## Sociodemographic factors associated with an attendance at screening programmes in the Czech Republic

O Ngo<sup>1</sup>, O Majek<sup>1</sup>, S Dankova<sup>1</sup>, J Danes<sup>2</sup>, M Skovajsova<sup>3</sup>, M Zavoral<sup>4</sup>, S Suchanek<sup>4</sup>, B Seifert<sup>5</sup>, V Dvorak<sup>6</sup>, J Duskova<sup>7</sup>, L Dusek<sup>1</sup>

1 Institute of Biostatistics and Analyses, Faculty of Medicine, Masaryk University, Brno; Institute of Health Information and Statistics, Prague, Czech Republic

2 Department of Radiology, 1st Faculty of Medicine, Charles University, Prague, Czech Republic

3 Breast Unit Prague, Mamma centrum Háje, Prague, Czech Republic

4 Department of Medicine, 1st Faculty of Medicine, Military University Hospital, Prague, Czech Republic

5 Institute of General Practice, 1st Faculty of Medicine, Charles University, Prague, Czech Republic

6 Center of Outpatient Gynaecology and Primary Care, Brno, Czech Republic

7 Institute of Pathology, 1st Faculty of Medicine, Charles University, Prague, Czech Republic

**Background:** Screening programmes represent preventive procedures effective in reducing population burden of cancer. High level of participation rate is necessary to ensure the effectiveness of a programme. The objective of our study was to describe sociodemographic factors related to an attendance at the cancer screening programmes in the Czech Republic.

**Methods:** A study was conducted using the national data from European Health Interview Survey carried out in the Czech Republic from June 2014 to January 2015. 6,737 respondents aged over 15 years were interviewed. Cancer screening programmes were analysed for each type separately according to their target populations. Multivariate logistic regression models were used to estimate the strength of association between sociodemographic factors and attendance at the particular screening programme.

**Results:** Attendance at all mentioned screening programmes was associated with age. Women aged over 65 years were less likely to participate in a breast screening with increasing age, similar pattern was observed in a cervical screening for women aged over 50 years. For colorectal screening, women were more likely to have an FOBT than men (OR=1.3, 95% CI=1.1-1.5). Women living in households with higher income were more likely to attend breast or cervical screening (OR=1.6, 95% CI=1.1-2.4; OR=2.0, 95% CI=1.6-2.6) compared to women with the lowest income. High level of education was positively associated with higher chance of attendance at breast and colorectal screening (OR=1.7, 95% CI=1.1-2.6; OR=1.5, 95% CI=1.1-2.0) than those with a lower level. For cervical screening marital status and level of urbanization were also positively associated with participation.

**Conclusion:** It is important to pay attention and identify persons who do not participate in screening programmes. The findings of this study suggest that particular age, household income and level of education patterns determine lower attendance in screening programmes, which could help to focus further health educational interventions.