Sexual health in long-term breast cancer survivors – a comparative study

Solveig K. Smedsland¹, Kathrine F. Vandraas¹, Ragnhild S. Falk¹, Cecilie E. Kiserud¹, Mette Brekke², Julie Horn², Randi J. Reidunsdatter³, Kristin V. Reinertsen¹

¹National Advisory Unit of Late Effects after Cancer Treatment, Department of Oncology, Oslo University Hospital, Oslo, Norway. ²Research Support Services, Oslo Centre for Biostatistics and Epidemiology, Oslo University Hospital, Oslo, Norway. ³General Practice Research Unit, Institute of Health and Society, University of Oslo, Oslo, Norway. ⁴Department of Public Health and Nursing, Norwegian University of Science and Technology, Trondheim, Norway. Department of Obstetrics and Gynecology, Levanger Hospital, Nord-Trøndelag Hospital Trust, Levanger, Norway. ⁵Department of Circulation and Medical Imaging, Norwegian University of Science and Technology, Trondheim, Norway.

BACKGROUND

• Sexual health challenges are frequently reported by women diagnosed with breast cancer (BC), but knowledge of their long-term sexual health is limited.
• There is a lack of large-scale studies comparing sexual health in long-term BC survivors (BCSs) and population controls.

AIMS

• To compare sexual health among BCSs eight years after diagnosis to that of similar aged population controls.
• To explore the effects of pre/postmenopausal age at BC diagnosis and systemic BC treatments on long-term sexual health.

MATERIAL AND METHODS

• The SWEET (survivorship work and sexual health) study is a cross-sectional nation-wide questionnaire study examining work life and sexual health among long-term BCSs in Norway.
• Women aged 20-65 years when diagnosed with early BC in 2011/2012 (n=2803) were identified by the Cancer Registry of Norway and invited to participate. In total, 1241 BCSs were eligible.
• Controls were similar aged women (n= 17 751 of the 36 395 invited) from the fourth survey of the Tredetangle Health Study (HUNT³).
• Sexual health was measured by subscales from the EORTC QLQ-BR23 (sexual functioning and sexual enjoyment) scored from 0-100 and from the Sexual Activity Questionnaire² (sexual discomfort) scored from 0-6.
• Linear regression analyses with adjustments for age, living partnered or not, and educational level were performed to compare groups.
• Clinical relevant differences between groups required mean score differences of ≥ 10 on the EORTC scales and ≥ 0.6 for sexual discomfort.

RESULTS

• Mean age at survey was 59 years in BCSs and 54 years in controls.
• Most BCSs had been diagnosed for BC stage I or II (80%) with breast conserving therapy (58%), radiotherapy (80%), chemotherapy (70%) and/or endocrine therapy (67%). Twenty-three percent reported current use of endocrine therapy.
• Sixty-two percent of BCSs were diagnosed at premenopausal age.

| Comparison of sexual health in breast cancer survivors and population controls |
|---------------------------------|-----------------|-----------------|-----------------|
|                                   | Sexual functioning | Sexual enjoyment | Sexual discomfort |
| Beta 95% CI                      | Beta 95% CI       | Beta 95% CI       |                  |
| All age groups                   |                  |                  |                  |
| HUNT SWEET                       | Ref -8.9         | Ref -10.1 -7.3   | Ref -14.4 -16.4 -12.5 | Ref 1.0 0.9, 1.1 |
| Premenopausal age (<55 years at diagnosis) | Ref -11.0        | Ref -12.8 -9.2   | Ref -18.9 -21.2 -16.6 | Ref 1.3 1.2, 1.4 |
| Postmenopausal age (≥55 years at diagnosis) | Ref -5.3         | Ref -7.6 -2.9    | Ref -5.7 -9.3 -2.2   | Ref 0.4 0.2, 0.7 |
| Extended endocrine therapy       | Ref -11.9        | Ref -14.7 -9.1   | Ref -17.6 -21.4 -13.9 | Ref 1.4 1.2, 1.7 |
| Adjuvant chemotherapy            | Ref -11.1        | Ref -12.7 -9.5   | Ref -16.7 -19.0 -14.5 | Ref 1.3 1.1, 1.4 |
| Former use of aromatase inhibitor | Ref -10.1        | Ref -12.9 -7.4   | Ref -17.0 -21.0 -12.9 | Ref 1.3 1.0, 1.5 |

Clinical significant differences (Beta values) in bold.
¹Breast cancer survivors on current/extended endocrine therapy. ²Breast cancer survivors treated with former adjuvant chemotherapy. ³Breast cancer survivors with former adjuvant aromatase inhibitor therapy.

CONCLUSION

Premenopausal age at diagnosis, extended endocrine therapy, adjuvant chemotherapy and former aromatase inhibitor therapy are risk factors for sexual health challenges in long-term BCSs. During follow-up, special attention with regards to sexual health should be given to BCSs with these risk factors.

REFERENCES

¹Smedsland et al. Cohort Profile Update: The HUNT study, Norway. International Journal of Epidemiology 2022
³Thirlaway et al. The Sexual Activity Questionnaire: a measure of women’s sexual functioning. Quality of Life Research 1996.

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E-mail address corresponding author: solve@ous-hf.no