

These boundaries are controversial, particularly with regard to screening for women in their forties and later in life. For example, why should a woman aged 74 years 11 months and 30 days be concerned by screening and then no longer be concerned a day later? This is an inherent defect of threshold-based decisions.

Utility curves for breast cancer screening according to age are clearly not straight (rectangular). The individual limits of when to start and when to stop screening are fuzzy and overlap the collective limits. Not surprisingly some women do not strictly adhere to the prescribed French standard of 50–74 years. However, the actual benefit of breast cancer screening by mammography for women aged over 75 is not yet known.

Materials and Methods: The population-based EDIFICE survey was carried out by telephone from December 12th 2007 to January 7th 2008, in order to reach a representative sample of 1504 subjects living in France and aged between 40 and 85 years. Among the 226 women aged over 75, 188 had no personal history of cancer (any location).

Results: Out of 148 women aged over 75, without breast cancer and having previously undergone mammography at least once before, 16 could not remember the date of the last mammogram and 72 (49%) had undergone a mammogram test when aged over 75. Among these women, 60% planned to be screened in the future.

No socio-demographic differences were observed between screened and unscreened women with regard to: educational level, income, health risk behaviours (smoking, alcohol), being knowledgeable about the value and the process of screening, or psychological features.

Only three factors were statistically associated with a higher rate of attendance: screening initiated by a physician, women having consulted a gynecologist within the past 12 months and women having already undergone at least five mammographies. Only this latter factor was significant in a multiregression analysis (OR = 3.3; CI_{95%} 1.03–11.1).

Discussion and Conclusion: To accurately determine the utility of screening women aged over 75, an individual assessment is presumably required due to the high variability in the state of health of elderly people, with life expectancy and competitive pathology being critical relevant factors.

In France, there are currently more than 1,000,000 women aged 75–80 years old and the mean cost of a screening test is 70 Euros. Thus, more than 5 to 10 M Euros per year is currently spent for screening these women aged over 75, the utility of which remains debatable.

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Poster

The usefulness of screening FDG-PET for breast cancer

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Purpose: The aim is to evaluate the efficacy of whole-body fluorine-18-fluorodeoxyglucose (FDG) positron emission tomography (PET) in screening breast cancer involved the breast and axillary regions.

Methods: 72 women with palpable breast tumor underwent PET scan for clinical diagnosis and 8 women with positive uptake in screening whole body PET scan. Uptake PET breast lesions were evaluated by confirmatory standard staging studies, patients underwent computed tomography (CT), MRI, x-ray (XR), or pathology.

Results: Of the 76 positive lesions, 66 (86.8%) were true positive (TP) for neoplastic disease, and 10 (13.2%) were false positive (FP) for non-neoplastic disease (mastopathy etc.). Of 4 PET negative lesions, 4 (100%) were true negative for non-neoplastic disease. The sensitivity, specificity and accuracy for palpable breast mass were 100%, 44% and 93%, respectively. In contrast, those for the detection of metastatic axillary lymph node were 56%, 97% and 82%, respectively. The SUVmax value of TP cases was significant high than FP cases. Furthermore, the SUVmax value was also significant high in cases with the histology of a solid-tubular ductal carcinoma and/or Her2 strong 3+ expression.

Conclusions: Whole-body FDG-PET indicated high sensitivity for palpable disease including primary breast cancer, but showed lower sensitivity in metastatic axillary lymph node. The application of PET scan may improve the detection of breast cancer and may be helpful in evaluation of axillary nodal staging.

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Poster

Survey on a pilot mammographic screening programme in Istanbul, Turkey

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Background: Breast cancer diagnosed in Turkey presents at more advanced stages and is associated with a higher mortality rate due to the lack of organized comprehensive mammographic screening. The aim of this study is to evaluate the feasibility of initiating a breast cancer screening program in a major Turkish city by investigating the factors associated with the likelihood for obtaining mammography among healthy women in Bahcesehir county, a region of Istanbul.

Material and Methods: In this cross-sectional survey, 659 healthy women between ages 40 and 69 years were surveyed. All women denied specific breast complaints, had no prior history of a breast biopsy and had no personal history of breast cancer. The multiple-choice questionnaire ascertained information regarding patient demographics, family history of cancer, and patient knowledge regarding breast cancer and the uses of screening. Statistical analyses were performed using the SPSS 15.0 program.

Results: Among the 659 women, 274 (41.6%) had undergone mammography within the last 2 years. Factors associated with increased likelihood of obtaining a mammogram by logistic regression included age older than 50 (OR = 1.75; %95 CI = 1.23–2.49), higher educational level (high school or university graduate; OR = 1.55; %95 CI = 1.07–2.25), and undergoing periodic gynecologic exam (OR = 5.53; %95 CI = 3.88–7.89). In subgroup analysis stratified by age, women between ages 40 and 49 who underwent mammography within the last 2 years were more likely to have higher educational level (OR = 1.94; %95 CI = 1.14–3.31), to undergo periodic gynecologic exam (OR = 4.06; %95 CI = 2.53–6.51), and in addition were more likely to have a 1st or 2nd degree family history of breast cancer (OR = 2.2; %95 CI = 1.06–4.50). By contrast, women between 50 and 69 years old were more likely to have undergone mammography within the last 2 years if they undergo periodic gynecologic exams (OR = 8.63; 5.04–14.77). However, educational level and family history were not found to be significant predictors of mammographic usage in this older age group.

Conclusions: Currently, population-based breast cancer screening in Istanbul would be most successful among women with higher education who undergo periodic gynecologic exams and among younger women who also have a family history of breast cancer. To develop a successful population-based breast screening program in urban regions of Turkey, women of lower educational level and those who do not undergo routine wellness visits with their gynecologist will need to be specifically targeted for educational outreach in order to achieve broad screening compliance within the population.

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