# Breastfeeding initiation and duration in African and Brazilian Immigrant Women in Portugal

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## Background

International research has focused on the influence of age, income, education, race, and ethnicity on the decision to breastfeed. USA studies in particular have consistently found racial differences in the decision to breastfeed, and that foreign born women are more likely to breastfeed than US-born women[1]. Plus, acculturation has been demonstrated to be associated with lower breastfeeding duration rates[2]. However, the role of immigrant status in understanding these disparities has not been well studied and there isn't any Portuguese study on breastfeeding practices in immigrants.

We analyzed data from the Evaluation of Health and Health Assessment of African and Brazilian immigrants in Portugal study, with the aim of characterizing breastfeeding practices in two migrant groups of women of reproductive age: women from African Portuguese Speaking Countries and women from Brazil. The study was conducted in 2007 and the sample includes a total of 1603 women aged between 15 and 55 years old.

[1] Forste R, Weiss J, Lippincott E. The Decision to Breastfeed in the United States: Does Race Matter? Pediatrics 2001; 108: 291-296.
[2] Singh G K, Kogan M D, Dee D L. Nativity/Immigrant Status, Race/Ethnicity, and Socioeconomic Determinants of Breastfeeding Initiation and Duration n the United States, 2003. Pediatrics 2007; 119: S38-S46.

## Methods

Individuals were selected through a process of random simple cluster geographical sampling (**Figure 1**) with the help of a Geographic Information System (GIS) software (ArcGIS 9.1). Routing tools available on the Internet were use to guide the interviewers on the field.

Data collection was conducted during a home visit by trained research interviewers, most of them from the communities in study. The questionnaire applied was adapted from the 4th National Health Survey. Questions about breastfeeding were only asked to women that had delivered in the last five years of the interview.

Socio-demographic and economic predictors included: the mother's age at delivery of the fist child, number of children, mother's age at delivery, education level. Cultural predictors included: mother's country of origin, children country of origin, mother's age at immigration, and number of years living in Portugal. Health factors related to pregnancy included: pregnancy planning, consultations during pregnancy.

Every-breastfeeding rates and duration rates for at least 6 months were calculated and computed by all the socio-demographic and cultural factors considered, and the chi-square statistic was used to test the overall association with breastfeeding prevalence.

### Figure 1 – Process of random simple cluster geographical sampling



## Results

Seventy two percent of our sample is constitute by African Portuguese Speaking Country community and 28% by the Brazilian community. Around 14% of the 374 mothers that had delivered in the last five years of the interview were born in Portugal, 57% in an African Portuguese Speaking Country and 29% in Brazil (**Table 1**). Seventy six percent of these children were born in Portugal. There are differences in the number of years in Portugal in these two communities: the number of years of African women is higher than Brazilian women (t= 11.912; p < 0.001). There are also differences in the level of education: Brazilian women have a higher level of education (X2= 42.002; p < 0.001).

Every-breastfeeding was 94% and duration rate for at least 6 months was 34% (**Table 2**). Bivariate analysis revealed significant differences relating to the mothers immigration status, but not between African and Brazilian immigrant mothers: foreign-born women are more likely to breastfeed at 6 months than Portuguese-born (X2= 10.094; p < 0.005). Breastfeeding for at least 6 months was also associated to the number of years in Portugal (X2= 11.498; p < 0.01). No association was found to the child country of birth. Every-breastfeeding and breastfeeding for at least 6 months rates didn't differ statistically in African and Brazilian mothers. Breastfeed was also related to education level: women with higher education levels are more likely to breastfeed (X2= 6.323; p < 0.05); but breastfeeding for at least 6 months was not.

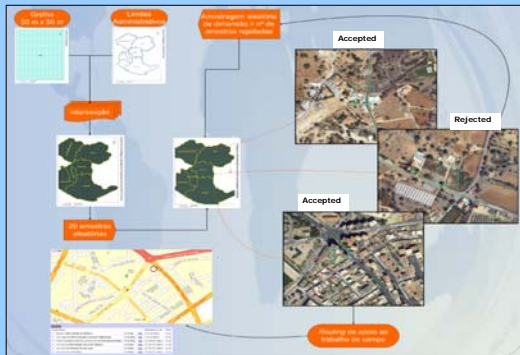### Table 1 – Characteristics of 374 Participating Mothers that had Delivered in the Last Five Years of the Interview

| Characteristic | Portuguese women | African women | Brazilian women |
|---|---|---|---|
| Age, y, mean ± Standard deviation | 25 ± 5.0 | 33 ± 7.5 | 29 ± 5.2 |
| Years in Portugal, mean ± Standard deviation | | 11 ± 7.0 | 4 ± 2.8 |
| **Education** | | | |
| Until the 7th grade | 66.7% | 67.3% | 32.1% |
| Until high school | 31.4% | 24.6% | 59.6% |
| Some college or collegre graduate | 2.0% | 8.1% | 8.3% |

### Table 2 - Breastfeeding Initiation (Ever) and Duration Rates According to Selected Socio-demographic Characteristics

| Characteristic | Sample Size | Ever Breastfeeding Rate | Rate for at least 6 months |
|---|---|---|---|
| Total population | 374 | 93.8 | 34.4 |
| **Mothers nativity** | | | |
| African | 211 | 94.4 | 35.5 |
| Brazilian | 109 | 96.1 | 41.7 |
| Portuguese | 51 | 87.8 | 14.3 |
| **Education** | | | |
| Until the 7th grade | 212 | 91.0 | 31.3 |
| Until high school | 136 | 96.8 | 36.5 |
| Some college or collegre graduate | 28 | 100 | 46.2 |
| **Years in Portugal** | | | |
| ≤ 5 years | 113 | 94.4 | 39.3 |
| 6-10 years | 129 | 95.0 | 38.8 |
| ≥ 11 years | 78 | 97.3 | 32.9 |
| **Child country of birth** | | | |
| Portugal-born | 282 | 90.8 | 29.9 |
| Foreign-born | 89 | 95.4 | 35.7 |

## Conclusions

Our study revealed significant differences relating to the mothers immigration status, but not between African and Brazilian immigrant mothers.

Our study contributes to the breastfeeding literature in two important ways: first, no previous study has analysed how immigration status affects breastfeeding practices for immigrants in Portugal, and immigrants health practices are of increasing importance, given recent analysis that demonstrate the contribution of immigrants to the raising of births in Portugal. Second, we compared the influence of nativity and immigration status to better understand their influence in determining breastfeeding.