ARTICLE IN PRESS

PUBLIC HEALTH XXX (2015) 1-8



Available online at www.sciencedirect.com

Public Health

journal homepage: www.elsevier.com/puhe



Original Research

Social disparities in access to breast and cervical cancer screening by women living in Spain

- I. Ricardo-Rodrigues, R. Jiménez-García*, V. Hernández-Barrera,
- P. Carrasco-Garrido, I. Jiménez-Trujillo, A. López de Andrés

Preventive Medicine and Public Health Teaching and Research Unit, Health Sciences Faculty, Rey Juan Carlos University, Alcórcon, Spain

ARTICLE INFO

Article history:
Received 2 June 2014
Received in revised form
7 December 2014
Accepted 15 February 2015
Available online xxx

Keywords:
Secondary prevention
Screening
Breast cancer
Cervical cancer
Disparities

ABSTRACT

Objectives: To describe uptake of breast and cervical cancer screening by women living in Spain, analyse the possible associated social and health factors, and compare uptake rates with those obtained in previous surveys.

Study design: Cross-sectional study using data from the 2011 Spanish national health survey.

Methods: Uptake of breast cancer screening was analysed by asking women aged 40–69 years whether they had undergone mammography in the previous two years. Uptake of cervical cancer screening was analysed by asking women aged 25–65 years whether they had undergone cervical cytology in the previous three years. Independent variables included sociodemographic characteristics, and variables related to health status and lifestyle.

Results: Seventy-two percent of women had undergone mammography in the previous two years. Having private health insurance increased the probability of breast screening uptake four-fold [odds ratio (OR) 3.96, 95% confidence interval (CI) 2.71–5.79], and being an immigrant was a negative predictor for breast screening uptake. Seventy percent of women had undergone cervical cytology in the previous three years. Higher-educated women were more likely to have undergone cervical cancer screening (OR 2.59, 95% CI 1.97–3.40), and obese women and women living in rural areas were less likely to have undergone cervical cancer screening. There have been no relevant improvements in uptake rates of either breast or cervical cancer screening since 2006.

Conclusion: Uptake of breast and cervical cancer screening could be improved in Spain, and uptake rates have stagnated over recent years. Social disparities have been detected with regard to access to these screening tests, indicating that it is necessary to continue researching and optimizing prevention programmes in order to improve uptake and reduce these disparities.

© 2015 The Royal Society for Public Health. Published by Elsevier Ltd. All rights reserved.

E-mail address: rodrigo.jimenez@urjc.es (R. Jiménez-García). http://dx.doi.org/10.1016/j.puhe.2015.02.021

0033-3506/© 2015 The Royal Society for Public Health. Published by Elsevier Ltd. All rights reserved.

Please cite this article in press as: Ricardo-Rodrigues I, et al., Social disparities in access to breast and cervical cancer screening by women living in Spain, Public Health (2015), http://dx.doi.org/10.1016/j.puhe.2015.02.021

^{*} Corresponding author. Preventive Medicine and Public Health Teaching and Research Unit, Health Sciences Faculty, Avda. de Atenas s/n, 28922 Alcorcón, Madrid, Spain. Tel.: +34 91 4888853; fax: +34 91 4888848.

Introduction

Breast cancer is the most common type of cancer in women around the world, and occurs in both developed and developing countries.¹ According to Globocan, in 2012, the incidence of breast cancer in Spain was 67.3 cases per 100,000 women and the mortality rate was 11.9 cases per 100,000 women; the latter is the second lowest rate in Europe, behind Estonia.¹ Over the last few decades, the incidence of breast cancer has increased, which may be due to greater exposure to factors that increase the risk of developing the disease.^{2–4} On the other hand, the mortality rate has decreased, mainly due to more screening of the population, using mammography, and access to more effective treatments.^{2–4}

Cervical cancer has lower morbidity and mortality rates in developed countries, and this is due, in part, to detection programmes.⁵ It is the third most common type of cancer in Spanish women, and Spain is one of the few European countries where the incidence of this cancer has increased (by 1%) over the last few years.^{1,6}

Since 2003, the European Union has recommended population screening for breast and cervical cancers, and most countries have put different detection programmes into practice.⁷

In 1990, Spanish public health authorities started a population screening programme for breast cancer offering a biennial mammogram to women aged 50–69 years with no family risk. Women with risk factors were invited to join the programme at 40 years of age. However, in Spain, certain private health care organizations and medical associations recommend that all women should have annual mammograms from 40 years of age. Nowadays, the public health programme for breast cancer screening reaches almost 100% of Spanish women; all women in the target group are personally invited every two years (post and/or telephone) to receive a mammogram.

Cervical cancer screening is based on cervical cytology of women aged 25–65 years at least every three years. All Spanish regions have a programme in place, although they are generally opportunistic. Therefore, there is no direct appointment system. However, awareness-raising campaigns directed at the target population have been implemented in several regions to encourage women to seek screening. Women are invited to undergo cervical cytology when they have contact with the health system (public or private), either due to their own decision to ask for the test, or because they attend a health centre for another reason and the treating physician identifies them as part of the recommended target group. 78,10

Previous studies in Spain have reported compliance rates for breast and cervical cancer screening of 48.1–84.1% and 67.4–76.6%, respectively.^{7,9–13} Both mammography and cervical cytology are provided free of charge for the recommended target populations in Spain. Uptake rates of both types of screening have been found to be associated with sociodemographic factors. In particular, women of low socioeconomic status or with a lower level of education are less likely to undergo screening. Likewise, ethnic minorities and less healthy lifestyle behaviours have been reported to be negative predictors. ^{14–21}

The aim of this study was to estimate the uptake of breast and cervical cancer screening using data from the 2011 Spanish national health survey, to compare uptake rates with those obtained in previous Spanish national health surveys, and to identify health and lifestyle-related sociodemographic variables that are predictive of screening uptake.

Methods

A cross-sectional study was performed based on data obtained from the Spanish national health survey (ENSE 2011). The survey was conducted throughout Spain through personal interviews at homes selected at random. The information collection period lasted for one year, from July 2011 to June 2012. Tri-stage sampling was used, with stratification of the items in the first stage (census sections) having a probability proportional to the size of the section. The items in the second stage (principal family dwelling) were selected by systematic sampling with random start points and equal probability for selection for each family dwelling in the section. In the third stage, an adult (age \geq 15 years) was selected with equal probability to complete the questionnaire.²² Ultimately, 26,502 interviews were conducted, 20,007 of which were with adults aged >15 years. More information on the methodology of ENSE 2011 is available elsewhere.²²

Of the total sample, women aged 40–69 years were selected for mammography (n = 5303) and women aged 25–65 years were selected for cervical cytology (n = 7022) in this study. These are the recommended age ranges for these screening types.⁸

Dependent variables were created using the following questions in the questionnaire.

- Uptake of breast cancer screening. This was determined by asking, 'Have you ever undergone a mammogram?'. Those who answered affirmatively were asked a second question, 'When was the last time you had a mammogram?'. Subjects who reported that they had undergone their most recent mammogram within the previous two years were considered as 'uptake', as this classification corresponds to women who comply with the recommended screening period. The remaining subjects were classified as 'non-uptake'.
- Uptake of cervical cancer screening. This was determined by asking 'Have you ever undergone cervical cytology?'.
 Women who answered affirmatively were asked, 'When was the last time you underwent cervical cytology?'.
 Women who had undergone cervical cytology within the last three years were considered as 'uptake', as this classification corresponds to women who comply with the recommended screening period. The other subjects were classified as 'non-uptake'.

The following independent variables were considered.

 Sociodemographic variables such as age, nationality (Spanish born/immigrant), marital status (single/married), city/town size (<20,000/20,000-100,000/>100,000 inhabitants), education level (primary/secondary/university)

Download English Version:

https://daneshyari.com/en/article/10516291

Download Persian Version:

https://daneshyari.com/article/10516291

<u>Daneshyari.com</u>