

separately, under distinct assumptions regarding pre-post test associations, from two-group studies.

Results: The overall weighted mean ES for two-group comparisons was .52 (higher mean for treatment than control) for physical function, .35 for symptoms other than fatigue, and .27 for body composition. More modest positive effect sizes were documented for mood (.19), quality of life (.14), fatigue (.11), and exercise behavior (.04). ES were larger among single group pre-post design studies (function = .70, mood = .49, symptoms = .41, quality of life = .34, fatigue = .32, physical activity behavior = .31, body composition = .11), but typically followed the same pattern as two-group comparisons. ES among control group participants were typically negative and not (statistically) significantly different from 0. Modified funnel plots of ES by sampling variance suggested missing small sample studies with small or negative ESs.

Conclusions: Exercise interventions resulted in small positive effects on health and well-being outcomes. ES magnitude results were consistent with previous efforts to synthesize parts of this literature. The findings suggest challenges remain in designing interventions that are effective with more subjects and that are successful in attaining larger outcome improvements among subjects. Exercise characteristics essential to achieve favorable outcomes, such as form (e.g. endurance, resistance, flexibility) and dose, could not be synthesized due to scant data. Further research with more diverse samples is essential.

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POSTER

Improving symptom outcomes following chemotherapy administration: the experience of WISECARE+

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Background: WISECARE+, a pan-European, quasi-experimental cancer nursing study, evaluated the impact of a nurse-led, evidence-based symptom management intervention on the actual symptoms experienced by adult patients receiving chemotherapy. It focused on nausea, vomiting, fatigue and oral problems and was conducted in 8 units across 5 clinical sites in Europe.

Materials and Methods: This study was undertaken in three phases: pre-intervention, intervention and post-intervention.

During the pre-intervention phase (which lasted 7 months), patients completed a daily symptom questionnaire for 14 consecutive days following each cycle of chemotherapy. This questionnaire incorporated the Chemotherapy Symptom Assessment Scale (Brown et al 2001) and the Oral Assessment Guide (Eilers et al 1988). During this phase, nursing care was delivered according to local practice.

The intervention was then presented to the clinical sites over a 2 month period. This included extensive background literature, guidelines for symptom management and novel methods of communicating with patients about their symptom experiences. The clinical sites were given guidance on methods of integrating this symptom management intervention in practice. During the post-intervention phase (which lasted 7 months), patient symptom data was collected in the same manner as above. Symptom management of nausea, vomiting, fatigue and oral problems was organised and delivered on the basis of the symptom management intervention.

Results: Data were received from 235 patients across Europe. All data were analysed using SPSS 12 for Windows. Differences between the pre- and post-intervention scores were evaluated using non-parametric tests as the data were not normally distributed. Symptoms of nausea ($p=0.025$), vomiting ($p<0.001$) and oral problems ($p=0.001$) were significantly reduced in the post-intervention phase of the study. There was no significant change in fatigue experiences between pre- and post-intervention phases ($p=0.611$).

Conclusions: This symptom management intervention resulted in significant improvements in patients' symptom experiences during a course of chemotherapy however, its lack of impact on experiences of fatigue warrants further investigation. Future work may involve incorporating additional symptoms into this model of symptom management.

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POSTER

The impact of exercise on symptoms and side-effects in cancer patients undergoing chemotherapy

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Background: The aim of this study was to evaluate the effects of a six weeks intervention with structured physical activity, relaxation techniques and massage on the symptoms/side-effects of cancer patients in chemotherapy.

Material and Methods: In order to obtain a continuous registration of side effects, a diary was developed and used throughout the intervention. The diary contains a structured part based on questionnaires and a "free text" part for the patients to write down their feelings and experience related to the symptoms in question. The patients scored side effects on a scale from 0-4 using the Common Toxicity Criteria and reported the scores in the questionnaires. Twelve possible symptoms/side-effects were registered daily: Lack of appetite, nausea, vomiting, diarrhea, numbness, constipation, physical fatigue, mental fatigue, treatment-related fatigue, muscle pain, arthralgia and "other pain".

Results: During the intervention a decrease in the scoring of 10 of the 12 side effects was found, while the score for vomiting and nausea remained unchanged. Patients with evidence of disease ($n=26$) had a significant higher level of side effects than patients with no evidence of disease ($n=28$). Both groups did experience a significant reduction in the sum of side-effects during the intervention.

Conclusions: The results indicate that six weeks of exercise in cancer patients with or without residual disease being treated with chemotherapy can lead to a reduction of treatment-related symptoms.

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POSTER

Results of an open non-randomised case study to evaluate a new soft silicone dressing Mepilex® Lite in the management of radiation skin reactions

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Background: Moist desquamation reactions develop in nearly a third of patients who undergo radical radiotherapy treatment to common sites (Wells et al 2004). Such reactions can be painful, distressing and difficult to manage, particularly as they are likely to develop in awkward places such as the neck, axilla and other skin fold areas. Broken skin provides a focus for infection but considerable controversy exists over the most suitable means of protecting moist areas and preventing further skin breakdown during radiotherapy. It is difficult to find a dressing which stays in place comfortably, provides an optimum healing environment, is easy to remove and also helps to relieve symptoms. This paper describes an evaluation of a new soft silicone dressing (Mepilex® Lite) in the management of patients with radiation skin reactions.

Methods: This case study was conducted in two cancer centres, one in Scotland and one in Sweden. Patients were potentially eligible if they were undergoing radical radiotherapy for breast or head & neck cancer and were experiencing severe erythema and/or moist desquamation with at least one symptom. Dressings were applied to the affected areas until skin reactions had healed. Weekly skin assessments were performed using the Radiation-Induced-Skin-Reaction-Assessment-Scale (RISRAS) and digital photography. Patients were encouraged to complete a daily diary, and radiotherapy staff were asked to evaluate the use of the new dressing.

Results: 16 patients were recruited. Many found the dressings comfortable to wear, protective during movement and sleep, soothing and easy to apply and remove. Some patients with extensive areas of moist desquamation found the dressings heavy, and a few commented that they removed a superficial layer of skin when changed, although it is likely that this was non viable tissue rather than healthy skin. 3 patients decided to discontinue using the dressing and 2 experienced severe itching (a known symptom of erythema) and were withdrawn from the study. The majority were very positive about the benefits of Mepilex® Lite and found it easy to adapt to their needs.

Conclusions: Mepilex® Lite has a number of properties which make it particularly suitable for the management of radiation skin reactions. This study suggests that it is a practical, comfortable and safe means