

# Factors associated with never having had a cervical smear: findings from a national population survey

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## Background

Well organised cervical screening is effective in reducing cervical cancer incidence and mortality. The success of cervical screening programmes is based on achieving high uptake. In recent years, uptake in several countries has been decreasing, particularly among younger women<sup>1</sup>. Better understanding the attitudes and beliefs of non-attendees may help inform initiatives to improve attendance.

## Objectives

This study aimed to explore (1) factors associated with never having had a cervical smear and (2) differences in behaviours, attitudes and beliefs of women who had ever, and never, had a smear test.

## Results

### Characteristics of participants

A total of 3,470 questionnaires were completed (response rate=62%). Two-thirds of participants were married or cohabiting with a partner and 64% were employed or self-employed. Two-thirds had children. One third had completed third level education.

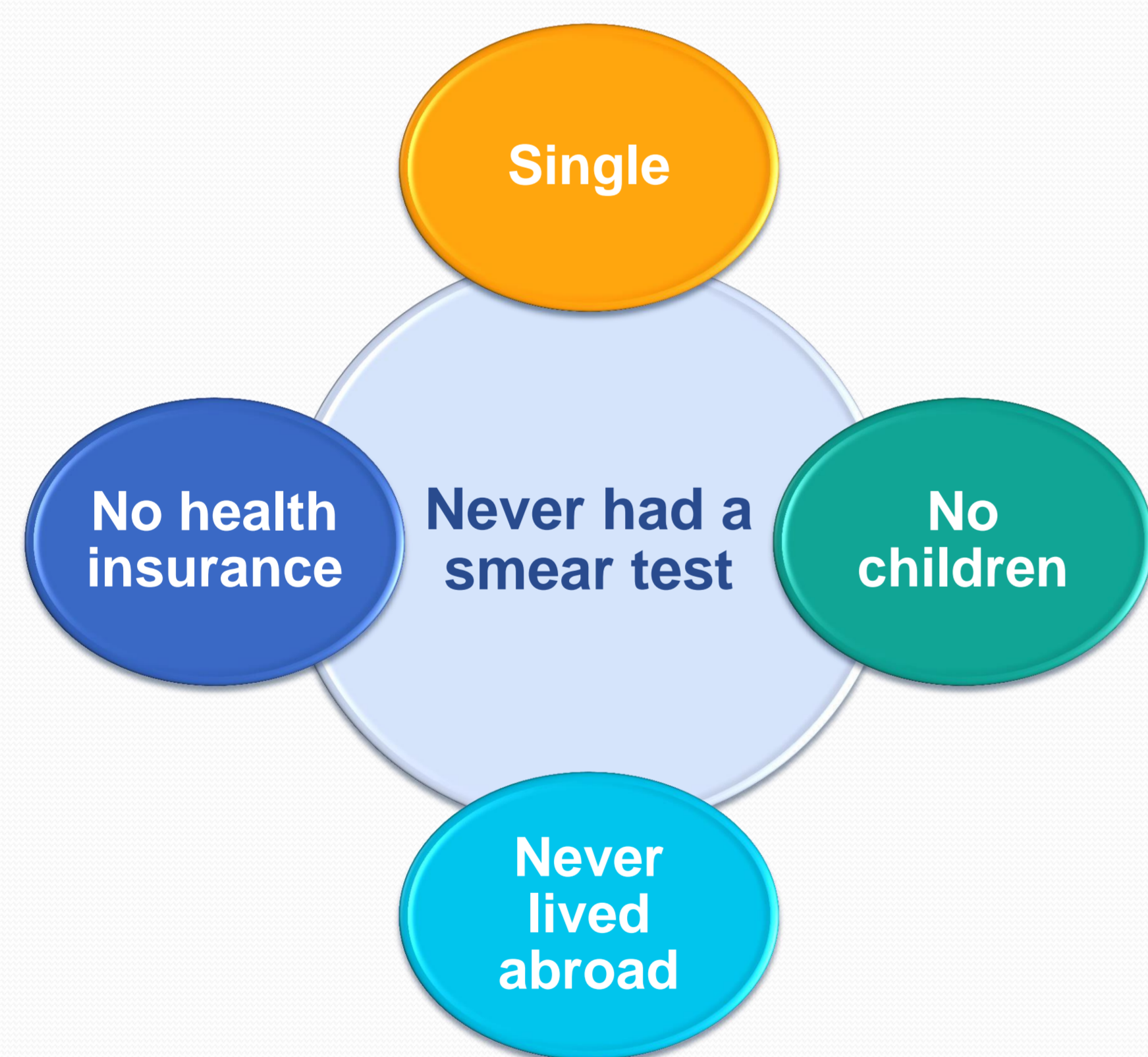
### Never/ever had a smear test

237 women (7%) reported that they never had a smear test. Socio-demographic factors and health behaviours significantly associated (in multivariate models) with never having had a smear are shown in figures 1 and 2, respectively.

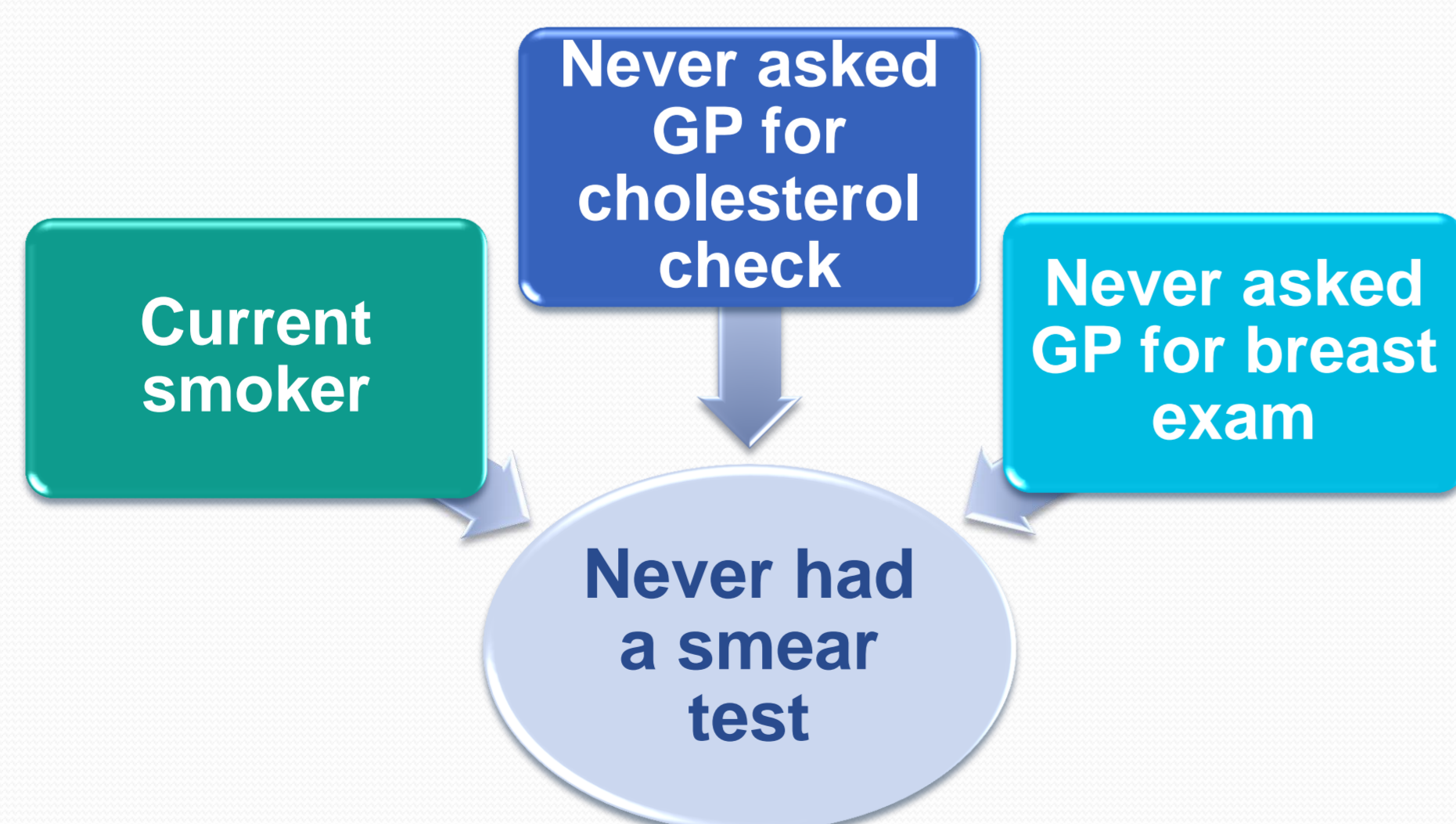
Table 1 compares views and beliefs about smear tests between women who had ever and those who had never had a smear.

Views and beliefs significantly associated with never having had a smear test are shown in table 2.

**Figure 1. Socio-demographic factors significantly associated with never having had a smear test**



**Figure 2. Health behaviours significantly associated with never having had a smear**



## Methods

### Subjects and survey design

An age-area stratified random sample of women aged 20-64 years were selected from patient lists of 20 general practices nationwide and three women's health centres in Dublin. A postal questionnaire was developed from literature review and the main findings from 10 focus groups<sup>2</sup>. Questions were included on socio-demographics and health behaviours, and a series of statements in relation to smear tests. The questionnaire was dispatched to 5,553 women in August and September 2010.

### Survey analysis

Respondents were classified according to whether they had ever had a smear. After adjusting for age, logistic regression was used to identify factors, views and beliefs associated with never having had a smear.

**Table 1. Women's views and beliefs about smears: % of women who had ever, and never, had a smear test who endorsed each statement**

	Ever had a smear	Never had a smear
Smear tests have to be <b>done regularly to be effective</b>	95%	88%
Women can stop having smears when they reach the <b>menopause</b>	10%	10%
Women should <b>start having smears soon after they become sexually active</b>	87%	83%
Women only <b>need smears if they are having problems</b> like pain or bleeding	4%	6%
Women only need to have a <b>smear if their GP recommends it</b>	4%	9%

**Table 2 Views and beliefs significantly associated with never having had a smear test**

	Never had smear (%)	Adjusted OR	95% CI
<b>Women should start having smears after having their first child</b>			
Agree	7.8	1.65*	1.08-2.52
<b>Going for a smear would make me feel embarrassed</b>			
Agree	13.4	6.07*	3.96-9.32
<b>Going for a smear would male me feel anxious</b>			
Agree	11.8	4.66*	2.96-7.32
<b>It would be easy for me to go for a smear</b>			
Disagree	18.5	4.18†	2.78-6.30
<b>I know enough about smears to make a decision about having one</b>			
Disagree	28.1	7.96†	5.30-11.99
<b>People I care about think I should go for smears</b>			
Disagree	10.6	1.69†	1.11-2.56

ORs adjusted for age and significant socio-demographic factors and health behaviours

\*OR for agree vs. disagree (reference category)

†OR for disagree vs. agree (reference category)

### References

- Lancucki L, Fender M, Koukari A et al. A fall-off in cervical screening coverage in younger women in developed countries. *J Med Screen* 2010;17:91-96
- Murphy J, Sharp L, Martin C, Pilkington L, Sheils O, O'Leary J. Women's knowledge and attitudes regarding cervical screening and human papillomavirus (HPV): Focus group findings from Ireland. *Cytopathology* 13(s2): 1-21.

## Conclusions

After adjusting for age, several other socio-demographic factors predicted whether women have ever/never had a smear test. Women's other health behaviours also influence smear uptake. Women who have never had a smear have different beliefs about smears, than women who have had a smear. Programmes should consider designing targeted information materials for specific socio-economic groups (e.g. single women, women without children). Campaigns might also encourage "significant others" in women's lives to help persuade women to attend.