

Socio-demographic factors associated with tobacco consumption and cessation in Portugal

Introduction

Smoking is a significant risk factor for several diseases. Social inequalities have been described for both tobacco consumption and, though to a lesser extent, for tobacco cessation. Previous works had shown that less affluent classes are more prone to smoke and less to quit smoking. These results have been observed for both men and women, in several European countries.^{1,2}

Aims

This study aims to describe socio-demographic factors associated with tobacco consumption and cessation in Portugal.

Methods

Data from the 2005/2006 Portuguese National Health Interview Survey was analyzed. A multinomial log-linear model was fitted considering 3 groups of reported tobacco consumption:

- **Present smokers** – Those who have claimed to smoke during the last 15 days;
- **Former smokers** – Those who have reported to smoke but not in the last 15 days;
- **Never smokers** – Those who have claimed never had smoke.

Data was analyzed with the R software version 2.15.3 (package nnet).^{3,4} Analysis was run separately for men and women and adjusted for age. Relative Risk Ratios (RRR) were obtained:

- Present smokers to never smokers;
- Former smokers to present smokers.

Results

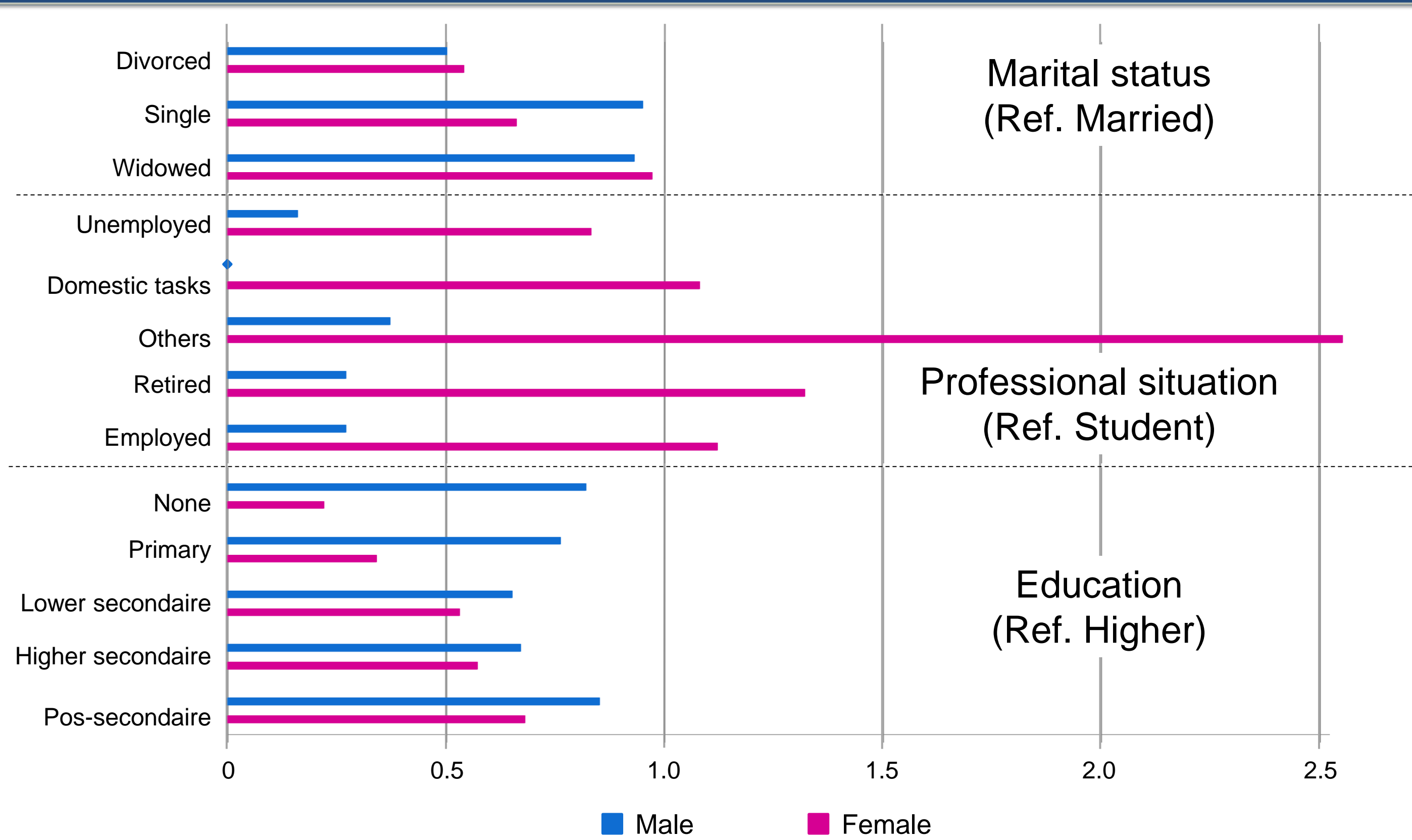


Figure 1. Relative risk ratio of being a former smoker comparatively to present smokers in each of the response categories of socio-demographic covariates. Ref. is the reference class for a given covariate.

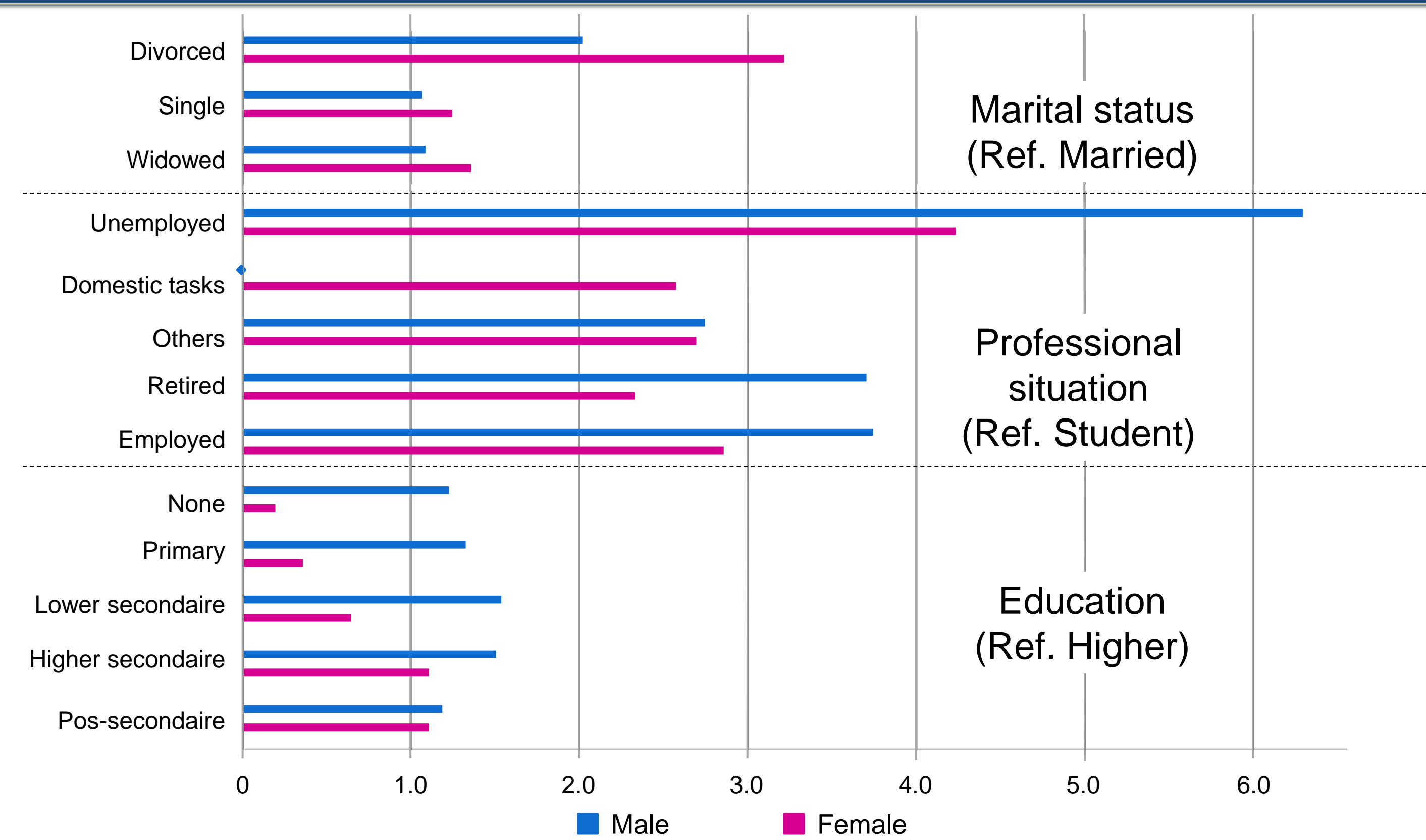


Figure 2. Relative risk ratio of being a present smokers comparatively to never smokers in each of the response categories of socio-demographic covariates. Ref. is the reference class for a given covariate.

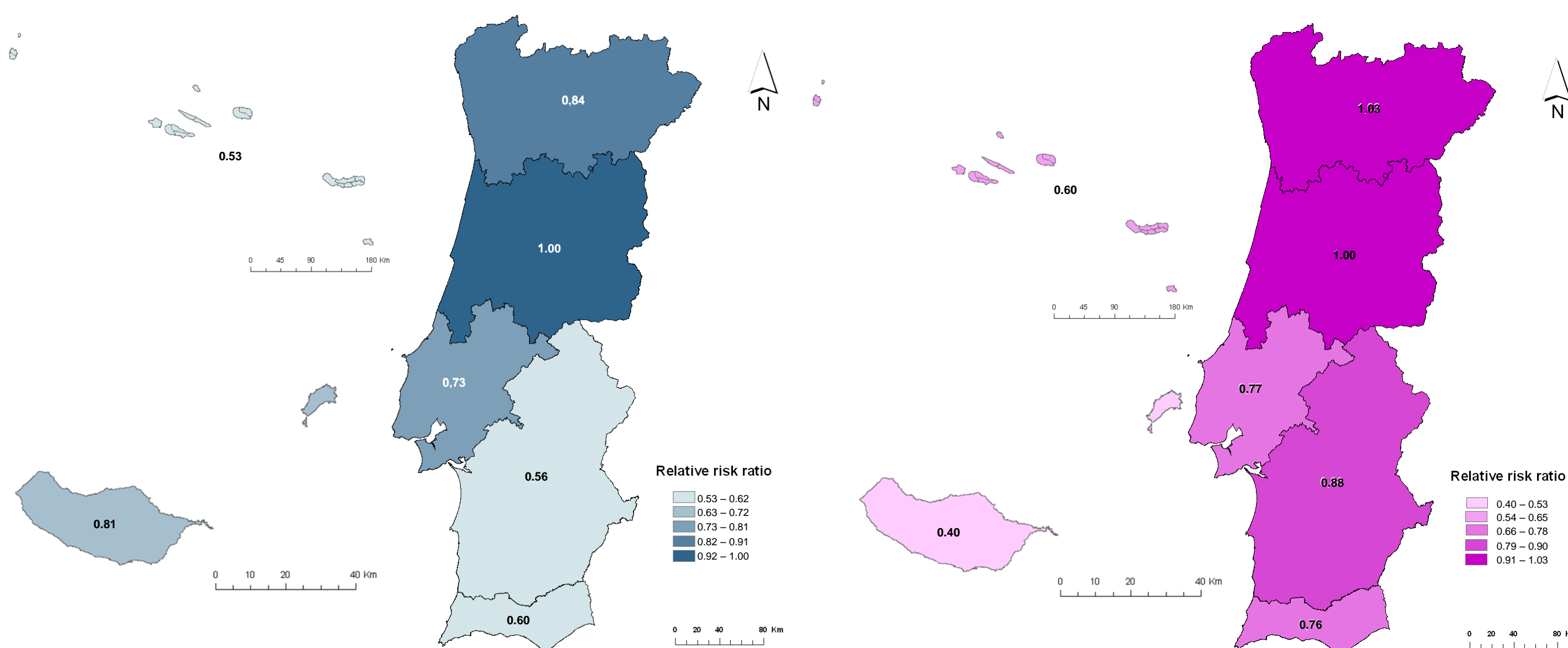


Figure 3. Relative risk ratio of being a former smoker comparatively to present smokers for region. Maps in blue represent men and maps in rose refer to women.

Analysis from RRR of former smokers comparatively to present smokers and of present smokers comparatively to never smokers shows that classes of higher tobacco consumption are, in general, those of lower cessation. For men this classes are divorcees, unemployed, men with lower secondary education and from Azores [respectively RRR (95% Confidence Intervals (95CI)): 0.50 (0.41, 0.61) and 2.01 (1.64, 2.46); RRR (95CI): 0.16 (0.13, 0.20) and 6.29 (5.00, 7.91); RRR (95CI): 0.65 (0.56, 0.77) and 1.53 (1.30, 1.79); RRR (95CI) 0.53 (0.46, 0.61) and 1.89 (1.64, 2.18)].

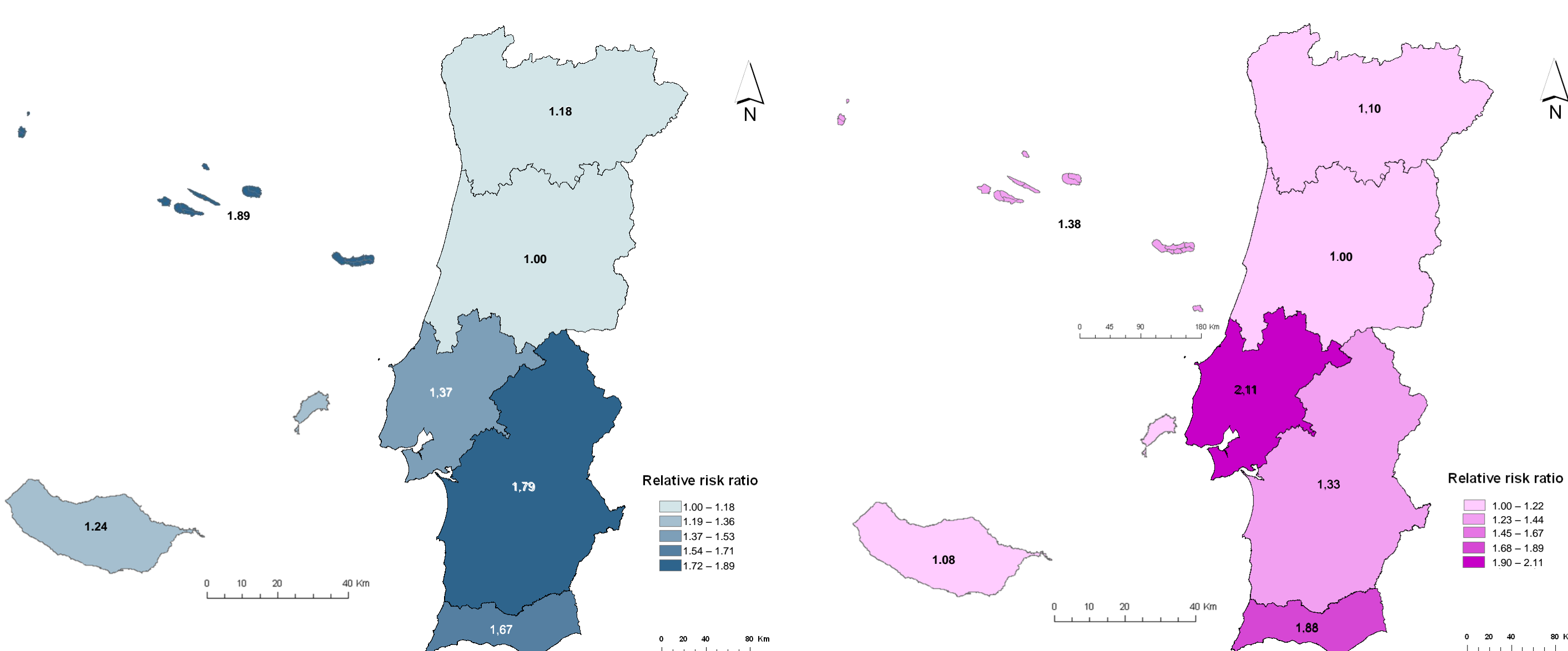


Figure 4. Relative risk ratio of being a present smoker comparatively to never smokers for region. Maps in blue represent men and maps in rose refer to women.

For women higher RRR of smoking were, in general, those of lower RRR of stop smoking. Exceptions were found in the non-unemployed women and those with less than upper secondary. For region Madeira had a lower RRR of stop smoking and Lisbon had the higher RRR of smoking [RRR (IC95): 0.40 (0.27, 0.58) and 2.11 (1.74, 2.57), respectively]. Divorced and unemployed had the lowest prevalence of cessation and the highest of smoking [RRR (IC95): 0.54 (0.41, 0.69) and 3.21 (2.69, 3.84), RRR (IC95): 0.83 (0.51, 1.38) and 4.23 (3.20, 5.58)].

Conclusion

Unfavourable socio-demographic characteristics are associated with higher prevalence of being a current smoker and lower of being an ex-smoker. Different and further cessation measures are needed in these less prone to quit group of individuals, namely men from Azores, divorced, unemployed and with lower secondary education. In women divorced, unemployed and those with

higher and pos-secondaire should be targeted.

Bibliography

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