

developed by Yoon, Y.H. (2004) was used to measure quality of life in terms of general and treatment-related characteristics.

All data were analyzed by t-test and ANOVA using SPSS WIN 12.0 version program.

The results are as follows:

1. Subjects gave the highest score to 'breast symptoms' (8.94) among all other items on the questionnaire, including 'arm symptoms' (8.46), 'side effects of systemic therapy' (8.38), 'body image' (6.99), 'upset by hair loss' (6.61), 'sexual enjoyment' (5.20), 'sexual functioning' (4.91), and 'future perspective' (2.07). Overall quality of life was 6.34 out of 10.
2. In terms of general characteristics, patients with religion gave the highest ($p = 0.005$) score on 'upset by hair loss' whereas those who are married ($p = 0.001$) and living in small- and medium-sized cities ($p = 0.030$) rated considerably higher scores on 'sexual functioning'. High scores were also shown in patients with more than 3 million won monthly income on their 'future perspective', 'breast symptoms', and 'arm symptoms'.
3. Regarding the treatment-related characteristics, treatment satisfaction scores was the highest on 'body image' ($p = 0.011$). On 'sexual functioning', there was a statistically significant difference among patients who had given birth ($p = 0.005$) and those who reported to have an intention to take the same operation again ($p = 0.029$). On 'breast symptoms', quality of life in patients who had not gone through chemotherapy after the operation showed relatively higher score ($p = 0.022$). On 'sexual enjoyment', it appeared to be statistically significant because the score of patients who took anti-hormone treatment was high ($p = 0.022$).

It was somehow difficult to analyze and understand the results since there was no previous research on the same topic to refer to. Still, we believe this study is worthwhile as it was conducted only in patients who had undergone breast reconstruction. Appropriate and practical nursing mediation as well as education program specifically designed for breast reconstruction patients will be required to improve the overall quality of their lives.

Wednesday, 16 April 2008

12:30–14:30

POSTER SESSION

Prevention/Psychosocial/Nursing

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Poster Discussion

Measuring quality of life following breast reconstruction – A comparison of four instruments

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Background: Breast reconstruction is performed to improve quality of life. As no validated questionnaires exist, a combination of generic and breast-cancer specific instruments have been used in this group. There is no evidence, however, to support the use of these tools in the breast reconstruction population thus here we compare four of the most commonly used instruments.

Materials and Methods: Women undergoing latissimus dorsi breast reconstruction were asked to complete the EORTC C30+BR23, FACT B+4, Body Image Scale (BIS) and Hospital Anxiety and Depression Scale (HADS) at the same session at 3 and 6 months post-operatively. Participants were asked to indicate any questionnaire preference and to highlight issues not adequately covered. Item completion rates were assessed and corresponding instrument subscales compared.

3 month scores for women experiencing early post-operative complications were compared with those for whom recovery was uneventful to evaluate whether the instruments could detect hypothesised differences.

Results: 67 women completed all 4 instruments at either 3 or 6 months post-operatively. The response rate for all items was high >90% with the exception of EORTC sexual enjoyment (52%) and FACT sexual satisfaction (82%) items. 57% (38) women reported a questionnaire preference: 42% EORTC vs. 58% FACT. Patients highlighted that donor site morbidity, cosmetic and clothing-related issues were not adequately addressed.

The correlation between corresponding subscales of EORTC and FACT ranged from very good agreement for fatigue ($r > 0.8$) to only fair correlation ($r < 0.4$) for body image. BIS scores correlated very well to body image as assessed by EORTC ($r = 0.9$) but less well with FACT ($r = 0.4$). There was a good correlation between both FACT and EORTC emotional subscales and HADS scores ($r = -0.6$ to -0.8).

30 (45%) women experienced an early complication, but statistically significant differences in hypothetically relevant domains such as pain and breast symptoms were not detected by any instrument.

Conclusions: FACT B+4 and EORTC C30+BR23 measure different but overlapping aspects of quality of life in the breast reconstruction population. They do not, however, offer sufficient coverage of relevant reconstruction-related issues to facilitate the detection of complication-related quality of life changes that should exist. A breast reconstruction-specific tool is therefore required to adequately evaluate quality of life in this group.

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Poster Discussion

"Hope & Hurdles" – Empowering women with secondary breast cancer

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Much has been done for women with early breast cancer to encourage them to be active participants and decision-makers throughout their breast cancer treatments. As a general rule, far less information and encouragement is given to women with metastatic disease even though these women are likely to face more frequent and complex issues in a wide range of areas affecting their lives and their families.

In response to calls from its 25,000 membership, Breast Cancer Network Australia, the peak national breast cancer consumer organisation in Australia, has developed an information and advocacy resource for women diagnosed with secondary breast cancer. The *Hope & Hurdles* Pack is the result of intense collaboration with women already living with advanced disease and those treating and caring for them.

The Pack includes:

- A Personal Record for women to track test results, side effects, medical reports and expenses
- An Information Guide which includes support and service options, recommends websites and helpful resources and contacts
- She Has Secondary Breast Cancer – How Can I Help Her? – a brochure to assist partners, relatives or friends to understand metastatic disease and to inform them of services and strategies available for them
- Messages of Hope & Inspiration from other women living with the disease
- CD for partners and a guided meditation CD

Importantly *Hope & Hurdles* has been endorsed by all the relevant medical colleges in Australia.

Hope & Hurdles is available free of charge to Australian women with secondary breast cancer via telephone or an on-line ordering system. Launched in July 2007, 1,600 copies have been distributed in the first 6 months. The initial feedback from both women and oncologists has been overwhelmingly favourable.

"A diagnosis of secondary breast cancer is not the end of the road, it is the start of a new journey. Some days you will be filled with fear and uncertainty, this is to be expected. Honour your feelings, they are valid; and always remember tomorrow is another day. Do not let anyone take away your hope. Remember, you are not a statistic or a number, but a woman, alive and kicking."

"Life is a series of hurdles from now on: you get over one, you might go on for a little while, and then you will need to get over another one – the more hurdles you jump, the better you get at doing it."

[Quotes from women with metastatic disease.]

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Poster Discussion

"Cancer" is described as the diagnosis by three times as many patients scheduled for mastectomy compared with breast conserving surgery

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Background: Psychological distress in breast cancer patients who undergo a mastectomy or breast conserving surgery has hitherto been studied after they had their operation. However, the distress probably commences even before the operation and may differ according to the type of the scheduled operation.

Method: Student doctors asked 52 breast cancer patients admitted in a specialist breast unit for surgery, why they were having their operation, as part of the routine history-taking. These patients had at least two prior consultations with surgeon/breast care nurse/oncologist, in which the diagnosis and treatment of their cancer was explicitly discussed in detail. They had ample opportunity to ask questions.

Results: In answer to the question: "why are you having the operation?", the patients who were scheduled for a mastectomy used the term cancer (19/26) three times more than those scheduled for breast conserving surgery (6/26, RR = 3.17, 95% CI 1.51–6.63, $p = 0.0003524$). These responses did not correlate with either their age or their final Nottingham prognostic index.

Conclusion: The patient's perception of a "cancer diagnosis" was associated with the very prospect of a mastectomy – a more disruptive operation – rather than their actual prognosis, or their age. It is conceivable that similar perceptions exist in other cancer patients, and these findings could have wide implications for the management of their psychological well being.

The full manuscript has been submitted for publication.

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Poster Discussion

Prophylactic bilateral salpingo-oophorectomy (BSO) with or without prophylactic bilateral mastectomy (PBM) or no intervention in BRCA1 mutation carriers. A cost-effectiveness analysis

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Background: Women with germline BRCA1 mutation have a significant risk of breast and/or ovarian cancer. Prophylactic bilateral mastectomy (PBM) and prophylactic bilateral salpingo-oophorectomy (BSO) prevent cancer in mutation carriers.

Material and Methods: The cost-effectiveness of BSO (age of 35 years) with or without PBM five years earlier was compared to a no intervention setting employing a marginal cost analysis. Norwegian data on cancer incidence, mortality rates and costs were implemented in a Markov model and BSO was assumed to reduce the risk of ovarian cancer by 90%. A 3% discount rate was used.

Results: The additional health care cost per mutation carrier undergoing BSO and PBM was €15,784 and 6.4 discounted life years gained (LYG) was indicated (BSO alone with 100% acceptance 3.1 LYG). The additional cost per LYG was €1,973 (BSO alone €1,749/LYG). Including all resource use, the figure was a cost of €496 and €1,284 per LYG, respectively.

Conclusion: BSO with or without PBM in BRCA1 mutation carriers is cost-effective. A testing of all incident breast cancers to identify mutation carrying families should be explored on a health economic basis.

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Poster Discussion

Patient-physician interactions during early breast-cancer treatment: results from an international online survey

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Background: Patient care extends beyond clinical outcomes, covering side effects, patients' confidence in their physician, and 'negative' patient-physician interactions (eg telling a patient her cancer has recurred). This international survey examined the impact of positive and negative interactions on patients with early breast cancer (EBC) and breast-cancer physicians.

Material and Methods: The survey was conducted online in two parts: 1) postmenopausal women diagnosed with EBC in the past 5 years, who had undergone breast-cancer surgery; 2) breast-cancer physicians (oncologist/gynaecologist/surgeon), depending on the healthcare setting for each country (US, UK, Germany, Italy and France). The survey covered several issues: patient-physician interactions, sources of information and EBC treatment.

Results: In total, 462 physicians and 600 patients were surveyed. In terms of physician-patient dynamics, 86.6% of physicians considered the most rewarding part of their job to be having a good relationship with their patient. Although 61.2% were satisfied with the consultation time (13–22 min), 30.2% did not believe it was sufficient. Indeed, 53.8% of patients indicated that they would prefer more time to ask questions. Patients reported that their physician was a primary source of information, with 81.4% of patients trusting their physician to recommend the best treatment and 79.6% indicating trust in the physician was a vital part of their care. Most physicians (90.2%) indicated that patients trusted them to give the best treatment but only 40.0% involved patients in decision-making. Physicians (72.2%) felt that telling a patient she has EBC was easier than talking about recurrence; 37.2% reported telling a patient her cancer has recurred is the most stressful part of their job. Many physicians (92.4%) rated clinical data as crucial for building trust; 72.4% believed that treatments that minimise recurrence result in more positive conversations.

Of the physicians surveyed, 76.0% would recommend anastrozole as adjuvant therapy for themselves or their family.

Conclusions: This survey reveals some disparities in the views of physicians and patients; however, a strong patient-physician relationship is highly valued by both. Patients should have access to accurate information and sufficient time to discuss their concerns. Effective and well-tolerated treatments minimise breast-cancer recurrence and increase the number of positive physician-patient interactions.

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Poster Discussion

Very low risk for subsequent breast cancer in BRCA1/2 carriers after prophylactic mastectomy

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Background: BRCA1/2 gene mutation carriers are at high life time risk to develop a first and contralateral breast cancer. These carriers increasingly consider prophylactic mastectomy to reduce their high risk, in stead of choosing intensive surveillance.

Patients and methods: Starting in 1995 a consecutive series of carriers who had uni- or bilateral prophylactic mastectomy after one or more surveillance rounds were analyzed. Most recent imaging had to be within six months of the prophylactic operation. Standard procedure was skin sparing mastectomy with immediate reconstruction by means of an implant in the majority of the women. Random samples of all removed breasts were microscopically analyzed; only (pre)-malignant lesions were registered.

Results: Are described in the table. The single occult infiltrating breast cancer detected was in stage pT1aN0. The patient is well after two years of follow-up.

Characteristics at prophylactic mastectomy	BRCA1 carriers N = 179	BRCA2 carriers N = 72
Prior breast cancer, N (%)	83 (46)	28 (39)
Mean age ± SD		
Asymptomatic (bilat)	37.3±8.5 yrs	39.4±7.2 yrs
Symptomatic (unilat)	41.3±8.6 yrs	44.1±8.1 yrs
Pathology: DCIS, N (%)	7 (4)	5 (7)
IDC, N (%)	–	1 (1.4)
LCIS	1	1
Follow-up time	1027 women years	254 women years

In the follow-up only one of the 251 (0.4%) carriers was diagnosed with a pT1cN1 breast cancer in the incompletely removed axillary tail two years after prophylactic mastectomy. Six years after treatment she is free of disease.

Conclusions: Uni- or bilateral prophylactic mastectomy is highly effective in preventing breast cancer in BRCA1/2 carriers. Since the remaining risk is less than 1% continued surveillance is not warranted.

Wednesday, 16 April 2008

12:30–14:30

POSTER SESSION

Psychosocial aspects

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Poster

The Distress Thermometer assessed in women at risk of developing hereditary breast cancer (HBC)

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Background: The Distress Thermometer (DT; a National Comprehensive Cancer Network, USA), is a short and promising instrument to get insight into the distress experienced by cancer patients.