

Individual invitation of non-attenders to cancer screening: predictors of participation after the invitation in Czech programmes

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Background

Individual invitation to cancer screening programmes is recommended to promote their high effectiveness. The aim of our study was to investigate participation rates in previous non-attenders according to their individual characteristics.

Methods

Cervical, breast, and colorectal cancer screening programmes in Czechia were in place as organised non-population-based; participants were enrolled by GPs or gynaecologists as a part of their regular preventive check-up. A pilot project was initiated in 2014 to introduce the invitation of non-attenders by health insurance companies, which cover the entire population. All eligible individuals (up to the age of 70), who had not recently attended a particular screening, have been personally invited, possibly to more than one screening examination.

Results

Within the pilot project (01/2014-06/2015), 2,247,863 individuals were addressed with initial invitations, of which 664,929, 587,130, and 1,697,083 were invited to cervical, breast, or colorectal screening, respectively. These volumes correspond to 20%, 32%, and 59% of the respective target populations. Overall respective examination participation rates were 13.5%, 19.7%, and 19.5%. Whereas participation rates were homogenous across age and sex groups for colorectal (18–21%) and breast screening (13–15% for women aged 50+), participation rate was decreasing with age for cervical cancer screening (21% to 11%). Recent participation at another screening programme was always a strong predictor of the participation. Considering women aged 50–70 who were eligible for all screening programmes, participation rates for complete non-attenders were 7.0%, 8.2%, and 9.6% for cervical, breast and colorectal screening, whereas corresponding rates were 19.5%, 29.7%, and 27.1% for women with a recent participation to the both remaining screening programmes.

Conclusions

The project integrating the invitation of non-attenders was effective namely for colorectal cancer screening, where spontaneous attendance had led to a low coverage. The invitation was especially effective for individuals already participating in another screening programme.