Impact of Co-morbidities on Quality of Life in Breast Cancer

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QOL in Breast Cancer

- Second most common cancer in the world and the most frequent cancer among women.

- Each year there are over 1.1 million newly diagnosed women with breast cancer worldwide

- Measuring quality of life in breast cancer patients has been the focus of clinical practice and research in the recent decades

- The time of diagnosis, initial stages of adjuvant treatment course and the months immediately following the end of adjuvant treatment are transition times of poor adjustment and decreased quality of life

Breast Cancer

- Multimodality approach involving surgery, chemotherapy, radiotherapy, hormonal and targeted therapies.

- Incidence of comorbidities similar in women with or without breast cancer due to the natural effects of aging

- Potential impact of comorbidities in breast cancer:

➢Treatment delays
➢Non-compliance
➢Avoidance of Sx/chemo/RT→ poorer outcomes
➢Increased hospitalization events
➢Decrease QOL

Study

- Aim of the study: To prospectively evaluate the QOL in patients of breast cancer and to study the impact of comorbidities on QOL

- Study period: March 2015 to March 2016

- Included patients who received adjuvant radiation therapy

- Patients with metastases at presentation were excluded from the study.

- The **FACT B scale**[*] was used for assessment of QOL

- The FACT-B assessment was done at 3 points: Baseline(Pre RT) and at 3 and 6 months post RT completion.

[*].www.facit.org

FACT-B (Version 4)

FACT-B(Version 4)

Below is a list of statements that other people with your illness have said are important. **Please circle or mark one number per line to indicate your response as it applies to the past 7 days**.

	PHYSICAL WELL-BEING	Not at all	A little bit	Some-what	Quite a bit	Very much
GP1	I have a lack of energy	0	1	2	3	4
GP2	I have nausea	0	1	2	3	4
GP3	Because of my physical condition, I have trouble meeting the needs of my family	0	1	2	3	4
GP4	I have pain	0	1	2	3	4
GP5	I am bothered by side effects of treatment	0	1	2	3	4
GP6	I feel ill	0	1	2	3	4
GP7	I am forced to spend time in bed	0	1	2	3	4

	SOCIAL/FAMILY WELL-BEING	Not at all	A little bit	Some-what	Quite a bit	Very much
GS1	I feel close to my friends	0	1	2	3	4
GS2	I get emotional support from my family	0	1	2	3	4
GS3	I get support from my friends	0	1	2	3	4
GS4	My family has accepted my illness	0	1	2	3	4
GS5	I am satisfied with family communication about my illness	0	1	2	3	4
GS6	I feel close to my partner (or the person who is my main support)	0	1	2	3	4
Q1	*Regardless of your current level of sexual activity, please answer the following question. If you prefer not to answer it, please mark this box [ ] and go to the next section.*					

FACT-B (Version 4)

		Not at all	A little bit	Some-what	Quite a bit	Very much
GS7	I am satisfied with my sex life	0	1	2	3	4

Please circle or mark one number per line to indicate your response as it applies to the <u>past 7 days</u>.

EMOTIONAL WELL-BEING

		Not at all	A little bit	Some-what	Quite a bit	Very much
GE1	I feel sad	0	1	2	3	4
GE2	I am satisfied with how I am coping with my illness..........	0	1	2	3	4
GE3	I am losing hope in the fight against my illness..................	0	1	2	3	4
GE4	I feel nervous...	0	1	2	3	4
GE5	I worry about dying	0	1	2	3	4
GE6	I worry that my condition will get worse	0	1	2	3	4

FUNCTIONAL WELL-BEING

|		Not at all	A little bit	Some-what	Quite a bit	Very much
GF1	I am able to work (include work at home)	0	1	2	3	4
GF2	My work (include work at home) is fulfilling.....................	0	1	2	3	4
GF3	I am able to enjoy life...	0	1	2	3	4
GF4	I have accepted my illness..	0	1	2	3	4
GF5	I am sleeping well	0	1	2	3	4
GF6	I am enjoying the things I usually do for fun	0	1	2	3	4
GF7	I am content with the quality of my life right now..............	0	1	2	3	4

Results

- 64 patients were recruited, all underwent curative surgery and 53 (83%) received chemotherapy

- Median age at was 52.5 years (range 29 to 86 years)

- 52 (81%) women were married
- 10 (16%) were widowed
- 2 (3%) were unmarried

- Postmenopausal- 32(50%)
- Premenopausal- 17(27%)
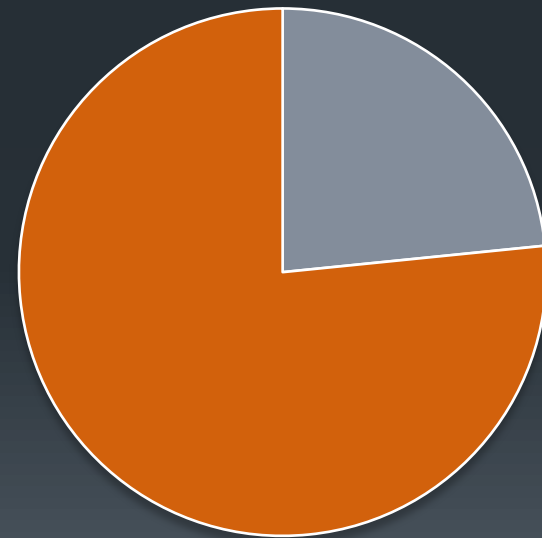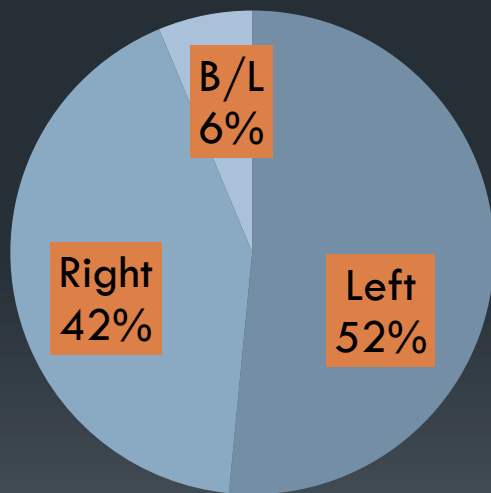- Hysterectomised- 13(20%)
- Perimenopausal- 2(3%)

Education
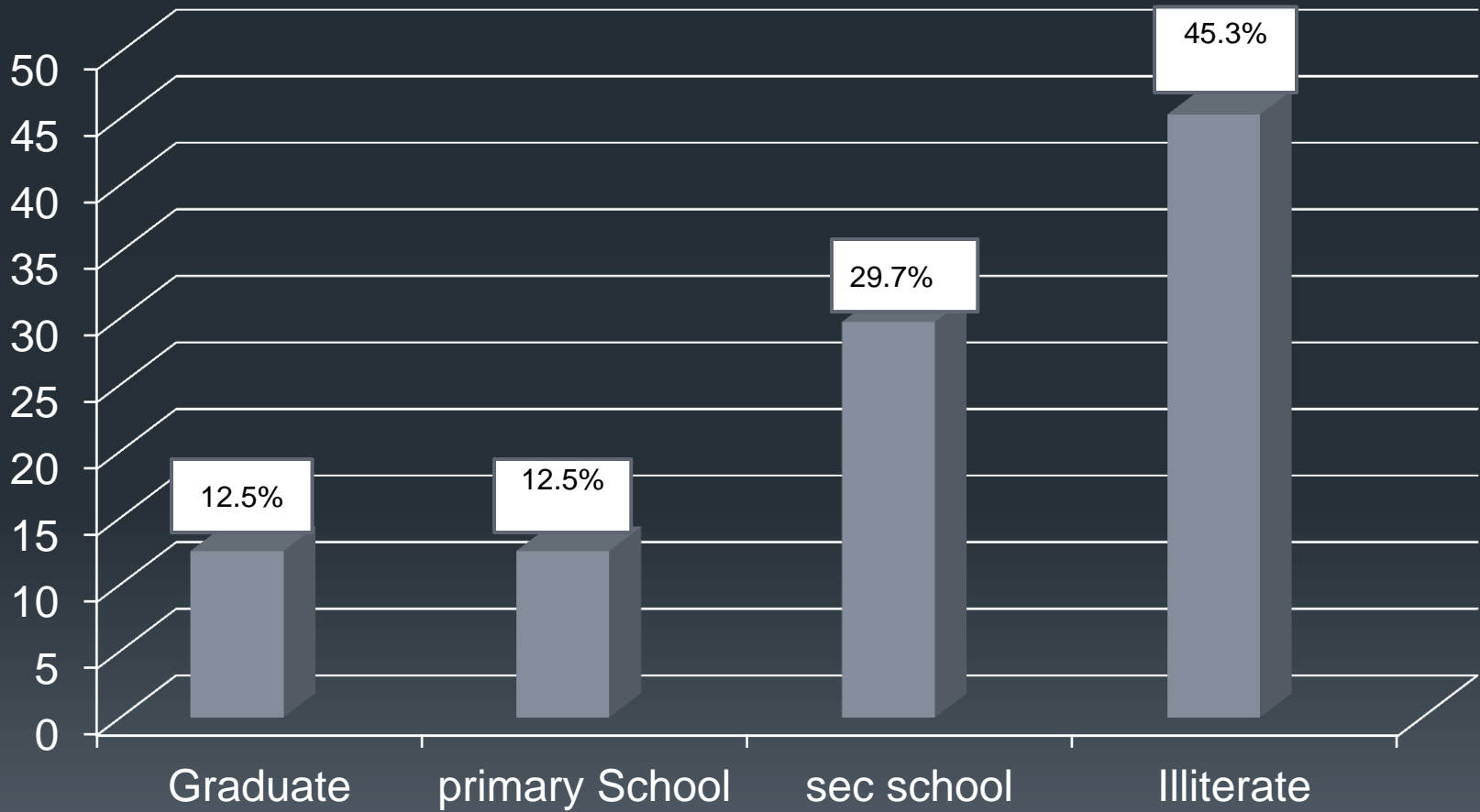
Socioeconomic Status
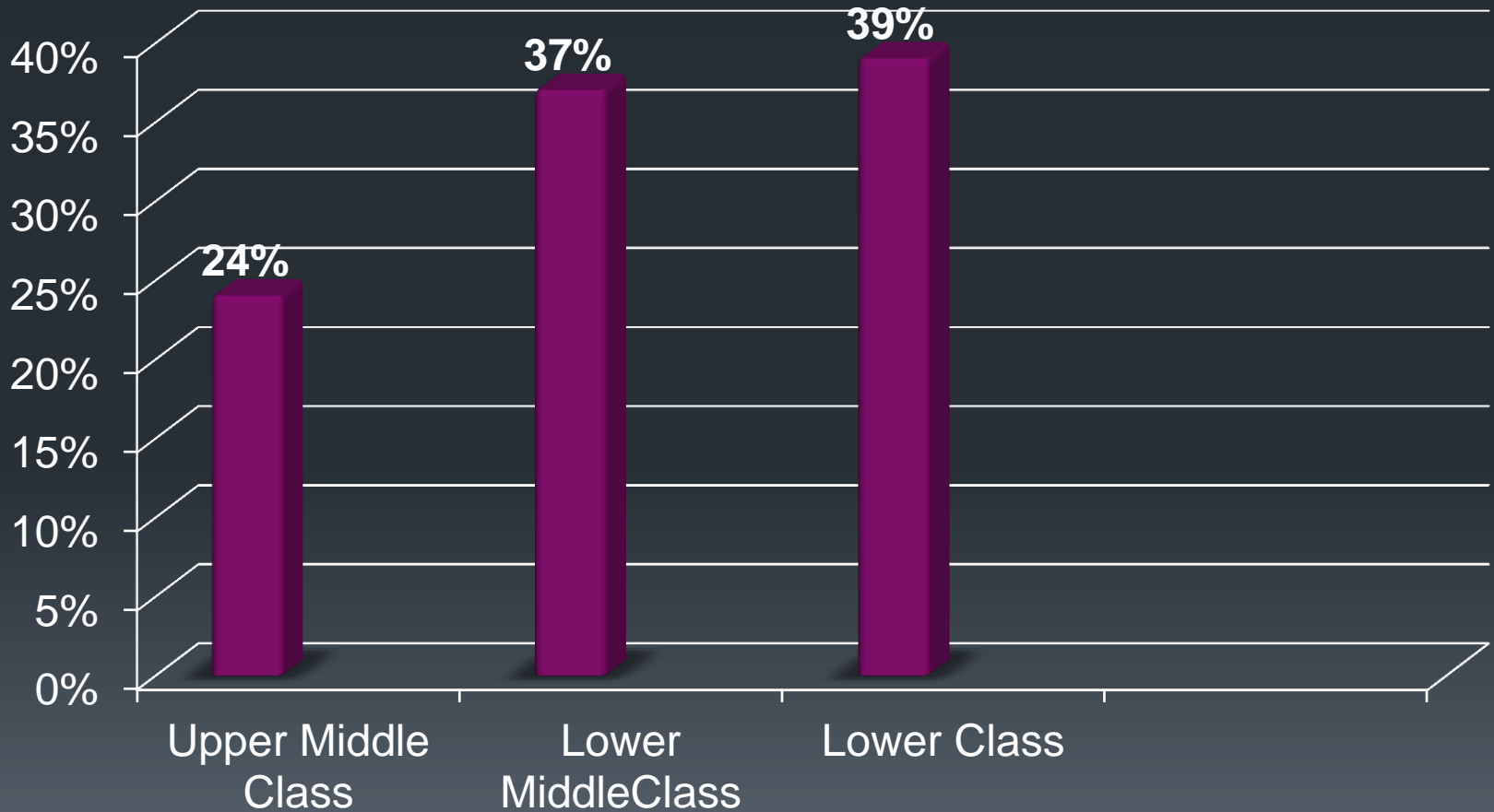
Laterality and Type of Surgery

Post-RT Therapies

At the end of radiation therapy patients were advised on hormone &/or targeted therapy based on their receptor status and menopausal status

- Tamoxifen in 14 patients

- Aromatase inhibitors in 25 patients

- Herceptin maintenance in 4 patients.

Co-morbidities

- No associated co-morbidities in 35 (54%) patients.

- 29(46%) patients had co-morbidities like DM,HTN, CAD, hypo/hyperthyroidism

- 13 (20%) pts had >1 co-morbidity

- DM - 30%, hypertension - 28%, arthritis – 15%, CAD – 10%, thyroid disorders- 7%

- 13 pts had >1 co-morbidity

➢22 patients (34.3%) were obese (BMI>25)

➢ 21 patients(32%) were overweight (BMI 23-24.9)

Comparision of Fact B scores at baseline, 3 and 6 months

Functioning	Pre RT Mean(SD) N=64	3 months Mean(SD) N=64	6 months Mean(SD) N=60	p value
Physical wellbeing	18.1(3.1)	19.7(3.4)	20.2(3.8)	NS
Social well being	20.3(3.7)	19.8(3.6)	19.2(3.6)	NS
Emotional well being	16.4(3.1)	17.5(3.3)	17.7(2.7)	0.001
Functional well being	17.5(3.5)	18.4(3.2)	18.9(2.8)	NS
Additional concerns	22.1(4.8)	23.1(5.1)	23.3(5.6)	0.002
Total Score	94(14.2)	99(14.2)	101.1(13.6)	NS

Total score range- 0 to 148, higher the score better the QOL.

PWB- Physical well being
SWB-Social well being
EWB-Emotional well
being
FWB-Functional well
being
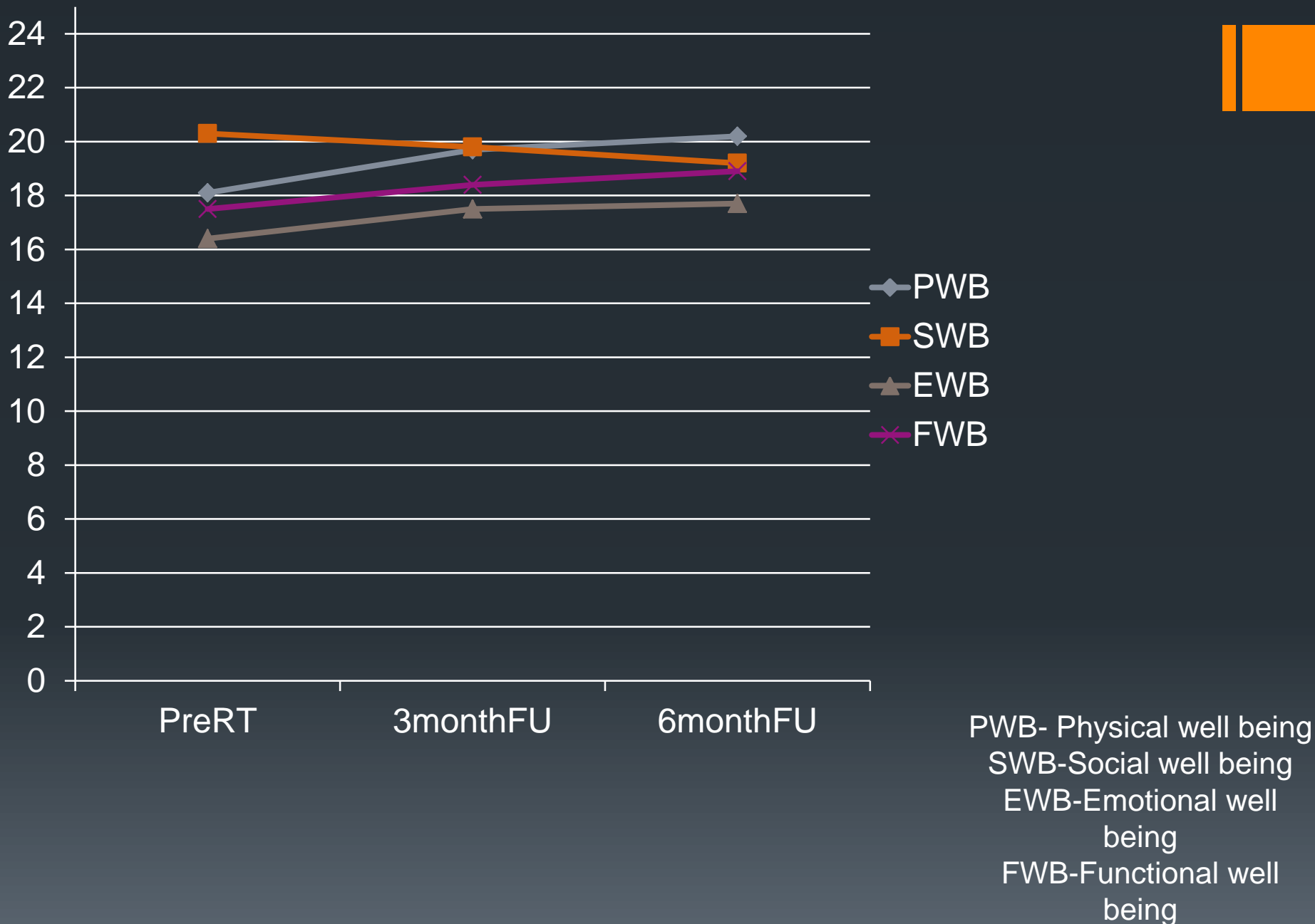
	Pre RT with comorbidity Mean (Range) N=29	Pre RT w/out comorbidity Mean (Range) N=35	3 mo with comorbidity Mean (Range) N=29	3 mo w/out comorbidity Mean (Range) N=35	6 mo with comorbidity Mean (Range) N=33	6 mo w/out comorbidity Mean (Range) N=27
Physical well being	17.2 11-21	20.6 13-27	18.5 12-28	21 14-30	20.2 12-29	20.3 14-30
Social well being	20.1 15-26	22.9 12-28	20.8 16-29	21.2 14-27	21.6 15-29	20.8 12-28
Emotional well being	20.2 12-25	17.5 11-24	18.3 12-24	18.8 13-25	19.5 12-25	19.5 12-24
Functional Well being	17.5 13-26	20.7 10-25	18 12-26	19.4 13-27	18.5 14-22	20.5 15-27
Additional concerns	20.6 11-29	21.1 12-31	20.7 12-32	22.6 12-31	20.3 13-33	23.7 14-33
Fact B score	91 71-119	98 66-134	95 70-120	102 70-128	106 76-131	108.9 74-136
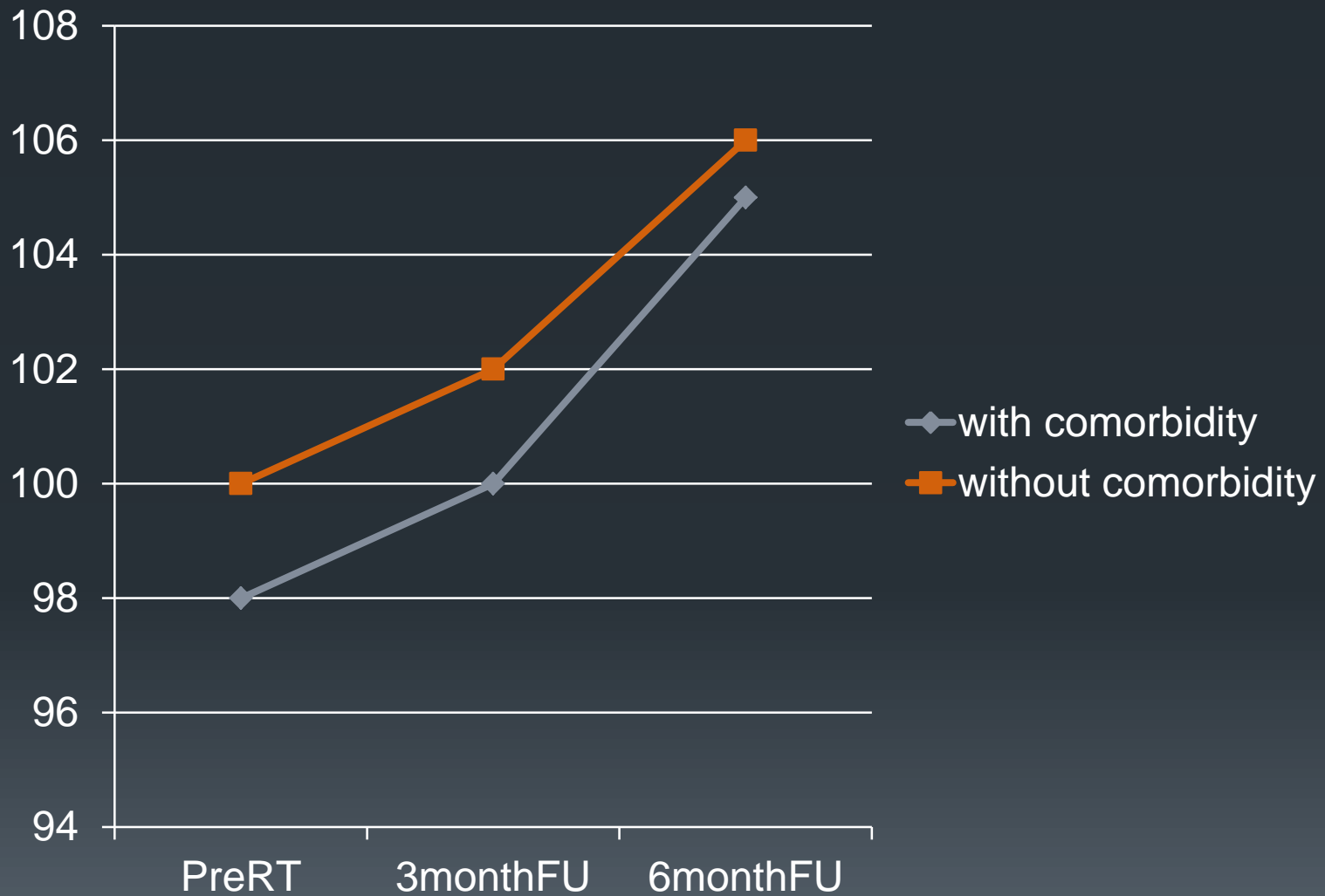
Results

- Emotional well being and symptoms like pain, and upset by hair loss, systemic therapy side effects improved significantly.

- The arm symptoms were increased compared to baseline and persisted.

- There was deterioration in the social well being compared to pre treatment (statistically not significant)

- Impaired body image and decrease in the sexual functioning was observed.

- There was moderate distress due to fear of cancer recurrence and resuming normal life.

- Majority of patients (70%) reported that fatigue decreased in intensity but was sustained even at 3 and 6 months

Results

- There was a significant difference in QOL scores between pateints with and without comorbidities and although both groups showed improvements, the differences persisted on follow up

- This suggests that comorbidities can significantly impact QOL in breast cancer patients

- Overall patients perceive a benefit from treatment but pain, arm symptoms, body image, social and sexual problems may persist or worsen in the long term

Limitations

- Small sample size

- Short follow up

- No assessment at the time of initial diagnosis

BMC Cancer

BioMed Central

Quality of life in patients with breast cancer before and after diagnosis: an eighteen months follow-up study

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RESULTS : Significant differences in patients functioning and global quality of life at three points of time(p<0.001). Although there were deteriorations in patients scores for body image and sexual functioning, there were significant improvements for breast symptoms, systemic therapy side effects and patients future perspectives(p,0.005)

Quality of Life after Breast Carcinoma Surgery

A Comparison of Three Surgical Procedures

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RESULTS : Aspects of QOL other than body image are not better in women who undergo BCS or mastectomy with reconstruction than in women who have mastectomy alone

BCS and mastectomy –only group did not differ significantly regarding well being.

KEYWORDS: breast carcinoma, breast reconstruction, breast-conserving surgery

Future directions

- Impaired body image and decreased sexual functioning must be seriously considered and addressed in long term survivors of breast cancer to improve their overall quality of life

- Even after completion of treatment, there is social stigma and cultural inhibition and this may affect post treatment psycho-social functioning.

- As there is limited literature in Indian population, development of instruments for measuring quality of life in breast cancer patients, or cultural adaptation and validation studies of the existing instruments needs to be done.

Thank you