

TOBACCO USE DURING PREGNANCY AMONG NATIVE AND MIGRANT WOMEN IN PORTUGAL - RESULTS FROM THE BAMBINO STUDY



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BACKGROUND

Tobacco use during pregnancy is a major modifiable risk factor of adverse maternal and fetal health outcomes. Being a migrant has been associated with lower risk of smoking while pregnant. However, it remains a matter of debate whether such association could be explained by other socio-demographic characteristics or whether such effect remains or increases according to the length of stay in the host country.

AIM

This study examined the differences in maternal smoking prevalence between native, long-term and recent migrant women in mainland Portugal.

METHODS

Data used in this study was derived from baMBINO, a national project grounded on 33 public maternity units in mainland Portugal aiming to investigate differences in perinatal healthcare and outcomes between migrant and native women. Participants included in this analysis (n=2345) were classified into: native (Portuguese-born), long-term and recent migrants (foreign-born women who spent 10 years or more and less than 10 years in Portugal, respectively). Logistic regression model was fitted to estimate the association between the aforementioned migration statuses and tobacco use during pregnancy, taking into account women’s age, parity, marital status, level of education, family income, and gestational age at the first antenatal care visit. Adjusted odds-ratio (OR) and respective 95% confidence interval (95% CI) were obtained.

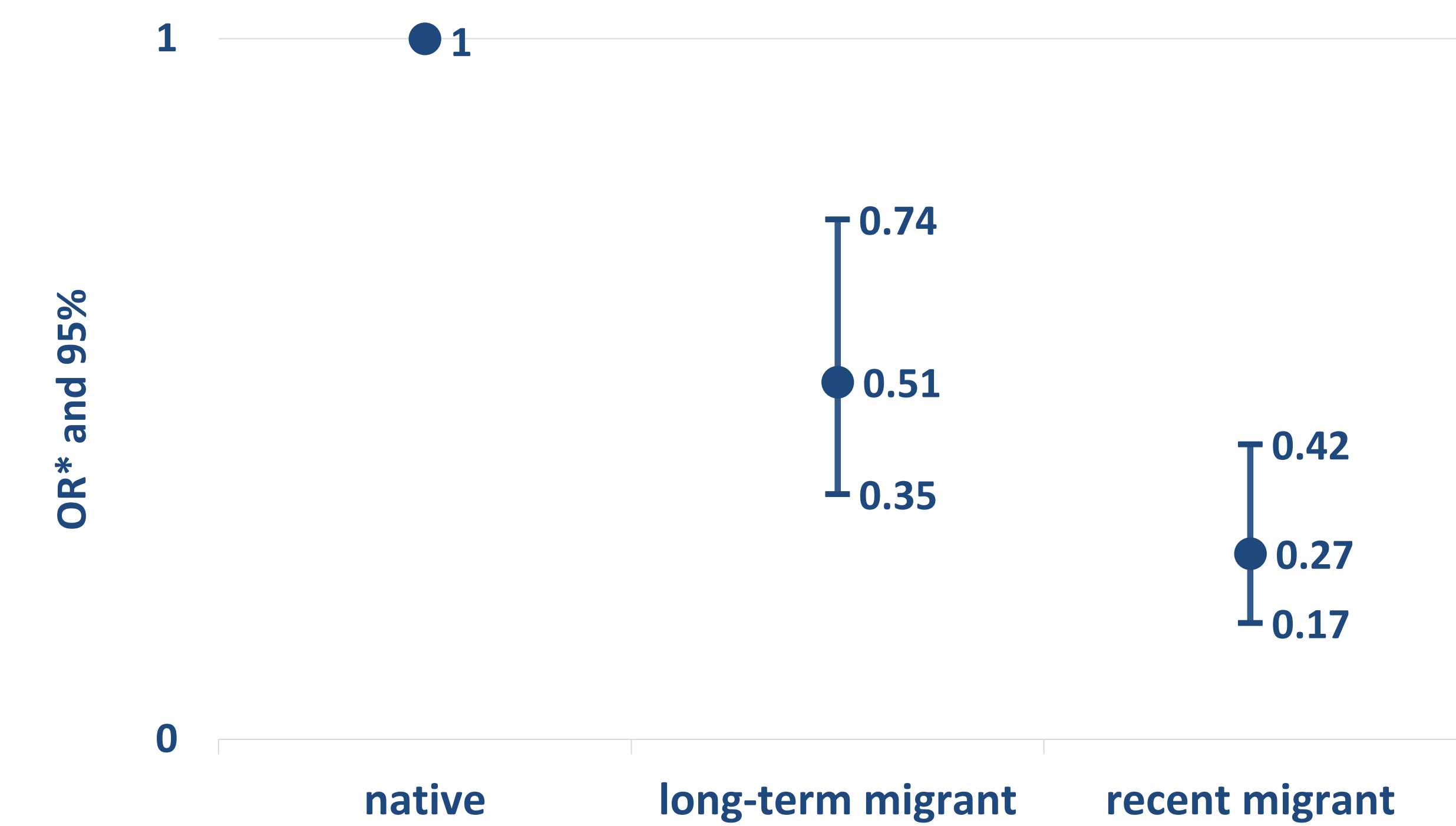
RESULTS

Around half of study participants were foreign-born (n=1242) and 54% of those were recent migrants. Compared to native women, both long-term and recent migrant women were more likely to be unmarried, to have a family income of less than 1000€ and to have their first prenatal visit after 12 weeks of gestation. Tobacco use during pregnancy was more prevalent among native women than among long-term or recent migrant women (13.4% vs. 8.0% and 3.9%, respectively; p<0.001), as shown in *Table 1*. According to the multivariate regression model, recent and long-term migrants showed lower risk of smoking during pregnancy (OR=0.27; 95% CI: 0.17-0.42 and OR=0.51, 95% CI: 0.35-0.75, respectively), compared with native Portuguese women (*Figure 1*).

Table 1. Characteristics of the study participants (n= 2332)

	Migration Status			p-value
	Native	Long-term Migrant	Recent Migrant	
	n=1103	n=577	n=665	
	n (%)	n (%)	n (%)	
Maternal age (years)				
<25	129 (11.8)	74 (12.9)	138 (20.9)	<0.001
25 - 34	619 (56.5)	294 (51.1)	378 (57.1)	
>= 35	348 (31.8)	207 (36.0)	145 (21.9)	
Marital Status				
Married	831 (75.8)	406 (71.5)	473 (72.3)	0.099
Single	265 (24.2)	162 (28.5)	181 (27.7)	
Maternal Educational Level (years)				
< 10	279 (25.5)	156 (27.7)	189 (29.2)	<0.001
10 – 12	388 (35.5)	263 (46.7)	251 (38.7)	
> 12	425 (38.9)	144 (25.6)	208 (32.1)	
Parity				
Primiparous	560 (51.0)	247 (43.0)	348 (52.5)	0.001
Multiparous	539 (49.0)	328 (57.0)	315 (47.5)	
Family income per month (euros)				
≤ 1000	443 (44.2)	320 (61.8)	441 (76.9)	<0.001
>1000	559 (55.8)	198 (38.2)	133 (23.2)	
Gestational age at 1st antenatal visit				
≤ 12 weeks	987 (90.1)	495 (86.8)	527 (80.0)	<0.001
> 12 weeks	108 (9.9)	75 (13.2)	132 (20.0)	
Tobacco use during pregnancy				
Yes	148 (13.4)	46 (8.0)	26 (3.9)	<0.001
No	955 (86.6)	531 (92.0)	639 (96.1)	

Figure 1. Odds-Ratio (OR) and respective 95% confidence interval (95% CI) for the association between migrant status and tobacco use during pregnancy.



\* Adjusted for maternal age, marital status, education level, parity, family income and gestational age at first antenatal visit

CONCLUSION

There are significant disparities in the prevalence of maternal smoking during pregnancy according to the women’s place of birth and duration of stay in Portugal. Foreign-born women had a lower risk of smoking during pregnancy than native-born women. However, the increase in the duration of stay in the host country seemed to have a negative effect on maternal smoking of migrants in Portugal.



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