

## Abstract

In Sweden, breast cancer is today the most common type of cancer among women. Of the approximately 7,059 women who developed the disease in Sweden during 2006, about 73% were postmenopausal and aged 55 or older at time of diagnosis, and about 33% were aged 70 or older. Survival time for women with breast cancer has been extended due primarily to the development of new adjuvant treatments; however, these treatments may produce a wide variety of troublesome symptoms. There are limited descriptions in the literature of how Health-Related Quality of Life (HRQoL) is affected by adjuvant treatments in elderly populations. Nevertheless, it is common that in clinical practice these women are offered less aggressive treatment due to fears that the side effects may be greater for them. This thesis explores the experience of adjuvant chemotherapy (CT) and/or radiotherapy (RT) among postmenopausal women with breast cancer. More specifically, the thesis aims to examine how HRQoL develops over time, what factors predict overall HRQoL after treatment and if age is associated with HRQoL. A further aim was to describe stressful events experienced by these women and how they manage these stressful events or situations.

The participants were recruited from three centres in Sweden (Gothenburg, Stockholm and Skövde). In the first study, 150 women scheduled to receive adjuvant chemotherapy (CT, n=75) or radiotherapy (RT, n=75) were included. In the second study, 20 women with breast cancer were interviewed regarding their experiences during CT. The third and fourth studies included the same 75 women scheduled to receive adjuvant CT from the first study. Both inductive and deductive research methods were used. Data from the qualitative studies (II and IV) were analysed with content analyses (qualitative and quantitative). Data collected with quantitative methods were analysed using mainly non-parametric methods (Paper I and III).

No significant relationship was found between age and any of the HRQoL domains, except dyspnoea and sexual functioning. Thirty percent of the diaries recorded no stressful events during adjuvant CT. Stressful events experienced during CT were more related to physical problems than to psychosocial problems. CT and RT affected many aspects of the women's HRQoL negatively. RT was associated with more localized problems, whereas CT was associated with systemic symptoms. Nausea/vomiting was one of the most stressful events reported by women undergoing CT, increased significantly during and after treatment and was also the most anticipated side effect of CT. Fatigue and depression increased over time and remained high at time of follow-up. Baseline predictors for overall QoL after CT were emotional functioning and pain, whereas overall QoL after RT was predicted by baseline emotional and physical functioning, lower tumour stage and less breast symptoms. Social support from family, friends and health care professionals was important for these women. The women employed many different coping strategies for each stressful event. Acceptance, relaxation and distraction were the most commonly used strategies.

In conclusion, CT and RT variously and seriously affect aspects of HRQoL in postmenopausal women. This indicates that the situation of these women cannot be understood as simply a function of chronological age, but as an individual process where the biological age is important. Patient care may be improved by focusing more attention on specific symptoms, notably fatigue, nausea/vomiting, and depression, and also on social and emotional functioning. Interventional studies are needed that specifically target identified pre-treatment predictors of later impaired QoL to determine if it is possible to prevent declines in QoL in these women. The deeper understanding of the coping strategies used by women to handle stressful events is also an important knowledge and a possible way for health care professionals to support in clinical practice.

**Keywords:** Breast cancer, Postmenopausal, Health-Related Quality of Life, Overall Quality of Life, Quality of Life, Content Analysis, Daily life, Experience, Symptom experience, Stressful events, Coping, Coping strategies.

# **Experience of adjuvant treatment among postmenopausal women with breast cancer**

- Health-Related Quality of Life, symptom experience, stressful events and coping strategies

## **Akademisk avhandling**

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av

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- I. Browall M., Ahlberg K., Karlsson P., Danielson E., Persson L-O. & Gaston-Johansson F. (2008). Health-Related Quality of Life during adjuvant treatment of breast cancer among postmenopausal women. *European Journal of Oncology Nursing* (Accepted)
- II. Browall M., Gaston-Johansson F. & Danielson E. (2006) Postmenopausal women with breast cancer: their experiences of the chemotherapy treatment period. *Cancer Nursing*, 29, 34-42.
- III. Browall M., Ahlberg K., Persson L-O., Karlsson P. & Danielson E. (2008). The impact of age on ealth-Related Quality of Life (HRQoL) and symptoms among postmenopausal women with breast cancer receiving adjuvant chemotherapy. *Acta Oncologica*, 47, 202-215.
- IV. Browall M., Persson L-O., Ahlberg K., Karlsson, P. & Danielson E. Daily assessment of stressful events and coping among postmenopausal women with breast cancer treated with adjuvant chemotherapy. (Submitted)

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