25   Invited
A Twenty Year Survivor's Perspective

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Any patient who has heard the words 'You have cancer' will probably be able to remember that moment for the rest of her life. Because cancer still is such a terrifying diagnosis, most patients panic and believe that that their life is in danger and they are going to die from the disease. It is also a trauma for relatives and the family, when a member of the family is diagnosed with cancer. The emotional reactions in spouses, children, siblings and parents can be just as strong and painful as in the patients. This presentation is about the journey from cancer diagnose, operation, treatment and recovery to a new established life.

23 years ago there was a huge lack in knowledge about breast cancer, diagnose, prognosis and treatment options. Patients were not expected to take part in decision making and patient empowerment was not common. Deciding on a particular treatment is as much a personal matter for patients as it is a medical one. As advocates within patient organisations, we believe that well-informed patients get better care and are more satisfied with treatment.

Cancer causes changes. When you are diagnosed with cancer you shift from being a person to being a patient. After operation and additional treatment you are expected to go back to normal life. Every cancer patient is well aware that end of treatment might not mean end of disease. No doctor can give you the assurance that treatment was effective and that you are cured. The realization that there is a risk of recurrence is a companion for many years. Every follow up visit and mammography is a vivid reminder of the threat of the cancer coming back.

After treatment a new phase is starting − the beginning of learning to live with the cancer experience. Give it time is a cliché often told to patients suffering from severe diseases. As time goes by and days run like sands through the hourglass you can gradually return to a more normal life again. The process of recovery is important in healing the person. The experience of cancer will help you to understand that you cannot take the future for granted. But it is wise to let time help to understand that there is life after cancer, even a life full of more hope and happiness than you ever expected.

Wednesday, 21 March 2012   17:30–18:30

PROFFERED PAPER
Screening

26   Proffered paper oral
20 Years Nation-wide Breast Cancer Screening in the Netherlands

J. Fracheboud[1], S.J. Otto[1], M.J.M. Broeders[2], J.D. Otten[2], R. de Gelder[1], E.A.M. Heijnsdijk[1], A.E. de Bruijn[1], A.L.M. Verbeek[2], G.J. den Heeten[3], H.J. de Koning[1]. [1]Erasmus M.C., Public Health, Rotterdam, The Netherlands; [2]Radboud University Nijmegen Medical Centre, Epidemiology and Biostatistics, Nijmegen, The Netherlands; [3]National Expert and Training Centre for Breast cancer screening, Nijmegen, The Netherlands

Background: The Dutch population-based mammography breast cancer screening programme (BCSP) that started in 1989 knew three stages: (a) the implementation for women aged 50−69 years (1989–1997), (b) the extension up to age 75 (1998–2003), and (c) the transition from film screen to digital mammography (2004–2010). The BCSP has been monitored annually by the NETB with regard to effects and costs. We present the main results of one of the longest running national breast cancer service screening programmes.

Material and Methods: We used regional aggregated data for screening outcomes (completeness of follow-up 98.3%), data on interval cancers, breast cancer incidence and treatment by mode of detection after linkage of screened womens' files to the Netherlands Cancer Registry, data on mortality from Statistics Netherlands, and data on costs from the Center for Population Screening (RIVM), that co-ordinates the BCSP.

Results: In the period 1990–2009, 16.6 million invitations were sent to 3.6 million women. Overall attendance was 80.0%, increasing from 73.5% in 1990 to 81.5% in 2009. In the same period, 13.2 million screening examinations were performed among 2.9 million women (average 4.6 examinations per woman), resulting in 178,490 (1.35%) referral recommendations, 95.757 (0.72%) needle or open biopsies and 66.562 (0.50%) breast cancer diagnoses. The cumulative risk of a false-positive result after 10 screens was 6.0% for a woman who was 50 in

1990. Of all screen-detected breast cancers was 14.6% a DCIS and 49.9% a small (T1) node negative invasive tumour. Up to 2005, the programme sensitivity was 74.3% for initial and 67.6% for subsequent screens, and the programme specificity 99.0% and 99.4%, respectively. The mean annual total cost was €32.6 million (51.7 million in 2009), and the mean cost per examination €49.39 (55.65 in 2009). Compared with the prescreening period 1986–1988, breast cancer mortality among women aged 50−75 years decreased by 31.3% in 2009. We found a significant breast cancer mortality change from +0.3% increase annually to −1.7% decrease in targeted women related to the start of screening, that coincided with a significant decrease in advanced breast cancer rates. Overdiagnosis was limited: 2.8% of all and 8.9% of screen-detected breast cancers.

Conclusions: After 20 years, the acceptance and the screening performance of the BCSP are high. The BCSP contributed considerably to a reduced breast cancer mortality at limited harms and at reasonable costs.

27   Proffered paper oral
Cost-effectiveness of Screening with Additional MRI for Women with Familial Risk for Breast Cancer Without a Genetic Predisposition

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Background: Women with a family history of breast cancer start screening with mammography at a younger age than standard population screening age to reduce mortality risk. Adding Magnetic Resonance Imaging (MRI) strongly increases sensitivity compared with mammography alone. Yearly screening with MRI is cost-effective for women with a (50% likelihood of carrying) BRCA1/2 mutation. However, this is still not clear for women with a family history of breast cancer without a proven genetic predisposition.

Materials and Methods: Data from the Dutch MRI Screening Study (MRISC), the largest prospective cohort study including women in this risk group, were used for cost-effectiveness analysis. A total of 1597 women, with 8370 women years at risk, and an estimated cumulative lifetime risk (CLTR) of 15−50% for breast cancer were screened with clinical breast examination (CBE) every six months and annual mammography and MRI between ages 25−70 years. Costs per detected breast cancer were calculated. In addition these data were incorporated into a micro simulation screening analysis model: MISCAN. This model simulates screening programs with different screening modalities and time intervals and takes overdiagnosis into account.

Results: No metastases occurred at a median follow-up of 5 years in the 38 invasive (and 9 DCIS) breast cancers detected in the study. The costs per detected cancer by screening with CBE, mammography and MRI were about €103.380. Screening with this scheme from age 35 to 60 is predicted to reduce breast cancer mortality by 24% at a cost per life-year gained (LYG) of €30.404 (3% discounting). The estimated mortality reduction by screening with annual mammography and CBE is 20% at €10.269 cost per LYG. Effectiveness of other screening schemes will be presented.

Conclusions: Adding MRI to screening programs for all women with a CLTR of 15−50% for breast cancer is expensive. However, it may be cost-effective for a selective group. We will discuss subgroups that may benefit from MRI-screening. A multi-centre randomized controlled trial is currently performed in the Netherlands to answer this question.

28   Proffered paper oral
The Effects of Population-based Mammography Screening Starting Between Age 40 and 50 Compared to the Effects of Adjuvant Systemic Therapy

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Background: Adjuvant systemic therapy has been shown to be effective in reducing breast cancer mortality. The additional effect of mammography screening in a situation in which an increasing number of patients receive adjuvant treatment remains uncertain, in particular for women aged 40−49 years. We assessed the effects of screening starting between age 40 and 50, as compared to the effects of adjuvant systemic therapy.

Materials and Methods: The use of adjuvant endocrine therapy, chemotherapy and the combination of endocrine- and chemotherapy, as

well as the uptake of mammography screening in the Netherlands was modelled using micro-simulation. With the model, the effects of 1) adjuvant therapy, 2) biennial screening between age 50 and 74 (current screening age) in the presence of adjuvant therapy, and 3) extending the current screening programme with 1−10 extra examinations between age 40 and 50 were assessed, by comparing breast cancer mortality in women aged 0–100 years in scenarios with and without these interventions.

Results: In 2008, adjuvant treatment was estimated to have reduced the breast cancer mortality rate in the simulated population from 67.4/ 100,000 woman-years to 57.9/ 100,000 woman-years: a decrease of 13.9% compared to a situation without treatment. Biennial screening between age 50 and 74 further reduced the mortality rate by 15.7%, to 48.8/ 100,000 woman-years. Extending screening to age 48 would lower the mortality rate by 1.0% compared to screening from age 50; 10 additional screening rounds between age 40 and 49 would reduce this rate by 5.1%.

Conclusions: Adjuvant systemic therapy reduced breast cancer mortality by 13.7%; mammography screening additionally decreased mortality by 15.7%. Expanding the lower age limit of screening would slightly further reduce breast cancer mortality.

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29   Proffered paper oral
Digitization of the Dutch National Screening Programme Completed: Results of 1.3 Million Digital Mammographies

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Background: The Dutch population-based breast cancer screening programme (BCSP) provides biennallya mammography screening examination to all women aged 50−75. The examination consists of a two-view mammography in initial screens, and usually one-view in subsequent screens, but in 30−50% also two-view mammography is performed according to a list of indications. From 2004 to 2010, all 65 film screen mammography (FSM) units within the BCSP have been replaced by digital full field mammography (DM) units. We assessed the screening performance of both, FSM and DM, during this period.

Material and Methods: From the annual monitoring of the BCSP in the period 2004–2010, we used regional aggregated data on invitations, screening examinations and follow-up of referred women. Analyses to compare referral and breast cancer detection rates were performed at the level of radiologists' groups (reading units, RU) for a) RU reading FSM only (FSM-only) and b) RU reading simultaneously FSM and DM (Mixed).

Results: In 2004–2010, 80% of the invited women attended the programme, resulting in 6.1 million screening examinations, of which 1.3 million DM (22.0%). Overall, 104,819 women (1.7%) got a referral recommendation for clinical assessment leading to a breast cancer diagnosis in 33,022 women (0.54%), of which 5,303 (16.1%) had a DCIS diagnosis. The referral recommendation rate was 16.9 (95% C.I. 16.7; 17.0) per 1000 women screened for FS-only, and 16.1 (95% C.I. 15.9; 16.3) for FS and 21.3 (95% C.I. 20.9; 21.7) per 1000 for DM in the mixed group. The total breast cancer detection rate was 4.8 (95% C.I. 4.7; 4.9) per 1000 women screened, 5.2 (95% C.I. 5.1; 5.3) and 5.8 (95% C.I. 5.7; 6.0) per 1000, respectively. In DM, we found a higher but non-significant invasive cancer detection (4.5 per 1000, 95% C.I. 4.3; 4.7) and a significantly higher DCIS detection (1.2 per 1000; 95% C.I. 1.1; 1.3). Overall referral and detection rates both increased during the study period, except for a decline of the initial referral peek in DM.

Conclusions: The increasing referral recommendation rate is not due to the introduction of and transition to DM, but the result of a general trend to more referrals. DM, however, led to a significantly higher cancer detection rate due to a significantly higher detecion of DCIS. We conclude that the transition to DM did not negatively affect the performance of the BCSP.

Wednesday, 21 March 2012   12:00–13:15

POSTER SESSION
Advocacy, Education and Nursing

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30   Poster
Breast Cancer Early Detection in Armenia

Z. Janibekyan[1]. [1]*Open Medical Club, Health, Yerevan, Armenia*

Background: The overall aims of the project is to improve women health and to contribute to save lives of the women; to aim target women to

understand the importance of early diagnosis of Breast Cancer (BC) and in case of early diagnosis the life of woman will be saved; to increase awareness of women aged 30−55 on importance of regular medical check-ups on BC prevention in 10 villages of Lori and 10 villages of Vayots Dzor rural regions in Armenia.

Materials and Methods: To achieve the objectives of the project the following methods were identified:
A. *Qualitative research tools such as Focus Group Discussions (FGD) and Key Informant interviews* were used to access the knowledge of community members. Thirty-nine key informants altogether were interviewed and 21 FGD were conducted in target regions.
B. *Training of women/peer to peer education at the target regions.* Totally 40 women have participated in the project as peer educators, 20 women from each region. The participants were presented the methods of peer to peer education, breast cancer risk factors, prevention and early detection information, etc. Also 5,000 copies of information and educational 'Breast Self Examination Manual for all Women' booklet were developed and distributed to the participants during the training sessions.

Results: A lack of appropriate services at the Primary Health Care (PHC) at villages and knowledge barriers were identified as the main barriers to early detection and preventions of BC. As a result of the training 40 peer educators have raised their knowledge on the issue of BC early detection and prevention methods by 68 %. Peer educators disseminated information on BC early detection methods totally in 8 educational and health institutions of target regions. The number of visits to the health ambulatories has been increased up to 23% as well as increased awareness of women population on BC early detection prevention ways/ methods in targeted regions of Armenia by 21%. 279 women from the targeted villages have undergone mammography in Yerevan clinics and 21 women have been diagnosed benign tumors.

Conclusions: Primary Health Care is a stated government priority and this has led to recent increases in the budget allocation for PHC. The following recommendations should be tailored to address deficits in government provision such as:
1. Increasing delivery of the PHC system in rural regions of Armenia.
2. Identifying the health information system requirements for scaling up PHC system as well as indicators that could be regularly monitored at community/village level.
3. A strategy for scaling up PHC system should be developed jointly with the different local organizations already active in this area, seeking to bring the government as well. It should include an advocacy strategy as well, provision of specific services that are currently lacking including chronic disease control and management, reproductive health, pre and antenatal care as well as screening and preventative services.

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31   Poster
Strategies for Increasing Early Detection of Breast Cancer Through Community Outreach and Training

B. Wiafe Addai[1]. [1]*Breast Care International, President, Kumasi, Ghana*

Introduction: Worldwide Cancer incidence including Breast Cancer is on the rise. Late presentation of breast cancer has been our major problem in Ghana. Early Detection and prompt treatment has been our Focus at Breast Care International and the Peace and Love Hospitals, located in Kumasi and Accra − Ghana.

Lack of awareness on the disease, myths and misconceptions are among the key factors that account for the late presentation of Breast Cancer in Ghana. Breast Care International initiated various strategies to solve this problem in Ghana, since 2002.

Background − Breast Care International (BCI): Breast Care International (BCI) is a Non-Governmental Organization officially registered in Ghana in 2002 with the aim of establishing Breast Cancer Awareness Centers throughout the Country, to create Breast Cancer awareness among Ghanaian women, especially the rural women since they form the majority; Educate them on the existence of Breast Cancer, Undertake Clinical Screening Exercises, Diagnosis, Counseling, Treatment, Rehabilitation as well as Research into the various breast pathologies especially Breast Cancer.

Our outreach visits in 2010 alone covered fifty groups and communities. Mode of selection of visits to a group or community was either at the instance of the opinion leaders, leadership of organized institutions in the communities, prompting of patients from such communities who had visited our facility for breast examination and treatment and other interested individuals.

Objectives: To promote breast cancer awareness; to reduce the number of patients presenting late, to increase the number of breast cancer survivors, to improve the quality of life of women living with breast cancer through the provision of quality treatment, diagnosis, counseling; education, advocacy, advice and support.