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# Presence of a full-time companion in Brazilian maternities linked to the Rede Cegonha

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**Abstract** *The objective was to estimate the proportion of women with a full-time companion in Brazilian maternities linked to the Rede Cegonha (RC) and to compare them between the macro -regions in Brazil. A nationwide study, carried out from December/2016 to October/2017. 10,665 puerperal women from all regions of Brazil participated in the study, who gave birth at one of 606 maternity hospitals with a regional action plan approved by RC. Proportions and respective 95% confidence intervals were estimated, adjusted for the cluster effect, by comparing the macro-regions using Wald's chi-square test. The presence of a full-time companion occurred in 71.2% of maternities, being higher among women aged 20-35 years, brown-skinned, with higher education, married, and assisted in vaginal delivery. Almost 30% of puerperal women did not have a full-time companion. In the Southeast and Midwest regions, self-declared black women, with less schooling and unmarried women were less accompanied. The moment of delivery had less presence of the companion (29.2%). Despite the advances, this right is still not fully fulfilled, pointing to the occurrence of social inequities among Brazilian macro-regions.*

**Key words** *Maternal health, Maternal-child health services, Hospitals Maternity, Health policy, Social inequity*

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## Introduction

In 2011, Brazil created the Rede Cegonha (RC) Strategy to implement actions that ensure a network of maternal and child care based on a new model of care during delivery and birth based on available scientific evidence. From there, it was sought to institute good practices according to the recommendations of the World Health Organization (WHO). Thus, RC was organized into four components: prenatal care; delivery and birth; puerperium and comprehensive child health care; and logistic system[1-5].

In the category of delivery and birth, we highlight the importance of guaranteeing the presence of a free-choice and full-time companion (pre-delivery, delivery, and immediate post-delivery) in the maternity hospital. This is a right established by the Companion Law 11,108, of April 7, 2005, that considered it beneficial to maternal health, providing emotional support, optimizing the physiology of the delivery, reducing the length of hospital stay, and the number of cesarean sections. This action can prevent abuse and unnecessary interventions during delivery, offering quality control of professional care[2-3,6-10].

WHO classified the presence of a full-time companion as very useful and to encourage to have one. Although there is plenty of this information, the absence of a companion persists in some hospital establishments during delivery[1-3,7-8,11].

A national hospital-based study called "*Nascer no Brasil*" (Born in Brazil), conducted between February 2011 and October 2012, examined 266 public, private and mixed hospitals, in which less than 20% of women benefited from the presence of a full-time companion [3,6]. This result violates the Best Practices instituted by WHO and the right established by the Companion Law, which should be fulfilled in its entirety. However, this study did not include data from establishments in health regions with a Regional Action Plan approved by Rede Cegonha (PAR-RC) since RC was still in the process of being implemented in the country[6,9,12].

Considering that this right was not yet fully implemented, we highlight this study by the need to identify possible changes in the national scenario after the implementation of RC from the perspective of the presence of a full-time companion, aiming to estimate the proportion of women with a full-time companion in maternity hospitals linked to Rede Cegonha and comparing them between macro-regions in Brazil.

## Method

This is a cross-sectional study with a quantitative approach carried out nationwide. The second evaluation cycle of hospital services located in a health region with the RC action plan was from December 2016 to October 2017. This is an excerpt from the research entitled "Evaluation Practices in Delivery and Birth Care in Maternity Hospitals in Rede Cegonha", financed by the Ministry of Health (*Ministério da Saúde* - MS) and carried out in partnership with the Federal University of Maranhão (*Universidade Federal do Maranhão* - UFMA), with the National School of Health Public (*Escola Nacional de Saúde Pública* - ENSP) and Oswaldo Cruz Foundation (FIOCRUZ)[3].

All 606 public health establishments or those affiliated with the SUS that in 2015 were located in health regions with PAR-RC were eligible. Also, they should have the following inclusion criteria: 500 or more deliveries and in health regions with PAR-RC independently having resources or not (N=581); or less than 500 deliveries, in a health region with PAR-RC and having resources (N=25). This set of hospital establishments was responsible for 61.2% of deliveries in the SUS in 2017 (SINASC) and about 50% of deliveries performed in the country[13-16]. Of these, 86 establishments were located in the North, 174 in the Northeast, 224 in the Southeast, 81 in the South, and 41 in the Midwest.

We obtained this information through the linkage between the Live Birth Information System (*Sistema de Informações de Nascidos Vivos* - SINASC) and the National Registration of Health Establishments (*Cadastro Nacional de Estabelecimentos de Saúde* - CNES)[13-16].

We interviewed 10,665 puerperal women from all regions of Brazil whose delivery had taken place in the selected establishment from 00:00 am on the first day of the team's stay in the place until 11:59 pm on the last day of assessment stipulated for that maternity hospital.

In all regions, the number of postpartum women selected per hospital was proportional to their size (deliveries/year). Thus, we defined a fixed number of days of data collection according to the volume of deliveries in eligible health units. Thus, four days in the North region, two days in the Northeast and Southeast regions, five days in the South region, and seven days in the Midwest region. The sampling included all eligible postpartum women over several days of collection in all establishments that met the inclusion criteria, reducing the likelihood of selection bias.

We evaluated 1,996 women in the North region, 2,172 in the Northeast region, 2,526 in the Southeast, 2,109 in the South region, and 1,862 in the Midwest region. The sampling plan generated an over-representation of the North, South, and Midwest regions, corrected through a calibration procedure[4-5].

The sample of postpartum women was stratified by geographic macro-region. We calculated the minimum sample size of postpartum women in each region based on a 50% vaginal birth rate to detect differences of 5%, with a significance level of 5% and 80% power, totaling a minimum of 1,800 postpartum women for each macro-region, plus 10% for any losses. Vilela et al. detailed more information about the sample design[5].

We did not include women in clinical instability such as the use of oxygen therapy, sedation, intermediate units or in ICU, mental disorder, hearing loss, hospitalized due to abortion, or who did not understand Portuguese. Refusals represented 0.8% of the total eligible postpartum women (n=89).

Data collection was carried out in loco immediately after delivery, by a field team of trained health professionals with experience in maternity hospitals, reducing possible memory biases. An electronic form was used, on the web platform – REDCap (Research Electronic Data Capture). The questionnaire for postpartum women was based on documents and guidelines of the Ministry of Health[1-2,17-20].

For this study, the term hospitalization refers to the different moments in which the woman had or did not have a companion, considered as pre-delivery, delivery, and/or post-delivery. The variables included in this study were: maternal age (≤19 years old, 20 to 35 years old, >35 years old), self-reported skin color (white, black, brown-skinned, Asian, indigenous), education (≤ 4 years, 5- 9 years, 10-12 years, ≥ 13 years), current marital status (single, married/in a common-law marriage, separated/divorced/widowed), father´s age (≤19 years old, 20 to 50 years old, >50 years old), planned pregnancy (no, yes), type of pregnancy (single, twin), type of delivery (vaginal, forceps, cesarean), maternity allowed the presence of a companion (no, yes), the pregnant woman had a companion during hospitalization (no, yes), full-time companion (pre-delivery, delivery and post-delivery) (no, yes), at which time the companion was not allowed to be present (only in the pre-delivery, only in the delivery, only in the post-delivery period, pre-delivery and delivery, pre-delivery and post-delivery, delivery and post-delivery, pre-delivery, delivery and post-delivery), nighttime companion (no, yes), who was the companion (child's father/partner, friend, mother and, sister, doula, another person), reason reported by the puerperal woman for not having a companion (maternity prohibited, prohibition of male companions, companions only for adolescents, only companions over 18 years old, lack of knowledge of the law, did not want to have a companion, there was no companion, it was necessary to pay to have a companion, another reason).

The outcome of interest was obtained by the post-delivery woman's positive answer to the question: Did you have a full-time companion (pre-delivery, delivery, and post-delivery) in this maternity hospital? (yes, no).

We used Stata® software, version 14.0 for data analysis, using bivariate analyzes and calculating absolute and relative frequencies. All analyzes were calibrated to ensure that the distribution of the sampled post-delivery women matched the distribution of deliveries that took place in the 606 hospitals in 2017[4-5].

For data analysis, we compared the proportions and respective 95% confidence intervals (95% CI) of all variables between macro-regions using Wald's Chi-square test, considering an alpha of 5%, adjusted for the effect of the cluster as a methodological strategy to reduce possible errors in the variance estimates.

The research was approved by the Research Ethics Committee of the Federal University of Maranhão – UFMA and by the National School of Public Health Sérgio Arouca, CAAE 56389713.5.3001.5240, on December 14, 2016. All people interviewed signed the Informed Consent Form.

## Results

Most deliveries were in the Southeast region with 2,512 (23.7%). Mothers in the age group of 20 to 35 years old (n=7,292, 68.5%), brown skin color (n=6,000, 57.9%) were the most accompanied. However, in the South region, women had between 10 to 12 years of education (n=5,956, 56.2%), married/in common-law marriage/living with a partner (n=8,491, 78.2%) and with a vaginal delivery (=5,851, 55.3%) (Table 1).

Mothers were younger in the North (24.1%) and Northeast (23.6%); the Southeast had the highest proportion of single mothers (25.2%) and the proportion of cesarean sections in the

country remained high (42.9%), mainly in the North and Midwest regions.

Almost all women (n=10,017; 94.1%) reported that maternity allowed the presence of a companion at some point during hospitalization (pre-delivery, delivery, or post-delivery), while 71.2% (n= 7,503) of them had a full-time companion, with the highest proportion in the South region (81.3%) and the lowest proportion in the Midwest (62.0%) and North regions (69.1%) (Table 2).

When considering only puerperal women who did not have a full-time companion (n=3,131, 28.6%), the time of delivery was the most reported because the companion was not allowed (29.2%), predominantly in the North and Northeast regions. At night, 169 puerperal women (9.6%) reported that the maternity ward did not allow the presence of a companion. During hospitalization, the partner (43.7) was most frequently present, followed by the mother (33.2%).

When considering only women who did not have a companion, the most reported reason was not having someone to be with them, higher in the South region (33.3%), followed by the Southeast region (30.6%). In the North and Northeast regions, the absence of a companion was due to the prohibition of the presence of a companion by the maternity hospital, with 28.8% and 27.7%, respectively (Table 2).

Table 3 shows the sociodemographic and obstetric characteristics of puerperal women with and without a companion, compared by macro-region and by country. Most women who had a companion throughout the country belonged to the age group of 20 to 35 years old and brown skin color, between 10 to 12 years of study, with a partner, and who underwent vaginal delivery ($p<0.05$).

However, women over 35 years old, self-declared black, with ≤ 4 years of education, and separated/divorced/widowed were less accompanied in the Midwest and Southeast regions.

## Discussion

Our analyzes carried out by geographic region show an increase in the presence of full-time companions in maternity hospitals across the country after the implementation of the RC when compared to the study "Born in Brazil" of 2011, in which only 18.8% of women had a constant companion [6]. Women of mixed color, with higher education, married, and with a vaginal delivery were more frequently accompanied. However, in the Southeast and Midwest regions, self-declared black women, with low education, single or without a partner were less accompanied. The time of delivery was reported as the main period in which the presence of a companion was not allowed, with a predominance in the North and Northeast regions.

As a limitation of the study, there was the non-inclusion of the private sector and the restriction of the sample to puerperal women from establishments with PAR-RC, which may mean that extrapolations to Brazil must be analyzed with some care because in the maternity hospitals not included here, maybe the proportion of companions is lower due to limited financial resources – since establishments linked to RC had greater investments to adapt the structure and changes in the work process. However, health establishments linked to RC accounted for 61.2% of SUS deliveries in 2017, in Brazil[5].

We believe that the inclusion of private maternity hospitals in this study would achieve more satisfactory results regarding the presence of a full-time companion in the maternity ward, due to greater monitoring and effective compliance with the norms and rights for patients in these health services.

We highlight nationwide results as positive aspects, with representation by macro-regions, obtained after the implementation of RC and best practices in delivery and birth care, which allowed us to observe the implementation of this policy of the right to a full-time companion in maternity hospitals.

When compared to the study "Born in Brazil"[3,6], where most unaccompanied women were black, with less education and single registered in the Northeast and Midwest regions, this study showed a reduction in these characteristics in the Northeast region, increasing in the Southeast and remaining high in the Midwest.

Results of international studies conducted in Ecuador[21], Kenya[22], Israel, and Syria[23] highlight that white, literate, wealthy, and employed women were more accompanied. This shows social discrimination in childbirth care, suggesting two types of inequities: racial and educational, in a greater or lesser proportion, depending on the level of regional development. In Brazil, these data violate the principles of equity in health care, often linked to social hierarchies, including dimensions such as race/skin color, ethnicity, education, marital status, social class, and others[24].

**Table 1.** Sociodemographic and obstetric characteristics of puerperal women having their delivery in health units linked to the Rede Cegonha, according to macro-regions. Brazil, 2016-2017.

| | N[1] (n=1,996) | | | NE[1] (n=2,172) | | | SE[1] (n=2,526) | | | S[1] (n=2,109) | | | CO[1] (n=1,862) | | | TOTAL (n=10,665) | | | p-value |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | % | IC95% | F | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | |
| Total deliveries | 1,985 | 18.7 | . | 2,137 | 20,1 | . | 2,512 | 23.7 | . | 2,105 | 19.9 | . | 1.862 | 17.6 | . | 10,601 | 100.0 | . | <0.01 |
| Mother´s age | | | | | | | | | | | | | | | | | | | <0.01 |
| ≤19 years old | 481 | 24.1 | 22.2-26.1 | 521 | 23.6 | 21.9-25.6 | 453 | 17.5 | 16.0-19.1 | 396 | 18.5 | 16.9-20.3 | 354 | 19.0 | 17.0-21.2 | 2,205 | 20.6 | 19.7-21.5 | |
| 20 to 35 years old | 1,352 | 67.7 | 65.5-69.8 | 1,439 | 66.8 | 64.6-68,8 | 1,749 | 69.8 | 67.8-71.6 | 1,439 | 68.7 | 66.6-70.7 | 1.313 | 70.5 | 67.9-72.9 | 7,292 | 68.5 | 67.4-69.5 | |
| >35 years old | 163 | 8.2 | 7.1-9.5 | 212 | 9.6 | 8.4-11.0 | 324 | 12.7 | 11.4-14.2 | 274 | 12.8 | 11.4-14.3 | 195 | 10.5 | 8.9- 12.4 | 1,168 | 10.9 | 10.3-11.7 | |
| Mother´s skin color | | | | | | | | | | | | | | | | | | | <0.01 |
| White | 237 | 11.9 | 10.5-13.5 | 345 | 15.9 | 14.4-17.6 | 743 | 29.4 | 27.6-31.4 | 1,351 | 63.3 | 61.1-65.5 | 328 | 18.3 | 16.3-20.5 | 3,004 | 25.8 | 24.8-26.7 | |
| Black | 165 | 8.4 | 7.2-9.8 | 317 | 14.7 | 13.2-16.3 | 378 | 14.9 | 13.5-16.5 | 213 | 10.3 | 9.0-11.8 | 232 | 12.1 | 10.6-13.7 | 1,305 | 13.2 | 12.5-14.0 | |
| Brown-skinned | 1,521 | 76.1 | 74.1-77.9 | 1,417 | 65.4 | 63.2-67.4 | 1,353 | 53.6 | 51.5-55.6 | 518 | 24.9 | 23.0-26.9 | 1.191 | 63.6 | 61.0-66.2 | 6,000 | 57.9 | 56.8-59.0 | |
| Asian | 31 | 1.6 | 1.1-2.3 | 45 | 1.9 | 1.4-2.6 | 28 | 1.1 | 0.7-1.8 | 13 | 0.7 | 0.4-1.2 | 70 | 3.5 | 2.7-4.4 | 187 | 1.6 | 1.3-1.9 | |
| Indigenous | 31 | 1.4 | 1.0-2.1 | 21 | 1.0 | 0.7-1.6 | 7 | 0.3 | 0.1-0.5 | 6 | 0.3 | 0.1-0.6 | 19 | 0.9 | 0.6-1.4 | 84 | 0.7 | 0,5-0,9 | |
| No information | 11 | 0.6 | 0.3-1.0 | 25 | 1.1 | 0.7-1.7 | 17 | 0.7 | 0.4-1.1 | 8 | 0.5 | 0.2-1.1 | 22 | 1.6 | 0.7-3.5 | 83 | 0.8 | 0.6-1.1 | |
| Years of Education | | | | | | | | | | | | | | | | | | | <0.01 |
| ≤ 4 years | 127 | 6.3 | 5.3-7.5 | 189 | 9.0 | 7.7-10.3 | 85 | 3.4 | 2.7-4.3 | 99 | 4.9 | 4.0-6.0 | 71 | 3.7 | 2.9-4.7 | 571 | 5.7 | 5.2-6.3 | |
| 5-9 years | 672 | 34.1 | 31.9-36.3 | 745 | 33.8 | 31.7-35.9 | 716 | 28.2 | 26.4-30.1 | 726 | 34.5 | 32.4-36.7 | 565 | 30.6 | 28.2-33.2 | 3,424 | 31.6 | 30.6-32.7 | |
| 10-12 years | 1,024 | 50.9 | 48.7-53.2 | 1,133 | 52.4 | 50.2-54,6 | 1,555 | 61.1 | 59.1-63.1 | 1,156 | 54.8 | 52.5-57.0 | 1.088 | 58.8 | 56.1-61.3 | 5,956 | 56.2 | 55.0-57.3 | |
| ≥ 13 years | 159 | 8.0 | 3.8-5.7 | 99 | 4.6 | 3.8-5.7 | 162 | 6.9 | 5.9-8.1 | 127 | 5.7 | 4.8-6.8 | 137 | 6.8 | 5.8-8.1 | 684 | 6.2 | 5.7-6.8 | |
| No information | 13 | 0.7 | 0.4-1.2 | 6 | 0.2 | 0.1-0.5 | 8 | 0.3 | 0.1-0.6 | 1 | <0.01 | <0.01-0.4 | 1 | <0.01 | <0.01-0.3 | 29 | 0.3 | 0.2- 0.4 | |
| Single | | | | | | | | | | | | | | | | | | | <0.01 |
| Married/ Common-law marriage | 356 | 18.0 | 16.3-19.8 | 361 | 16.7 | 15.1-18.4 | 625 | 25.2 | 23.4-27.1 | 310 | 14.8 | 13.3-16.5 | 337 | 18.0 | 16.0-20.1 | 1,989 | 19.9 | 19.0-20.8 | |
| Separated/ Divorced/idow | 1,613 | 80.7 | 78.8-82.4 | 1,748 | 80.4 | 78.6-82.1 | 1,857 | 73.2 | 71.3-75.0 | 1,774 | 84.0 | 82.2-85.6 | 1.499 | 80.6 | 78.4-82.6 | 8,491 | 78.2 | 77.3-79.1 | |
| | 22 | 1.1 | 0.7-1.7 | 50 | 2.2 | 1.6-3.0 | 37 | 1.4 | 1.0-1.9 | 24 | 1.1 | 0.7-1.8 | 26 | 1.4 | 0.9-2.1 | 159 | 1.5 | 1.3-1.9 | |
| Other | 1 | <0.01 | <0.01-0.3 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 1 | <0.01 | <0.01-0.01 | |
| No information | 3 | 0.1 | <0.01-0.5 | 13 | 0.7 | 0.4-1.2 | 6 | 0.2 | 0.1-0.5 | 1 | <0.01 | <0.01-0.3 | 0 | 0.0 | 0.0 | 23 | 0.3 | 0.2- 0.5 | |

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**Table 1.** Sociodemographic and obstetric characteristics of puerperal women having their delivery in health units linked to the Rede Cegonha, according to macro-regions. Brazil, 2016-2017.

| | N[1] (n=1,996) | | | NE[1] (n=2,172) | | | SE[1] (n=2,526) | | | S[1] (n=2,109) | | | CO[1] (n=1,862) | | | TOTAL (n=10,665) | | | p-value |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | % | IC95% | F | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | |
| Father´s age | | | | | | | | | | | | | | | | | | | <0.01 |
| ≤19 years old | 151 | 7.9 | 6.8- 9.3 | 177 | 8.3 | 7.2-9.7 | 153 | 6.1 | 5.2-7.2 | 137 | 6.5 | 5.5-7.7 | 108 | 5.7 | 4.7-7.0 | 726 | 7.1 | 6.5- 7.7 | |
| 20 to 50 years old | 1,710 | 88.8 | 87.2-90.1 | 1,898 | 89.2 | 87.7-90.5 | 2,285 | 92.2 | 91.0-93.3 | 1,915 | 91.8 | 90.4-92.9 | 1.687 | 92.5 | 91.1-93.6 | 9,495 | 90.8 | 90.1-91.4 | |
| >50 years old | 65 | 3.3 | 2.6-4.2 | 53 | 2.5 | 1.9-3.2 | 38 | 1.7 | 1.2-2.3 | 36 | 1.7 | 1.2-2.4 | 34 | 1.8 | 1.3-2.5 | 226 | 2.1 | 1.9- 2.5 | |
| Planned pregnancy | | | | | | | | | | | | | | | | | | | <0.01 |
| No | 1,361 | 68.1 | 66.0-70.2 | 1,343 | 61.8 | 59.6-63.9 | 1,654 | 65.1 | 63.2-67.1 | 1,248 | 59.4 | 57.2-61.5 | 1.203 | 65.7 | 63.2-68.0 | 6,809 | 63.9 | 62.8-65.0 | |
| Yes | 630 | 31.7 | 29.6-33.8 | 825 | 38.1 | 36.0-40.3 | 871 | 34.8 | 32.8-36.8 | 856 | 40.4 | 38.2-42.6 | 651 | 33.9 | 31.6-36.3 | 3,833 | 36.0 | 35.0-37.0 | |
| No information | 5 | 0.2 | <0.01-0.6 | 2 | 0.1 | <0.01-0.5 | 1 | <0.01 | <0.01-0.3 | 5 | 0.2 | <0.01-0.6 | 7 | 0.4 | 0.2-0.9 | 20 | 0.1 | <0.01-0.2 | |
| Type of pregnancy | | | | | | | | | | | | | | | | | | | 0.41 |
| Single | 1,976 | 99.0 | 98.4-99.4 | 2,150 | 99.1 | 98.6-99.4 | 2,493 | 98.6 | 98.0-99.0 | 2,081 | 98.7 | 98.0-99.1 | 1.840 | 98.9 | 98.3-99.3 | 10,540 | 98.8 | 98.6-99.1 | |
| Twin (two or more) | 20 | 1.0 | 0.6- 1.5 | 22 | 0.9 | 0.6-1.4 | 32 | 1.3 | 0.9-2.0 | 28 | 1.3 | 0.9-2.0 | 22 | 1.1 | 0.7-1.7 | 124 | 1.1 | 0.9-1.4 | |
| No information | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 1 | <0.01 | <0.01-0.3 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 1 | <0.01 | <0.01-0.1 | |
| Type of delivery | | | | | | | | | | | | | | | | | | | <0.01 |
| Vaginal delivery | 1,036 | 52.6 | 50.4-54.9 | 1,170 | 54.6 | 52.4-56.7 | 1,460 | 57.1 | 55.0-59.1 | 1,187 | 56.6 | 54.3-58.7 | 998 | 52.4 | 49.7-55.1 | 5,851 | 55.3 | 54.1-56.4 | |
| Forceps delivery | 1 | <0.01 | <0.01-0.4 | 6 | 0.3 | 0.1-0.7 | 29 | 1.1 | 0.7-1.7 | 17 | 0.8 | 0.5-1.3 | 2 | 0.1 | <0.01-0.4 | 55 | 0.6 | 0.4- 0.8 | |
| Caesarean | 938 | 46.3 | 44.1-48.6 | 974 | 44.2 | 42.0-46.4 | 1,002 | 40.4 | 38.4-42.5 | 877 | 41.3 | 39.1-43.5 | 839 | 46.4 | 43.7-49.0 | 4,630 | 42.9 | 41.9-44.1 | |
| No information | 20 | 1.0 | 0.6-1.5 | 22 | 0.9 | 0.6-1.4 | 33 | 1.4 | 1.0-2.0 | 28 | 1.3 | 0.9-2.0 | 23 | 1.1 | 0.8-1.7 | 126 | 1.2 | 0.9-1.4 | |

[1]N (North), NE (Northeast), SE (Southeast), S (South), MW (Midwest).

Source: Authors.

**Table 2.** Distribution of the presence of the full-time companion in health establishments linked to the Rede Cegonha. Brazil, 2016-2017.

| | N[1] (n=1,996) | | | NE[1] (n=2,172) | | | SE[1] (n=2,526) | | | S[1] (n=2,109) | | | CO[1] (n=1,862) | | | TOTAL (n=10,665) | | | p-value |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | |
| Maternity allowed the presence of a companion | | | | | | | | | | | | | | <0.01 | | | | | <0,01 |
| No | 120 | 5.8 | 4.9- 7.0 | 173 | 7.5 | 6.4-8.7 | 112 | 4.4 | 3.6-5.3 | 39 | 1.9 | 1.4-2.6 | 183 | 9.9 | 8.1-12.1 | 627 | 5.7 | 5.2-6.2 | |
| Yes | 1,874 | 94.1 | 93.0-95.1 | 1,994 | 92.2 | 91.0-93.3 | 2,412 | 95.5 | 94.6-96.3 | 2,069 | 98.0 | 97.3-98.6 | 1,668 | 89.6 | 87.4-91.4 | 10,017 | 94.1 | 93.6-94.6 | |
| No information | 1 | <0.01 | <0.01-0.4 | 5 | 0.3 | 0.1-0.8 | 2 | <0.01 | <0.01-0.3 | 1 | <0.01 | <0.01-0.9 | 11 | 0.5 | 0.3-0.9 | 20 | 0.2 | <0.01-0.3 | |
| Total | 1,995 | 13.7 | 13.5-13.8 | 2,172 | 31.1 | 30.7-31.4 | 2,526 | 36.5 | 36.1-36.9 | 2,109 | 11.1 | 10.9-11.2 | 1,862 | 7.6 | 7.4-7.9 | 10,664 | 100.0 | 100.0 | |
| The pregnant woman had a companion during hospitalization | | | | | | | | | | | | | | | | <0.01 | | | <0,01 |
| Não/Não se aplica | 200 | 9.7 | 8.5- 11.1 | 278 | 12.2 | 10.9-13.7 | 298 | 11.6 | 10.4-13.0 | 142 | 6.7 | 5.7- 7.9 | 338 | 17.4 | 15.3-19.7 | 1,256 | 11.4 | 10.8-12.2 | |
| Sim | 1,793 | 90.2 | 88.8-91.5 | 1,892 | 87.7 | 86.2-89.0 | 2,225 | 88.4 | 86.2-89.0 | 1,967 | 93.3 | 92.1-94.3 | 1,524 | 82.6 | 80.3-84.7 | 9,401 | 88.5 | 87.8-89.2 | |
| No information | 1 | <0.01 | <0.01-0.4 | 2 | 0.1 | <0.01-0.5 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 3 | <0.01 | <0.01-0.2 | |
| Total | 1,994 | 13.7 | 13.5-13.8 | 2,172 | 31.1 | 30.7-31.5 | 2,523 | 35.6 | 36.1-36.9 | 2,109 | 11.1 | 10.9-11.2 | 1,862 | 7.6 | 7.5-7.9 | 10,660 | 100.0 | 100.0 | |
| Presence of full-time companion | | | | | | | | | | | | | | | | <0.01 | | | <0,01 |
| Não/Não se aplica | 642 | 30.7 | 28.7-32.8 | 665 | 29.1 | 27.2-31.2 | 700 | 28.3 | 26.5-30.2 | 396 | 18.6 | 16.9-20.3 | 738 | 37.8 | 35.2-40.5 | 3,131 | 28.6 | 27.5-29.6 | |
| Sim | 1,347 | 69.1 | 67.0-71.0 | 1,511 | 70.6 | 68.5-72.5 | 1,815 | 71.5 | 69.6-73.3 | 1,710 | 81.3 | 79.6-83.0 | 1,120 | 62.0 | 59.3-64.6 | 7,503 | 71.2 | 70.2-72.2 | |
| No information | 4 | 0.2 | <0.01-0.6 | 6 | 0.3 | 0.1-0.6 | 5 | 0.2 | <0.01-0.5 | 2 | <0.01 | <0.01-0.3 | 4 | 0.2 | <0.01-0.6 | 21 | 0.2 | 0.1-0.3 | |
| Total | 1,993 | 13.7 | 13.5-13.8 | 2,172 | 31.1 | 30.7-31.5 | 2,520 | 36.5 | 36.1-36.8 | 2,108 | 11.1 | 10.9-11.2 | 1,862 | 7.7 | 7.5-7.9 | 10,665 | 100.0 | 100.0 | |
| Time when the companion was not allowed to be present | | | | | | | | | | | | | | 0.09 | | | | | 0,09 |
| Only in pre-delivery | 22 | 5.0 | 3.3-7.6 | 43 | 11.3 | 8.4-15.1 | 56 | 14.8 | 11.4-19.0 | 41 | 16.9 | 12.6-22.3 | 41 | 11.9 | 8.6- 16.0 | 203 | 11.9 | 10.3-13.8 | |
| Only in delivery | 172 | 40.9 | 35.9-45.8 | 142 | 39.8 | 34.6-45.3 | 53 | 15.2 | 11.4-19.8 | 44 | 20.4 | 15.5-26.3 | 127 | 31.8 | 26.0-38.2 | 538 | 29.2 | 26.8-31.7 | |
| Only in post-delivery | 53 | 12.3 | 9.5-15.9 | 22 | 5.8 | 3.8-8.7 | 174 | 44.9 | 39.6-50.4 | 48 | 20.3 | 15.5-26.0 | 39 | 10.2 | 7.4- 13.8 | 336 | 22.1 | 20.0-24.3 | |
| Pre-delivery and delivery | 31 | 6.5 | 4.5-9.1 | 18 | 4.6 | 2.8-7.3 | 10 | 3.4 | 1.7- 6.3 | 8 | 3.7 | 1.8-7.4 | 12 | 3.8 | 2.0-7.1 | 79 | 4.3 | 3.3-5.6 | |
| Pre-delivery and post-delivery | 40 | 9.7 | 7.1-13.1 | 6 | 1.9 | 0.8-4.2 | 57 | 14.7 | 11.2-19.0 | 39 | 17.1 | 12.7-22.7 | 19 | 4.6 | 2.9-7.2 | 161 | 9.1 | 7.6- 10.8 | |
| Delivery and post-delivery | 55 | 11.8 | 9.1- 15.1 | 74 | 22.4 | 18.0-27.6 | 18 | 5.2 | 3.1-8.3 | 34 | 12.7 | 9.1- 17.3 | 100 | 23.6 | 19.4-28.5 | 281 | 14.0 | 12.2-16.0 | |

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**Table 2.** Distribution of the presence of the full-time companion in health establishments linked to the Rede Cegonha. Brazil, 2016-2017.

| | N[1] (n=1,996) | | | NE[1] (n=2,172) | | | SE[1] (n=2,526) | | | S[1] (n=2,109) | | | CO[1] (n=1,862) | | | TOTAL (n=10,665) | | | p-value |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | |
| Pre-delivery, delivery and post-delivery | 61 | 13.8 | 10.8-17.6 | 59 | 14.2 | 11.0-18.1 | 8 | 1.8 | 0.9-3.7 | 20 | 8.9 | 5.8- 13.5 | 52 | 14.1 | 10.7-18.4 | 200 | 9.4 | 8.1-10.9 | |
| Total | 434 | 17.3 | 16.8-17.9 | 364 | 30.9 | 30.0-31.8 | 376 | 34.8 | 33.8-35.9 | 234 | 7.6 | 7.3- 7.8 | 390 | 9.4 | 8.8- 10.0 | 1,789 | 100.0 | 100.0 | |
| Companion at night | | | | | | | | | | | | | | | | | <0.01 | | <0,01 |
| No | 48 | 11.0 | 8.3-14.4 | 5 | 1.5 | 0.6-3.8 | 72 | 17.5 | 14.0-21.7 | 17 | 6.1 | 3.8-9.7 | 27 | 5.9 | 4.0-8.5 | 169 | 9.6 | 8.1-11.2 | |
| Yes | 390 | 89.0 | 85.6-91.7 | 366 | 98.5 | 96.2-99.4 | 322 | 82.5 | 78.3-86.0 | 235 | 93.9 | 90.3-96.2 | 369 | 94.1 | 91.5-96.0 | 1,682 | 90.4 | 88.8-91.9 | |
| Total | 438 | 16.9 | 16.4-17.5 | 371 | 30.7 | 29.8-31.6 | 394 | 35.4 | 34.4-36.4 | 252 | 7.8 | 7.5-8.0 | 396 | 9.2 | 8.7-9.8 | 1,851 | 100.0 | 100.0 | |
| Companion | | | | | | | | | | | | | | | | | | | |
| Child's father/ Partner | 483 | 27.7 | 25.6-29.9 | 394 | 21.1 | 19.2-23.0 | 1,306 | 58.2 | 56.0-60.4 | 1,514 | 76.2 | 74.1-78.2 | 684 | 45.8 | 42.9-48.7 | 4,381 | 43.7 | 42.6-44.8 | <0.01 |
| Friend | 164 | 8.9 | 7.7-10.3 | 233 | 12.2 | 10.7-13.9 | 111 | 5.2 | 4.2-6.2 | 75 | 3.8 | 3.0-4.7 | 111 | 7.6 | 6.2- 9.2 | 694 | 7.9 | 7.2-8.5 | <0.01 |
| Mother | 639 | 35.5 | 33.2-37.8 | 755 | 39.5 | 37.2-41.8 | 625 | 28.3 | 26.3-30.3 | 571 | 28.3 | 26.3-30,5 | 528 | 34.4 | 31.8-37.0 | 3,118 | 33.2 | 33.1-34.3 | <0.01 |
| Sister | 291 | 16.1 | 14.4-17.9 | 326 | 18.0 | 16.2-19.9 | 261 | 11.8 | 10.5-13.3 | 167 | 8.3 | 7.1-9.6 | 197 | 12.3 | 10.7-14.1 | 1,242 | 13.9 | 13.1-14.8 | <0.01 |
| Doula | 1 | <0.01 | <0.01-0.3 | 7 | 0.3 | 0.1-0.7 | 8 | 0.4 | 0.2-0.8 | 3 | 0.1 | <0.01-0.4 | 2 | 0.1 | <0.01-0.4 | 21 | 0.3 | 0.2- 0.4 | 0.16 |
| Other person | 540 | 30.3 | 28.1-32.5 | 667 | 35.2 | 33.0-37.5 | 464 | 20.6 | 18.9-22.5 | 364 | 18.4 | 16.7-20.3 | 373 | 23.9 | 21.7-26.3 | 2,408 | 26.5 | 25.4-27.5 | <0.01 |
| No information | 3 | 0.2 | <0.01-0.6 | 4 | 0.2 | <0.01-0.5 | 5 | 0.2 | <0.01-0.5 | 1 | <0.01 | <0.01-0.3 | 5 | 0.4 | 0.1-0.9 | 18 | 0.2 | 0.1- 0.3 | 0.42 |
| Total | 1,793 | 13.9 | 13.8-14.1 | 1,892 | 30.8 | 30.4-31.2 | 2,224 | 36.4 | 36.0-36.8 | 1,967 | 11.7 | 11.5-11.8 | 1,524 | 7.2 | 7.0-7.3 | 9,400 | 100.0 | 100.0 | |
| Reason for companion's absence | | | | | | | | | | | | | | | | | | | |
| Maternity did not allow | 66 | 35.4 | 28.7-42.6 | 88 | 30.3 | 25.0-36.3 | 46 | 15.6 | 11.7-20.4 | 14 | 10.1 | 6.0- 16.6 | 77 | 25.0 | 18.5-32.7 | 291 | 23.4 | 20.8-26.3 | <0.01 |
| No male companion allowed | 52 | 25.2 | 19.6-31.9 | 55 | 19,9 | 15.4-25.3 | 22 | 7.4 | 4,9- 11,1 | 7 | 5.0 | 2.3-10.3 | 38 | 11.4 | 8.1-15.7 | 174 | 13.9 | 11.9-16.2 | <0.01 |

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**Table 2.** Distribution of the presence of the full-time companion in health establishments linked to the Rede Cegonha. Brazil, 2016-2017.

| | N[1] (n=1,996) | | | NE[1] (n=2,172) | | | SE[1] (n=2,526) | | | S[1] (n=2,109) | | | CO[1] (n=1,862) | | | TOTAL (n=10,665) | | | p-value |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | f | % | CI95% | |
| Companion only for adolescents | 14 | 7.4 | 4.3- 12.3 | 5 | 1.4 | 0.6- 3.4 | 7 | 2.3 | 1.1-4.8 | 0 | 0.0 | 0.00 | 3 | 0.8 | 0.2- 2.4 | 29 | 2.3 | 1.5-3.4 | <0.01 |
| Only companion over 18 years old | 5 | 3.0 | 1.2- 7.1 | 7 | 2.4 | 1.1- 5.1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 11 | 3.0 | 1.7- 5.5 | 23 | 1.5 | 0.9-2.4 | <0.01 |
| The pregnant woman did not know she could have a companion | 5 | 3.2 | 1.3- 7.5 | 16 | 5.9 | 3.5- 9.8 | 26 | 8.7 | 5.8- 2.9 | 4 | 3.5 | 1.3-8.9 | 18 | 5.0 | 3.2- 8.0 | 69 | 6.4 | 4.9-8.3 | 0.18 |
| She did not want to have a companion | 10 | 5.0 | 2.6- 9.2 | 18 | 5.9 | 3.7-9.4 | 30 | 9.4 | 6.6- 13.4 | 23 | 17.5 | 11.7-25.4 | 41 | 11.6 | 8.4-15.6 | 122 | 8.5 | 7.0-10.4 | <0.01 |
| There was no one to be with her | 41 | 20.5 | 15.4-26.8 | 47 | 17.6 | 13.3-22.8 | 100 | 34.8 | 29.2-40.7 | 53 | 36.0 | 28.4-44.4 | 96 | 27.2 | 22.1-33.0 | 337 | 26.7 | 23.9-29.7 | <0.01 |
| She had to pay to have a companion | 0 | 0.0 | 0.0 | 0 | 0.0 | 0,0 | 1 | 0.1 | <0.01-2.8 | 0 | 0.0 | 0,0 | 2 | <0.01 | 0.1-1.7 | 3 | 0.2 | <0.01-0.9 | <0.01 |
| Other reasons | 32 | 15.1 | 10.8-20.8 | 74 | 27.9 | 22.5-33.9 | 87 | 28.8 | 23.7-34.5 | 55 | 38.4 | 30.6-46.9 | 84 | 26.8 | 20.3-46.9 | 332 | 27.3 | 24.4-30.4 | <0.01 |
| No information | 4 | 2.0 | 0.7-5.2 | 8 | 4.0 | 1.9-8.3 | 8 | 2.4 | 1.2- 4.9 | 3 | 2.1 | 0.7- 6.4 | 9 | 2.5 | 1.3-4.8 | 32 | 2.9 | 1.9-4.4 | 0.92 |
| Total | 200 | 11.7 | 11.3-12.1 | 273 | 32.7 | 31.6-33.8 | 299 | 37.6 | 36.5-38.7 | 141 | 6.5 | 6.2-6.8 | 327 | 11.5 | 10.5-12.5 | 1,240 | 100.0 | 100.0 | |

[1] N (North), NE (Northeast), SE (Southeast), S (South), MW (Midwest).

Source: Authors.

**Table 3.** Sociodemographic and obstetric characteristics of mothers with and without a companion, who had a delivery in health establishments linked to the Rede Cegonha, compared by macro-region. Brazil, 2016-2017.

| | N[1] (n=1,872) | | | | NE[1] (n= 1,992) | | | | SE[1] (n=2,409) | | | | S[1] (n=2,069) | | | | CO[1] (n=1,668) | | | | TOTAL (n=10,010) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value |
| Maher´s age (years old) | | | | <0.01 | | | | <0.01 | | | | <0.01 | | | | <0.01 | | | | 0.01 | | | | <0.01 |
| ≤19 | 452 | 98.0 | 96.2-99.0 | | 478 | 97.9 | 96.1-98.8 | | 438 | 95.7 | 93.4-97.2 | | 392 | 98.4 | 96.5-99.2 | | 325 | 94.8 | 91.9-96.6 | | 2,085 | 97.0 | 96.1-97.7 | |
| 20 to 35 | 1,267 | 95.4 | 94.1-96.4 | | 1,318 | 94.7 | 93.3-95.8 | | 1,666 | 92.5 | 91.1-93.8 | | 1,409 | 94.5 | 93.2-95.6 | | 1,180 | 92.2 | 90.5-93.6 | | 6,84 | 93.8 | 93.1-94.4 | |
| >35 | 153 | 94.1 | 88.5-97.5 | | 196 | 92.0 | 87.3-95.0 | | 305 | 87.8 | 83.5-91.1 | | 268 | 93.8 | 89.9-96.3 | | 163 | 87.0 | 81.0-91.3 | | 1,085 | 90.3 | 88.1-92.2 | |
| Mother´s skin color | | | | 0.85 | | | | <0.01 | | | | <0.01 | | | | 0.32 | | | | 0.45 | | | | 0.02 |
| White | 217 | 95.8 | 92.0-97.9 | | 317 | 95.7 | 92.7-97.4 | | 709 | 92.7 | 90.4-94.5 | | 1,328 | 95.9 | 94.7-96.9 | | 294 | 93.4 | 89.5-95.9 | | 2,865 | 94.4 | 93.3-95.3 | |
| Black | 155 | 96.8 | 92.9-98.6 | | 300 | 93.2 | 89.5-95.7 | | 359 | 92.1 | 88.9-94.3 | | 206 | 93.0 | 88.3-95.8 | | 205 | 89.0 | 84.1-92.5 | | 1,225 | 92.7 | 91.0-94.2 | |
| Brown-skinned | 1,431 | 96.1 | 94.9-97.0 | | 1,291 | 95.4 | 94.1-96.4 | | 1,291 | 92.3 | 90.6-93.7 | | 509 | 94.9 | 92.7-96.4 | | 1,070 | 92.6 | 90.9-94.0 | | 5,592 | 94.2 | 93.4-94.9 | |
| Asian | 31 | 94.1 | 79.1-98.5 | | 42 | 94.9 | 81.3-98.7 | | 27 | 96.8 | 80.1-99.6 | | 12 | 82.3 | 37.4-97.3 | | 61 | 92.1 | 82.2-96.7 | | 173 | 94.2 | 88.9-97.1 | |
| Indigenous | 28 | 89.1 | 73.6-96.0 | | 19 | 100.0 | 100.0 | | 6 | 86.9 | 43.2-98.3 | | 6 | 66.9 | 26.9-91.7 | | 18 | 84.0 | 60.2-94.8 | | 77 | 92.2 | 85.1-96.1 | |
| No information | 10 | 90.3 | 53.9-98.7 | | 21 | 100.0 | 100.0 | | 17 | 100.0 | 100.0 | | 8 | 92.5 | 58.8-99.1 | | 20 | 94.1 | 75.4-98.8 | | 76 | 97.7 | 93.5-99.2 | |
| Education level of the mother (years) | | | | 0.33 | | | | <0.01 | | | | <0.01 | | | | <0.01 | | | | <0.01 | | | | <0.01 |
| ≤ 4 | 113 | 92.3 | 86.1-95.9 | | 170 | 92.5 | 87.3-95.6 | | 80 | 85.7 | 75.6-92.0 | | 95 | 89.9 | 82.4-94.4 | | 63 | 80.4 | 68.4-88.6 | | 521 | 90.1 | 86.8-92.6 | |
| 5-9 | 624 | 96.0 | 94.2-97.3 | | 687 | 93.3 | 91.1-95.0 | | 677 | 88.6 | 85.8-91.0 | | 714 | 92.8 | 90.6-94.5 | | 498 | 91.0 | 88.2-93.2 | | 3,200 | 91.9 | 90.7-93.0 | |
| 10-12 | 972 | 96.5 | 95.1-97.5 | | 1,038 | 96.5 | 95.1-97.5 | | 1,486 | 94.4 | 93.0-95.4 | | 1,136 | 96.7 | 95.4-97.6 | | 982 | 93.2 | 91.5-94.6 | | 5,614 | 95.4 | 94.7-96.0 | |
| ≥ 13 | 151 | 96.3 | 91.9-98.4 | | 92 | 100.0 | 100.0 | | 159 | 95.6 | 90.5-98.0 | | 123 | 99.1 | 93.8-99.9 | | 124 | 94.9 | 89.6-97.6 | | 649 | 97.0 | 95.0-98.3 | |
| No information | 11 | 72.5 | 40.2-91.2 | | 5 | 81.8 | 32.8-97.6 | | 7 | 76.6 | 38.6-94.4 | | 1 | 100.0 | 100.0 | | 1 | 100.0 | 100.0 | | 25 | 77.6 | 57.0-90.0 | |

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**Table 3.** Sociodemographic and obstetric characteristics of mothers with and without a companion, who had a delivery in health establishments linked to the Rede Cegonha, compared by macro-region. Brazil, 2016-2017.

| | N[1] (n=1,872) | | | | NE[1] (n= 1,992) | | | | SE[1] (n=2,409) | | | | S[1] (n=2,069) | | | | CO[1] (n=1,668) | | | | TOTAL (n=10,010) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value |
| Current maternal marital status | | | | <0.01 | | | | 0.39 | | | | 0.09 | | | | <0.01 | | | | 0.02 | | | | <0.01 |
| Single | 334 | 96,2 | 93.5-97.8 | | 330 | 94.8 | 91.8-96.8 | | 593 | 89.8 | 87.0-92.1 | | 304 | 94.0 | 90.3-96.4 | | 292 | 88.6 | 84.5-91.7 | | 1,853 | 92.2 | 90.7-93.5 | |
| Married/ Common-law marriage | 1,513 | 95,9 | 94.8-96.8 | | 1,602 | 95.5 | 94.4-96.4 | | 1,776 | 93.5 | 92.1-94.6 | | 1,740 | 95.4 | 94.3-96.3 | | 1,352 | 93.0 | 91.5-94.2 | | 7,983 | 94.7 | 94.0-95.2 | |
| Separated/ Divorced/ Widow | 20 | 91,2 | 72.3-98.0 | | 47 | 86.4 | 72.5-93.9 | | 34 | 90.6 | 73.5-97.1 | | 24 | 92.9 | 74.9-98.3 | | 24 | 92.4 | 73.5-98.1 | | 149 | 89.2 | 81.9-93.8 | |
| Other | 1 | 100,0 | 100.0 | | , | . | . | | , | . | . | | , | . | . | | , | . | . | | 1 | 100.0 | 100.0 | |
| No information | 3 | 100,0 | 100.0 | | 13 | 92.5 | 61.4-99.0 | | 5 | 82.3 | 34.0-97.7 | | 1 | 100.0 | 100.0 | | , | . | . | | 22 | 91.0 | 69.6-97.8 | |
| Father´s age (years old) | | | | 0.13 | | | | <0.01 | | | | 0.04 | | | | <0.01 | | | | 0.42 | | | | <0.01 |
| ≤19 | 146 | 96,7 | 92.1-98.6 | | 160 | 97.6 | 93.3-99.1 | | 151 | 95.9 | 91.1-98.2 | | 137 | 98.8 | 95.4-99.7 | | 97 | 91.8 | 84.8-95.7 | | 691 | 96.7 | 94.8-97.9 | |
| 20 to 50 | 1,604 | 96,3 | 95.2-97.1 | | 1,746 | 95.2 | 94.0-96.1 | | 2,175 | 92.8 | 91.5-93.8 | | 1,875 | 95.1 | 94.0-96.0 | | 1,513 | 92.7 | 91.3-93.9 | | 8,913 | 94.2 | 93.6-94.8 | |
| >50 | 57 | 86,2 | 75.1-92.8 | | 48 | 100.0 | 100.0 | | 37 | 78.4 | 60.1-89.7 | | 36 | 92.3 | 78.4-97.5 | | 31 | 82.6 | 65.7-92.2 | | 209 | 89.0 | 82.6-93.2 | |
| Planned pregnancy | | | | 0.51 | | | | 0.02 | | | | 0.01 | | | | 0.12 | | | | 0.99 | | | | <0.01 |
| No | 1,279 | 95,7 | 94.4-96.7 | | 1,243 | 94.4 | 92.9-95.6 | | 1,574 | 91.6 | 90.1-93.0 | | 1,220 | 94.6 | 93.2-95.8 | | 1,083 | 92.3 | 90.5-93.7 | | 6,399 | 93.4 | 92.7-94.1 | |
| Yes | 590 | 96,5 | 94.7-97.7 | | 745 | 96.4 | 94.8-97.5 | | 834 | 94.1 | 92.2-95.6 | | 844 | 95.9 | 94.3-97.0 | | 577 | 92.0 | 89.4-94.0 | | 3,590 | 95.2 | 94.3-96.0 | |
| No information | 3 | 73,4 | 19.9-96.8 | | 2 | 100.0 | 100.0 | | 1 | 100.0 | 100.0 | | 5 | 100.0 | 100.0 | | 7 | 100.0 | 100.0 | | 18 | 96.6 | 78.5-99.5 | |
| Type of pregnancy | | | | 0.91 | | | | 0.17 | | | | <0.01 | | | | <0.01 | | | | 0.88 | | | | <0.01 |
| Single | 1,856 | 95,9 | 94.9-96.7 | | 1,972 | 95.3 | 94.2-96.1 | | 2,379 | 92.5 | 91.3-93.5 | | 2,042 | 95.1 | 94.0-96.0 | | 1,647 | 92.2 | 90.8-93.4 | | 9,896 | 94.1 | 93.5-94.6 | |
| Twin | 16 | 96,4 | 77.8-99.5 | | 20 | 85.6 | 62.9-95.4 | | 29 | 93.5 | 77.2-98.4 | | 27 | 100.0 | 100.0 | | 21 | 91.4 | 71.2-97.9 | | 113 | 92.7 | 84.9-96.6 | |

it continues

**Table 3.** Sociodemographic and obstetric characteristics of mothers with and without a companion, who had a delivery in health establishments linked to the Rede Cegonha, compared by macro-region. Brazil, 2016-2017.

| | N[1] (n=1,872) | | | | NE[1] (n= 1,992) | | | | SE[1] (n=2,409) | | | | S[1] (n=2,069) | | | | CO[1] (n=1,668) | | | | TOTAL (n=10,010) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value | f | Yes (%) | CI 95% | P value |
| She does not know/does not want to inform | , | . | . | | , | . | . | | 1 | 100.0 | 100.0 | | , | . | . | | , | . | . | | 1 | 100.0 | 100.0 | |
| Type of delivery | | | | 0.39 | | | | 0.49 | | | | 0.18 | | | | 0.63 | | | | 0.24 | | | | 0.04 |
| Vaginal | 968 | 95,5 | 94.0-96.6 | | 1,072 | 94.8 | 93.2-6.0 | | 1,393 | 91.7 | 90.1-93.1 | | 1,171 | 94.9 | 93.5-96.1 | | 897 | 91.4 | 89.4-93.0 | | 5,501 | 93.5 | 92.7-94.2 | |
| Forceps | 1 | 100,0 | 100.0 | | 5 | 100.0 | 100.0 | | 28 | 97.6 | 84.3-99.7 | | 17 | 100.0 | 100.0 | | 2 | 100.0 | 100.0 | | 53 | 98.4 | 89.1-99.8 | |
| Cesarean | 886 | 96,4 | 94.9 | | 895 | 95.8 | 94.3-97.0 | | 956 | 93.4 | 91.5-94.9 | | 854 | 95.2 | 93.5-96.5 | | 747 | 93.2 | 91.1-94.8 | | 4,338 | 94.8 | 94.0-95.5 | |
| She does not know/does not want to inform | 16 | 96,4 | 97.5 | | 20 | 85.6 | 62.9-95.4 | | 30 | 93.7 | 77.8-98.4 | | 27 | 100.0 | 0.0 | | 22 | 91.7 | 72.0-97.9 | | 115 | 92.8 | 85.1-96.7 | |

[1] N (North), NE (Northeast), SE (Southeast), S (South), MW (Midwest).

Source: Authors.

The study "Born in Brazil" carried out nine years ago showed that women who underwent cesarean delivery were more accompanied at some point during hospitalization[6-7]. However, this study points to an inversion of these results after the implementation of the RC since women having a vaginal delivery were more accompanied, suggesting an improvement in the model of care for vaginal delivery in a humanized way, promoting autonomy, decision-making, and empowerment of the woman for childbirth[3-4,8-10,12,21,24-25].

Although there has been a great advance in the presence of a full-time companion in all regions of the country, a national study conducted by Bittencourt et al. [4] assessed the level of implementation of best practices after the implementation of RC, and showed that the presence of a companion was not adequate for 8.4% of Brazilian maternities, with structural and work process restrictions observed in 30% of the institutions. We found similar results in a study conducted in three Arab countries[26] and in Kenya[22], pointing out structural and organizational barriers as the greatest challenges for the fulfillment of best practices of companions.

In this study, 5.7% of women who did not have a companion mentioned personal reasons, which does not make hospital establishments responsible for non-compliance with the aforementioned policy. Therefore, the best practices in delivery and birth care are at different stages of implementation, with variation between macro-regions.

The research also observed that the presence of a companion reduces even more specifically at the time of delivery, especially in the North and Northeast regions. The results of other studies[3,6,28] justify this conduct due to the institution's structural barriers and the resistance of the care team[4,29]. Professionals should be aware of the benefits of this WHO recommendation and the management team should encourage the implementation of this evidence-based practice.

The presence of a companion during pre-delivery, delivery, and post-delivery provides greater emotional support to the woman, optimizing the physiology of childbirth, reducing the number of cesarean sections and the postpartum recovery period. This conduct ensures the safety and quality of professional care, reducing violence and inappropriate childbirth practices[3-4,6,8,22,26].

The main reason why puerperal women did not have a companion in the South and Southeast regions was that they did not have someone to be with them. In the North and Northeast regions was because of the prohibition of a companion in

the maternity ward. Similar results[4,8-9,28] approach that the care produced in maternity hospitals tends to be crossed by a socioeconomic and cultural hierarchy, added to the structural inadequacies of the institution or factors related to women, such as not having or not wanting the presence of a companion.

## Conclusion

Brazil has advanced in the best practices in childbirth care aimed at the presence of a full-time companion after the implementation of the RC in 2011, increasing the presence of a full-time companion from 18.8% (2011) to 71.2% (2017) throughout the country, in approximately six years.

In general, the South and Southeast regions, regions with greater socioeconomic development, present more satisfactory results than other regions. However, socio-economic and cultural conditions and inequality, marked in the North and Northeast, point to the occurrence of social inequalities among Brazilian macro-regions in the right of a full-time companion.

Despite these advances, challenges remain to ensure that institutions fulfill this right guaranteed by law in its entirety, and it is necessary to reinforce the principles of equity, integrality, universality, and humanization. We suggest creating companion registration protocols at all times from hospitalization to delivery, professional training, and structural and organizational adequacy of the health services.

Well-conducted and implemented public policies are interventions with a pro-equity approach, with greater efforts in areas of greater social vulnerability, and can contribute to the scenario of care during childbirth in Brazil, with an emphasis on its usefulness for the decision-making management bodies.

## Collaborations

YNLA Goiabeira: Study conception, methodology development, data analysis, article writing process and critical review of the final text. EBAF Thomaz, RCS Queiroz: Study conception, data collection, methodology development, data analysis, article writing process and critical review of the final text. ZC Lamy, MC Leal, SDA Bittencourt, SGN Gama: Data collection and critical review of the final text. AM Santos: Data analysis and critical review of the final text.

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