dietician, a psychologist, a physiotherapist and a sexologist conducted the educations. The group of breast cancer patients and their relatives had focused group discussions, supervised by two experienced nurses. A questionnaire survey was performed before and after each session.

Results: Until now, 161 Patients and 75 Relatives have joined the programme. Patients were before and after the education, asked about their knowledge on breast cancer. Before the education, 21% were "not" or "less satisfied" with their knowledge on breast cancer, which fell to 0.7%, after having accomplished the education. The score "satisfied" or very "satisfied" with their knowledge on breast cancer increased from 73% to 93%. Furthermore, patients were asked about their mood, drive and energi-level: Before education 36% were "not" or "less satisfied", which ultimately fell to 6% while the score "satisfied" or "very satisfied" increased from 59% to 87% after having accomplished the education.

Conclusion: Both the patients and their relatives obtained by a systematic education a significantly increased and much more useful knowledge on breast cancer pathology and also a better understanding on how the disease affected the individual patients and their surroundings. All topics were scored as important and the focused supervised group discussions were regarded as very helpful, supportive and useful in cooping and rehabilitation by both the patients and their relatives.

70 Poster

#### Multiple primary cancer in breast cancer in Korea

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Background: In Korea, the pattern of incidence in breast and thyroid cancer is similar according to age. The relationship between breast cancer (BC) and thyroid cancer is debated. To clarify this controversial issue, a retrospective study on the multiple primary cancer including thyroid cancer in breast cancer patients who have been following at Konkuk University Hospital was performed.

**Materials and Methods:** We analyzed the clinicopathologic data of 207 patients with breast cancer with or without other primary cancer.

Results: Of 207 patients, 34 (16.4%) had a second primary cancer. The most common cancer were papillary thyroid cancer [19 (9.2%)], followed by stomach [7 (3.4%)], colorectal [3 (1.5%)], renal[2 (1.0%)], liver, ovary and endometrial cancer [1 (0.5%)]. Regarding the time of detection for such second primary cancers, although 86% of stomach cancer were detected metachronously, but 26% of thyroid cancer were detected synchrolously.

**Conclusions:** Breast cancer patients may have second primary cancer in other organs, such as synchronous thyroid cancer. The present findings give rise to the usefulness of screening for thyroid cancer in the patient with breast cancer.

### Wednesday, 24 March 2010

18:15-19:15

POSTER SESSION

## Psychosocial aspects

71 Poster Psychometric properties of the WHOQOL-BREF quality of life assessment in women with malignant and benign breast problems

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Background: The aim of this study in women with breast problems was to compare the psychometric properties of the World Health Organization Quality of Life instrument, short form (WHOQOL-BREF) data derived from the World Health Organization Quality of Life instrument, 100 items (WHOQOL-100) with data obtained directly from the WHOQOL-BREF. Furthermore, additional psychometric properties of the WHOQOL-BREF were assessed.

**Material and Methods:** Study group 1 (SG1; *N* = 607) completed the WHOQOL-100 four times, Study group 2 (SG2; *N* = 549) completed the WHOQOL-BREF once. The groups consisted of women with a palpable lump in the breast or an abnormality on a screening mammography who received a diagnosis of their breast problem after the first measurement. All participants (women with breast cancer and women with benign breast problems) completed measures of anxiety (STAI), depressive symptoms (CES-D), and fatigue (FAS). Women with breast cancer also completed the EORTC QLQ-BR23.

**Results:** Confirmatory analyses of the WHOQOL-BREF-data of both groups (SG1 and SG2) showed a reasonably good fit (CFI=0.88, RMSEA=0.06 and CFI=0.90; RMSEA=0.06). Cronbach's alphas of the

domains exceeded 0.70 in both groups, except for Social Relationships ( $\alpha$  = 0.67/0.68) (Table 1). Correlations between domain scores of the WHOQOL-BREF and the WHOQOL-100 within SG1 were all significant at  $\rho$  = 0.01 level (Physical r = 0.86; Psychological r = 0.91; Social Relationships r = 0.89; Environmental r = 0.14). Construct validity was shown by the moderate (r = 0.30–0.49) to high (r >0.49) correlations between scores on the FAS, STAI-State, EORTC QLQ-BR23 and the WHOQOL-BREF domains Physical and Psychological Health. Good test-retest reliability (r's >0.70) was found.

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Conclusion: WHOQOL-BREF-data derived from the WHOQOL-100 or obtained from the WHOQOL-BREF directly are comparable, and the WHOQOL-BREF has good psychometric properties in women with breast problems.

Table 1. Internal consistency of the WHOQOL-BREF at baseline: Cronbach's alpha for the total groups SG1 and SG2, and for the breast cancer and benign breast problems groups separately

	Total group		BC group		BBP group	
	SG1	SG2	SG1	SG2	SG1	SG2
Overall Quality of Life and General Health	0.64	0.71	0.58	0.70	0.67	0.72
Physical Health	0.77	0.82	0.75	0.83	0.78	0.82
Psychological Health	0.72	0.78	0.71	0.78	0.72	0.79
Social Relationships	0.67	0.68	0.66	0.61	0.67	0.69
Environment	0.80	0.82	0.80	0.78	0.80	0.83

Abbreviations: SG1 = Study group 1; SG2 = Study group 2; BC = breast cancer; BBP = benign breast problem.

### 72 Poster

Psychological distress in breast cancer patients

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**Background:** A diagnosis of breast cancer is a potentially life-threatening disease and is often accompanied by major psychological distress. Anxiety and depression in cancer patients are well documented. The reported rate of depression in cancer patients has been quite variable, but a recent study finds the rate of depression with breast cancer patients to be 10–15%.

A Danish study found an elevated risk for hospitalisation with depression for up to ten years after a cancer diagnosis. An efficient screening tool for detecting psychological distress is needed for breast cancer patients.

Aim: Our overall objective was to validate an Danish version of the Distress Thermometer for its ability to detect psychological distress at time of diagnosis.

Our aims in this study were to describe

- The extent of distress among women with breast cancer at time of diagnosis.
- Characteristics of women with breast cancer suffering from severe distress

**Material and Methods:** 363 patients out of 431 consecutive breast cancer patients filled in a baseline questionnaire at time of diagnosis. Inclusion of patients was completed ultimo October 2009.

The questionnaire consisted of the Distress Thermometer and a number of validated scales, The Hospital Anxiety and Depression Scale (HADS), Impact of Event Scale (IES-R) and EORTC QLQ-C30. Furthermore sociodemographic variables and questions related to life-style and available social support was included.

Data on treatment and information about tumor size, histopathology and staging will be collected through the Danish Breast Cancer Coorporative Group.

Analysis: The extent of distress is described in terms of the Distress Thermometer, HADS and IES-R. Characteristics of women experiencing a high level of distress will be analysed in relation to age and available social support and rehabilitation needs. The following covariates will be included in analyses: age, stage of disease, cancer treatment, socioeconomic class, marital status, and available social support in and outside the family.

**Results:** Preliminary results on the relationship between high level of distress, age and available social support in newly diagnosed women with breast cancer will be presented.

# 73 Poster

#### Quality of life in younger versus older breast cancer survivors

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Background: Breast cancer is one of the most frequently occurring cancers in the developing world, but with earlier detection and better