaks between 1995 and 2014.

ABSTRACT

Background: Mothers who work away from home tend to stop breastfeeding earlier than their non-working counterparts due to workplace barriers. Barriers to breastfeeding discriminate against women and may lead to inequities in children’s health outcomes. Guaranteeing paid breastfeeding breaks at work is one mechanism that can improve mothers’ opportunity to breastfeed in the workplace.

Objective(s): To assess the trends in the share of countries guaranteeing breastfeeding breaks in the workplace and paid maternal leave that lasts until the infant is six months old (the WHO recommended duration for exclusive breastfeeding), between 1995 and 2014.

Methods: Legislation and secondary source data was collected and reviewed for 193 UN Member States. Legislation was analyzed for content on breastfeeding breaks and maternal leave guarantees.

Results: 51 countries (26.7%) in 2014 did not guarantee breastfeeding breaks in any form and four countries provided only unpaid breaks or breaks that did not cover the first six months of life; since 1995 around 15 countries (10.2%) legislated for such a policy. In 2014,

out of 55 countries which did not guarantee paid breastfeeding breaks for the first six months after birth, seven countries guaranteed paid maternal leave for the same duration; 48 countries (25.1%) provided neither paid maternal leave nor paid breastfeeding breaks.

Conclusion(s): Progress in the number of countries guaranteeing breastfeeding breaks at work is modest. Adopting measures to facilitate breastfeeding at work can be a critical opportunity for countries to increase breastfeeding rates among the growing number of women in the labour force.

BACKGROUND

The benefits of breastfeeding on maternal and infant health are well-established.¹⁻⁴ Global and national public health organizations, including the World Health Organization (WHO), recommend exclusive breastfeeding until the infant reaches six months of age⁵⁻⁷ because of its immediate impact on health as well as its health benefits over the life-course.⁸

Despite these benefits, mothers who work away from home often have no choice but to discontinue breastfeeding upon return to work.⁹⁻¹³ Workplace policies such as paid breaks for breastfeeding or expressing breast milk and the provision of nursing rooms, and public awareness of such policies, increase the feasibility for mothers to breastfeed in the workplace.^{14,}

¹⁵ Thus, they represent both an important health promoting policy and a mechanism for supporting gender equity by ensuring that women, like men, are not forced to choose between their health or that of their children and their economic independence.¹⁶

Studies have shown an association between breastfeeding friendly legislation across US states, including laws permitting breastfeeding breaks at work, and breastfeeding initiation

and duration in cross-sectional¹⁷ as well as a differences-in-differences models.¹⁸
Additionally, using global policy data from 182 countries in 2012, Heymann and colleagues (2013) showed that the rate of exclusive breastfeeding of infants under six months of age was 8.86 percentage points higher in countries that guaranteed paid breastfeeding breaks at work compared to those that did not.¹⁹

Because the provision of breastfeeding breaks at work is associated with a higher rate of exclusive breastfeeding, infants of mothers who are denied the option to breastfeed at work may be prevented from attaining their full health potential. In addition to being a violation of their right to health as enshrined by the Convention on the Rights of the Child (CRC),²⁰ this could lead to enduring inequities in health and other long-term outcomes for children.

To improve the ability of mothers to both earn a living and breastfeed their infants, it is essential to encourage supportive work policies around the world. In this paper we first assessed global trends in national policies regulating breastfeeding breaks in the last two decades using recently available data based on the original legislation of 193 United Nations (UN) Member States. Second, we evaluated whether there were notable regional or income-level differences between countries. Third, we investigated if countries support breastfeeding by providing paid maternal leave for at least six months or offer mothers the option to return to work earlier than the end of their leave and continue breastfeeding by guaranteeing both policies.

METHODS

CREATING A DATABASE

Our main source of information on workplace policies was national labour and social security legislation. The full-text copies, together with the information on the history of amendment and

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3 repeal of such laws were identified through the International Labour Organization's (ILO's)
4 NATLEX database,²¹ as well as through other sources such as the ILO's Working Conditions
5 Laws Database.²² Additionally, information from the ILO's Conditions of Work Digest:
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repeal of such laws were identified through the International Labour Organization's (ILO's) NATLEX database,²¹ as well as through other sources such as the ILO's Working Conditions Laws Database.²² Additionally, information from the ILO's Conditions of Work Digest: Maternity and Work,²³ the World Alliance for Breastfeeding Action,²⁴ the Social Security Programs Throughout the World reports²⁵ and other secondary sources were used to supplement our dataset as required.

We conducted a content analysis of the laws and constructed a database. We defined breastfeeding breaks as breaks provided specifically for the purpose of breastfeeding or expressing breast milk during work hours, independent from regular daily breaks. We analyzed whether breastfeeding breaks were remunerated (y/n) and how many months after delivery working mothers were entitled to such breaks (**numeric value**). Maternal leave was defined as a combination of maternity leave and any additional leave available to both parents that could also be taken as time-off by mothers. We analyzed how many months of maternal leave were provided (**numeric value**) and whether it was remunerated (y/n). For the maternity portion of this leave we did not distinguish between prenatal and postnatal leave, even if the latter is more significant for breastfeeding as national laws are seldom explicit about this division.

We did not capture subnational policies or policies based on collective agreements available to subgroups of employees.

For each country, two researchers coded this information independently for every year between 1995 and 2014 and compared **and discussed** results to ensure accuracy **in the final values entered into the database**. We researched 193 UN Member States for all years, but due to data restrictions, the final dataset for 1995 was comprised of 176 countries for the breastfeeding

breaks policy variable and 171 countries for the maternal leave variable. The 2014 dataset was comprised of 193 countries for the breastfeeding breaks variable, and 191 countries for the maternal leave variable.

CONSTRUCTING INDICATORS FOR ANALYSIS

To assess global trends in policies guaranteeing breastfeeding breaks using the data we collected, we constructed an indicator measuring whether countries guaranteed at least six months of paid breastfeeding breaks in each year, following from the recommended duration of exclusive breastfeeding. We examined trends in the global prevalence of breastfeeding breaks guarantees by comparing the data from 1995 with the data from 2014. For each country and year, we also constructed a composite indicator measuring whether countries provided both paid breastfeeding breaks and maternal leave for the recommended duration or whether they favored one policy over the other. We then assessed and evaluated changes in the global prevalence of this combination of policies between 1995 and 2014.

We assigned our countries to income categories using the data available from World Bank for every year between 1995 and 2014.²⁶ The World Bank divides economies into four categories (low, low-middle, upper-middle and high income) based on the gross national income (GNI) per capita from the previous year, calculated according to the World Bank’s Atlas method.²⁷ In our analysis of policies according to income group, we combined low and low-middle income countries (LLMICs) and upper-middle and high income countries (UMHICs). To analyze trends by region, we primarily used the definitions provided by the

World Bank²⁷ with high income countries assigned to regions according to the United Nations definitions.²⁸

The maps provided in this article were generated using ESRI's ArcGIS.

FINDINGS

CURRENT STATE OF POLICIES AND PROGRESS SINCE 1995

In 1995, 111 of the 176 (63.1%) countries for which data were available had a national policy guaranteeing breastfeeding breaks. In 107 of these countries, the national policy provided mothers with paid breastfeeding breaks until their infant reached at least six months of age, while four countries provided shorter or unpaid breaks. Breastfeeding breaks were not guaranteed in any form in 65 of these 176 (36.9%) countries (Figure 1).

In 2014, in **136** countries worldwide, or **71%** of the world, mothers had the right to take paid breaks during the workday for the purpose of breastfeeding until their infant reaches at least six months of age and in **four** countries they at least had the right to shorter or unpaid breaks. On the other hand, **51** countries had yet to legislate policies that protected the right of mothers to take breastfeeding breaks (Figure 2).

Between 1995 and 2014 the proportion of countries that did not have laws providing breastfeeding breaks decreased from 36.9% to **26.7% (Figure 3)**. Among the countries with available data for all years, 13 countries with **no prior guaranteed breaks** (Albania, Belgium, Cuba, Cyprus, Ireland, Jordan, Kuwait, Macedonia, Maldives, the Philippines, Qatar, Samoa and the Sudan) instituted paid breastfeeding breaks in this period while the United States and New Zealand legislated for unpaid breaks.

REGIONAL VARIATIONS

In 1995, around half of the countries in the East Asia and Pacific and the Americas regions did not provide breastfeeding breaks. By 2014, while there had been improvements, these regions continued to have the highest proportion of countries that did not guarantee breastfeeding breaks (43.3% and 40%) whereas Europe and Central Asia had the lowest (**11.5%**).

The increase in the proportion of countries providing breastfeeding breaks between 1995 and 2014 was the smallest in Sub-Saharan Africa and the Americas. In Sub-Saharan Africa, the proportion of countries guaranteeing breaks increased by only **4%** during this period, although the overall rate was above 70% for both years; by contrast, the proportion that offered guaranteed breaks increased by 8.5% in the Americas only to reach 60% by 2014. In absolute terms, considering only the countries with available data, one to three countries per region adopted guarantees, except in Europe and Central Asia, where five countries introduced breastfeeding breaks.

VARIATIONS BY INCOME CATEGORY

Both in 1995 and 2014, low and lower-middle income countries (LLMICs) had higher rates of guaranteeing breastfeeding breaks than upper-middle and high income countries (UMHICs). In 1995, the proportion of LLMICS that provided some form of breastfeeding breaks at work was 68%, compared to 52.7% in UMHICs. By 2014 the gap narrowed but the contrast remained, with percentages of **80.3%** for LLMICs and **68.2%** for UMHICs.

BREASTFEEDING AND MATERNAL LEAVE LENGTH

In 2014, out of the **55** countries that did not guarantee paid breastfeeding breaks for the first six months after birth, **seven** countries (**Canada, Denmark, Finland, Gambia, Serbia, United Kingdom, and Iceland**) guaranteed a paid maternal leave for this period. Such a leave can also facilitate exclusive breastfeeding for the recommended duration of six months.

Between 1995 and 2014, the number of countries that offered neither six months of paid maternal leave nor six months of paid breastfeeding breaks decreased from **59** out of **171** countries (**34.5%**) to **48** out of **191** countries (**25.1%**) (**Figures 4 and 5**). The percentage of countries that offered a shorter leave but supplemented it with paid breastfeeding breaks that last until the child is at least six months old did not change much over time, and was by far the most common policy approach, adopted by about half of the countries in the world. Between 1995 and 2014 the number of countries that offered both policies for at least six months increased from 15 to **37** out of **171** countries with available data for **both** years.

When maternal leave policy is factored in, the difference between LLMICs and UMHICs becomes less prominent even though LLMICs still fare better in providing mothers with the opportunity to breastfeed for six months by guaranteeing at least one of these policies. In 2014, the proportion of UMHICs that offered neither paid breaks nor paid leave for six months was **28.2%** compared to **21%** among LLMICs. Yet the percentage of countries that offered both policies was markedly higher among the UMHICs than the LLMICs —**31.8%** compared to **8.6%**— because higher-income countries tend to provide longer maternal leave.

DISCUSSION

Globally, there has been gradual progress in the provision of policies supporting breastfeeding breaks at work. Between 1995 and 2014, the proportion of countries that did not have laws

providing breastfeeding breaks decreased from 36.9% to **26.7%**. However, the most recent data available indicated that **51** countries have not yet legislated guarantees for mothers to take any form of breastfeeding breaks at work and **four** countries had **only** unpaid breaks or breaks that did not last until six months of age. **While these countries were not specifically concentrated in one income-category, geographically the East Asia and Pacific and the Americas regions had a slightly higher share of countries that did not guarantee any form of breastfeeding breaks.**

The provision of paid maternal leave for six months can help compensate for the lack of breastfeeding break policies. However, **only seven** countries that did not guarantee paid breastfeeding breaks for this duration guaranteed paid maternal leave. Further, maternal leave by itself does not provide mothers with the same opportunity to combine breastfeeding and work. Women may choose to return to work in less than six months and still wish to continue breastfeeding. As well, they may need to return to work for income even when paid maternal leave is available if the wage replacement rate is low.

The percentage of LLMICs that guarantee some form of breastfeeding breaks at work is higher than the world average. **This may be due to a greater recognition of the importance of breastfeeding. Providing breastfeeding breaks is economically feasible in lower income countries, just as it is in higher income ones. Indeed, guaranteeing breastfeeding breaks at work would usually carry relatively minor costs for employers, as our review of the laws have shown** that the legislated length of breaks **is often about an hour.** Ultimately, if it is feasible for a workplace to provide breaks for a meal for all employees during the entire duration of employment, allowing breastfeeding employees an hour off to feed their infants for six months a few times during their employment should not be out of reach.

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3 Roughly only 2 out of every 5 infants in the world are exclusively breastfed for the
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5 recommended duration. Between 2000 and 2012 there has been little improvement in estimated
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7 exclusive breastfeeding rates for the first six months of life. Globally, exclusive breastfeeding
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9 rates increased only from 38% to 41% of infants, whereas the least developed countries
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11 demonstrated greater gains, from 38% to 50% of infants under six months of age.²⁹ Adopting
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13 measures to facilitate breastfeeding at work can be a critical opportunity for countries without
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15 supportive policies to increase breastfeeding rates among the growing number of women in the
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17 formal economy.
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23 **During our review of legislation, we observed that labour laws vary greatly in terms of**
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25 **their coverage and may exclude certain types of workers such as the self-employed, part-**
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27 **time workers, domestic workers, agricultural/seasonal workers, family-business workers,**
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29 **or small enterprise workers. Similarly, social security programs often require a minimum**
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31 **period of employment or contributions to the program before a worker is eligible to receive**
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33 **maternal leave benefits. Countries such as Sri Lanka, Morocco, Dominican Republic,**
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35 **Indonesia, Thailand, South Africa and India have already taken steps to extend their**
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37 **labour legislation to include some or all workers that are traditionally considered to be**
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39 **operating in the informal sector.³⁰ While important steps can and should be taken to extend**
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41 **the coverage of legal protections across all categories of workers, even if laws are initially**
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43 **limited to the formal sector, laws in support of breastfeeding, including laws guaranteeing**
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45 **breastfeeding breaks, can help to establish norms and change public perceptions of**
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47 **breastfeeding at work or other public places³¹ that may also be favorable to women**
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49 **employed in the informal sector.**
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In addition to guaranteeing breastfeeding breaks and adequate maternal leave, governments can support breastfeeding in the workplace by guaranteeing rights to clean and private spaces for breastfeeding or pumping, refrigeration units for storing breast milk, and child care rooms that can help facilitate on-site breastfeeding.^{10, 32} While important, more than legal rights and policies at the workplace clearly matter. The impact of legislation can be shaped by a government’s efforts to implement and enforce it and may depend on cooperation among the government, private sector and employees. Moreover, workplace policies are only one of the several interrelated components required to positively impact breastfeeding outcomes. Policies that are not specifically work-related are also integral to the effort to increase breastfeeding rates, such as laws that allow for breastfeeding in any public or private location and exempt breastfeeding mothers from public indecency.¹⁰ Additionally, the proper enforcement of the International Code of Marketing of Breast-milk Substitutes and subsequent relevant Health Assembly resolutions are critical in ensuring that mothers are well-informed about breastfeeding and infant nutrition options and are protected from commercial interests.^{5,32,33}

LIMITATIONS

There were certain limitations to our study. First, we examined the prevalence of policy legislation around the world and not policy enforcement. Second, to obtain national legislation we were limited by a desk search of global sources; not all updates and critical amendments may have been available at the time of data collection.

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3 Third, laws vary greatly in how they phrase policies. Inter-rater differences were discussed
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5 and reconciled; however, inter-rater reliability was not assessed.
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9 Finally, when calculating length of maternal leave we did not distinguish between prenatal
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11 and postnatal leave, which could result in an overestimation of the length of maternal leave
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13 available to breastfeeding mothers if the laws of a country require a portion of this leave to
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15 be used prenatally.
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18 19 *FUTURE RESEARCH* 20 21

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23 There remains much to be researched in the area of breastfeeding and work. An
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25 examination and identification of the characteristics associated with policies that support
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27 breastfeeding, potentially including other labour rights, strength of trade unions, or levels
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29 of democracy and governance, is a fruitful area for further scholarship. Research
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31 correlating breastfeeding legislation to national breastfeeding rates taking into account
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33 level of enforcement would be of utmost importance. Future studies should also utilize
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35 longitudinal data on global breastfeeding breaks policies to examine the causal effects of
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37 changes in policy on exclusive breastfeeding rates and breastfeeding duration, as well as
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39 health outcomes of infants and mothers. However, few countries changed their policies
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41 since 1995, making it difficult to assess whether countries that adopted supportive policies
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43 experienced greater improvements in breastfeeding practices than countries that did not.
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48 Another challenge is limited cross-national data on breastfeeding behaviors. The
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50 Demographic and Health Surveys (DHS)³⁴ and UNICEF Multiple Indicator Cluster
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52 Surveys (MICS)³⁵ are the main sources of data used to estimate cross-national exclusive
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54 breastfeeding rates and breastfeeding duration reported by UNICEF³⁰ and World Bank.³⁶
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3 However, the DHS is only administered in regular intervals for selected LLMICs.
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6 Moreover, respondents are asked whether their infant under four months of age has been
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8 fed anything other than breast milk in the last 24 hours;³⁷ this question might overestimate
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10 rates of exclusive breastfeeding because children who have been fed other liquids or solids
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12 at irregular intervals could be classified as exclusively breastfed.
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19 **CONCLUSION**

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22 Breastfeeding breaks are important for working mothers' ability to exclusively breastfeed during
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24 the first six months of life, and they help establish an equitable workplace for working mothers.
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26 Further, the increased rates resulting from providing breastfeeding breaks can contribute
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28 to more equitable health outcomes for infants and children. More than seven out of ten
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30 countries provide these breaks, however, this leaves nearly three out of ten without them.
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32 Moreover, over the last two decades there is been a rather slow increase in the number of
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34 countries guaranteeing the ability of working mothers to breastfeed for the six months
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36 recommended by the WHO for exclusive breastfeeding. Nations lagging behind should be
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38 encouraged to step up efforts to legislate supportive policies while all countries and the
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40 international community should develop innovative strategies for enforcement and disseminate
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42 information on rights that already exist.
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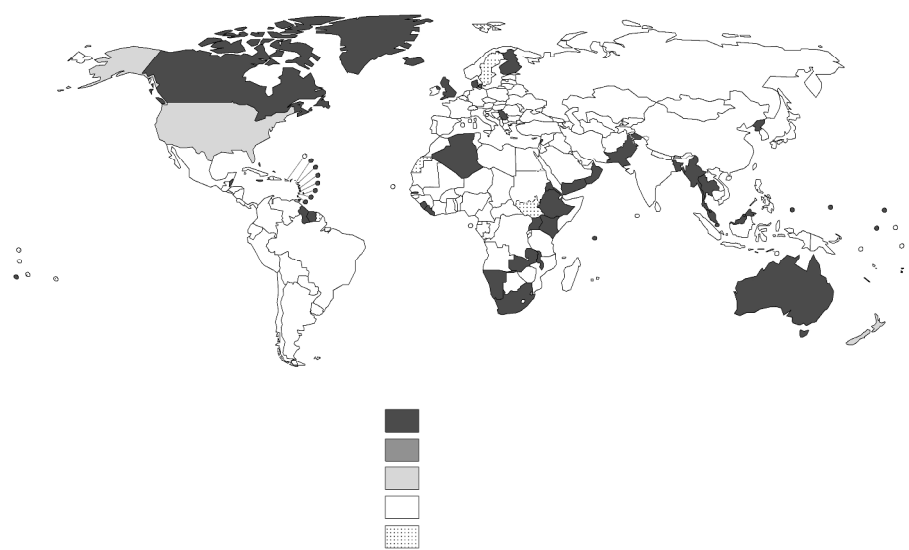
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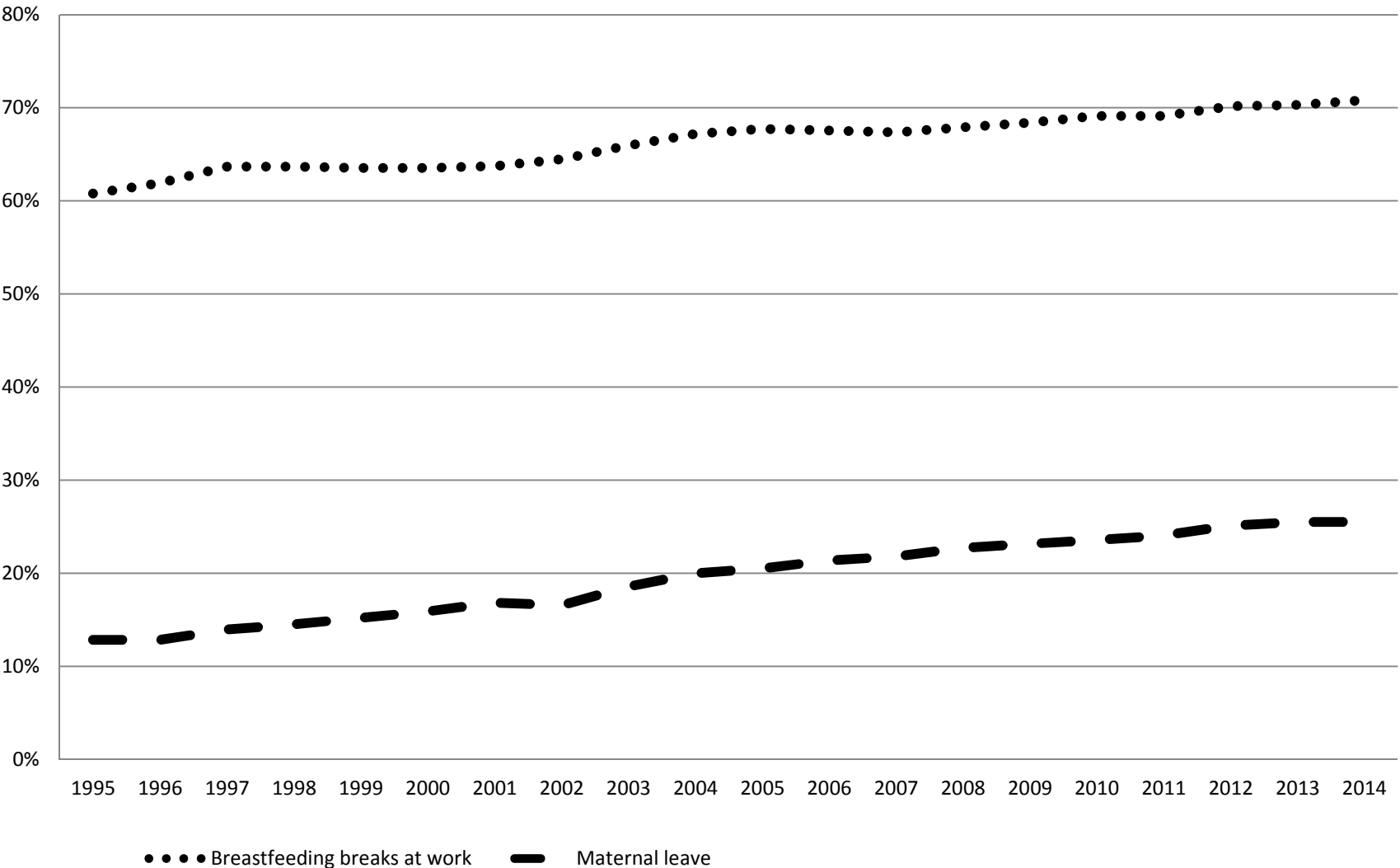


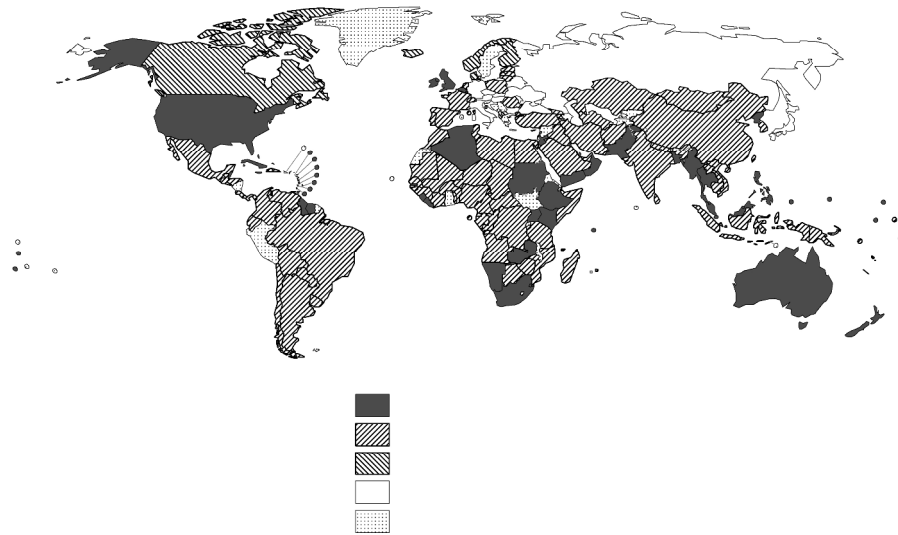


Peer Review

year	bf_paid6	mat_6mopaid
1995	0.607955	0.128655
1996	0.619318	0.128655
1997	0.636872	0.139535
1998	0.636872	0.145349
1999	0.635359	0.152047
2000	0.635359	0.159091
2001	0.637363	0.168539
2002	0.644809	0.165746
2003	0.659459	0.185792
2004	0.672043	0.2
2005	0.677419	0.205405
2006	0.675532	0.213904
2007	0.673684	0.218085
2008	0.678947	0.227513
2009	0.684211	0.231579
2010	0.691099	0.235602
2011	0.691099	0.240838
2012	0.701571	0.251309
2013	0.703125	0.255208
2014	0.708333	0.255208

Figure 3: How has the percentage of countries guaranteeing paid options to facilitate exclusive breastfeeding for at least six months changed from 1995 to 2014?







Review