appointments were of shorter duration and often conducted by junior medical staff; this resulted in higher routine follow-up costs in the telephone follow-up group (mean difference £55, 95% bCI £29-£77). There were no significant differences in the costs of treating recurrence between groups. Participants receiving hospital follow-up had significantly higher travel and productivity costs (mean difference £47; 95% bCI £40-£55).
Conclusions: Telephone follow-up by specialist nurses may be a useful strategy for reducing the burden on busy hospital clinics and providing a quality service. Although patients and carers will have fewer costs with telephone follow-up, this approach will not necessarily lead to cost or salary savings for the health service.

4151 ORAL

Management of chemotherapy-related symptoms by telephone aftercare by an oncology nurse

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Background: Practice research has shown that patients experience many chemotherapy related symptoms (CRS). These symptoms, which are sometimes experienced as severe, have an impact on the quality of life of the patient. The practice research also showed that patients barely got in touch with their medical specialist when they experienced (severe) symptoms and the interventions they applied were not always appropriate. As a result of a literature search, a pilot study of telephone aftercare by the oncology nurse was implemented, to be able to survey and manage CRS.
Materials and Methods: With telephone aftercare all clinical patients receiving chemotherapy will be called by an oncology nurse, 3 till 10 days after discharge from the hospital. For the purpose of surveying and managing CRS by the telephone aftercare a '*chemotherapy symptom list*' is being used. This symptom list contains 16 frequently occurring CRS. The oncology nurse makes the patient's symptoms objective by using the Common Toxicity Criteria of adverse events (CTC) version 3.0. Decision trees define per symptom which interventions at which CTC score should be applied. With a symptom scoring two or higher, the patient will be called back within 24−72 hours, or the patient will have to be directed to the treating medical specialist. In February 2009 oncology nurses of the Medical Oncology unit of the Erasmus MC-Daniel Rotterdam, the Netherlands, started with the pilot study of telephone aftercare for patients treated with chemotherapy.
Results: Until April 2009 twelve patients received telephone aftercare. In one case the patient was called back after 3 days and in two cases the treating medical specialist was consulted. All patients were very satisfied with this type of care. The oncology nurse took time to listen to and advise about symptoms, which may not score high when made objective, but may cause a severe subjective burden for the patient.
Conclusions: With telephone aftercare CRS seem to be better surveyed and managed. The oncology nurse seems to be the excellent person to make the subjective burden of symptoms objective, to provide advices and to direct the patient to the medical specialist when necessary.

4152 ORAL

Telephone delivered intervention for fatigue using motivational interviewing: an exploratory trial

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Background: Fatigue affects 89−99% of people undergoing intravenous chemotherapy. Typically it manifests as treatment starts and increases over time. Psycho educational interventions have been developed to combat this symptom but most are delivered to individuals face to face. A structured telephone intervention (Beating Fatigue by Telephone) consisting of three telephone calls over 3 months, a patient handbook and diary was developed from a previous face-to-face programme. Motivational interviewing techniques were used to deliver information on managing fatigue, facilitate goal setting and motivate uptake of techniques to actively manage the symptom. Feasibility, acceptability and potential effect of the telephone intervention were explored in this study.
Materials and Methods: An exploratory trial using a randomised pre-test post-test control group design explored the magnitude of treatment effect. People (n = 40) undergoing chemotherapy for breast or colorectal caner or lymphoma experiencing fatigue were recruited. Fatigue intensity, fatigue distress, confidence in managing fatigue and anxiety and depression were measured pre and post intervention. Telephone interviews (n = 10) explored how the intervention impacted on management of fatigue and factors that affected it. Quantitative data were analysed descriptively. Qualitative data were subject to thematic analysis.
Results: There was a trend for reduced fatigue and associated distress, greater confidence in managing it and improved psychological wellbeing in people participating in the intervention. Telephone interviews confirmed the feasibility and acceptability of the telephone intervention. Participants easily built a rapport with the intervention nurse and regular contact with the nurse created a feeling of commitment and responsibility to engage with the programme and seek ways to manage fatigue better.
Conclusions: It is feasible to deliver a psycho educational intervention for fatigue management by telephone. Patients found telephone consultation convenient and motivating. Motivational interviewing appeared an important feature. Preliminary results are encouraging; however, a large trial of beating fatigue by telephone is required before its effectiveness can be confirmed.

4153 ORAL

Being a cancer patient doesn't mean it stops when you walk out of the hospital – patients and care managers perspectives of surviving cancer, living life telephone care management programme

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Background: Despite evidence that cancer survivors experience a range of unmet needs services remain poorly developed. Many questions remain about what form services should take, and who, where and how they should be delivered. This study sought to gain insight into, and understanding of, patients' and care managers' views of a newly established programme designed to respond to supportive care needs of patients who have recently completed treatment. The programme, entitled 'Surviving Cancer, Living Life' consists of telephone care management and at this stage of development involves patients with breast and prostate cancer. The programme has been developed and implemented through a partnership between Guy's and St Thomas' NHS Foundation Trust and Pfizer Health Solutions.
Material and Methods: This study utilised a qualitative approach. A purposeful sample of 22 patients and 3 care managers involved in delivery were interviewed. Interviews explored reactions to the programme, nature of relationships developed with care manager, and perceived impact and outcomes of telephone support. Interviews were recorded, transcribed verbatim and subject to Framework Analysis.
Results: Perceptions of the programme were unequivocally positive – it appeared to answer a deep felt need for support at a period when patients felt vulnerable. It represented a new and strikingly positive experience of healthcare in contrast to many of the inadequacies felt to be present in the traditional, routine approach to cancer care follow up. The programme met a need for emotional, practical and informational support and provided relational continuity and a point of access. It helped patients reframe their life and adjust to life after treatment. The form of delivery – based solely on telephone contact – was considered advantageous compared to face-to-face contact, particularly in terms of convenience, confidentiality and continuity.
Conclusions: The medium of the telephone appears to hold significant promise when designing services to meet the supportive care needs of patients as they adapt to life after finishing treatment.

4154 ORAL

Somato-psychosocial caring program to improve symptoms in cancer patients with stem cell transplantation (HSCT): protocol for a prospective non-randomized clinical trial

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Background: Patients with hematopoietic stem cell transplantation (HSCT) suffer from a wide range of symptoms including muscositis (10–100%), nausea/emesis (30−60%), infections, social isolation (20−40%), mobility/activity deficits (15−20%), diarrhoe (30−70%) and infections (60−70%). After the stem cell transplantation (autonom or allogen) the patients need further long-term treatment under isolated conditions. This trial protocol is aimed to test the SCION (Self care improvement through oncology nursing)-HSCT program a multi-modular, somatic-psycho-social care intervention to improve self management in oncologic patients undergoing HSCT (funded by German Cancer Aid – 107498).
Methods: 84 HSCT patients University Hospital Halle (Saale) will participate in a non-randomized clinical trial. Patients are included if they are allogen or autolog transplanted, older than 14 years and signed

written informed consent. Patients from the intervention group received additionally to standard treatment, the SCION-HSCT program consisting of three modules: (a) Mobility/activity enhancement, (b) prevention of oral mucositis as well as (c) nutritional support. The program is emphasized on counseling and practical training for patients to collaborate actively within their treatment process. Patients in the controlgroup received standard care.
Primary endpoint is global HRQoL which is measured at discharge subjectively by patients with EORTC QLQ C30. Secondary enpoints are physical complaints like mobility deficits, mucositis and appetite loss. They are evaluated by CTCAE scale (Common Terminology Criteria for Adverse Events) version 3.0 by nurses. Futhermore we assess physical, social, emotional and role function of cancer patients (EORTC QLQ C30 subscales), physcial performance (GCOR-E-R and HFV), fatigue (FSI-D) subjectively rated by patients and resources consumption (e.g. hospital stay).
Results: The study will determine if SCION-HSCT program improves the self management skills of the patients during the period of hospitalization. It is hypothesized that patients who receive the multi-modular somatic-psycho-social care intervention will have better health related quality of life (HRQoL).

4155 ORAL

Using the Patient Generated Index (PGI) to elicit quality of life priorities in patients following curative treatment for colorectal cancer: experience from two lifestyle intervention development studies

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Background: Unmet needs at the end of treatment are known to influence longer term distress, therefore it is extremely important that oncology nurses are able to identify the concerns and priorities of individuals at this time. A number of screening tools have recently been developed for use in practice, in order to elicit patients' supportive care needs. These are based on pre-specified questionnaire items, so could be criticised for lacking the scope to address the diversity of patients' individual priorities and concerns. The PGI was originally designed to focus on the impact of a specific health condition on the individual's quality of life. Although not widely used in the cancer context, its validity and responsiveness for the colorectal cancer population has been demonstrated. This paper presents PGI data from two recent lifestyle intervention studies with this patient group, in order to illustrate the potential usefulness of this tool for practice.
Material and Methods: The PGI was used to collect quality of life data from the participants (n = 100) of two lifestyle intervention studies: ENJOY and LIVEWELL. Both aimed to improve diet and physical activity in patients who had recently completed curative treatment for colorectal cancer. Data was collected at baseline and at the end of the intervention.
The PGI asks patients to nominate the five areas of their life most affected by their cancer, and to rate and prioritise these, so as to elicit issues of most concern to them. Individual items and single index scores were analysed with the Statistical Package for Social Sciences (Versions 11 & 14), using a combination of descriptive statistics and non-parametric tests.
Results: In both studies, significant improvements in quality of life were seen between end of treatment and follow-up, adding strength to the validity of the PGI as an evaluation tool in this patient group. Patients' most prominent concerns included the impact of cancer on the family, being able to socialise and work, and living with a stoma. The PGI illustrated sensitivity to changes over time and was found to stimulate dialogue between patients and practitioners/researchers about key issues of importance to quality of life.
Conclusions: The PGI is an innovative and useful tool for eliciting the concerns of patients with cancer and assessing their relative importance. Understanding priorities and needs from the individual's point of view is an essential basis for supportive care in practice and in research.

Oral presentations (Mon, 21 Sep, 16:15−18:00) **Symptoms**

4160 ORAL

A survey of joint aches, pains and muscle stiffness comparing women with and without breast cancer

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Background: Joint aches, pains and muscle stiffness (JAPaMS) have been reported to be a problem for some women after adjuvant treatment for breast cancer, however the extent and impact of this problem is unknown and the causes unclear. The purpose of this study was to determine the prevalence of JAPaMS in women following treatment for breast cancer in comparison with women of a similar age without breast cancer and to explore associations with cancer treatment.
Materials and Methods: Women attending the breast cancer follow up clinic over a period of 6 months and who had completed primary treatment completed the Nordic Musculoskeletal Questionnaire (NMQ), the Brief Pain Inventory (BPI), the SF-36 and demographic details. A comparison group were drawn from women attending a benign breast clinic and a mobile breast cancer screening unit.
Results: 274 women without cancer and 247 with cancer were recruited. The women with cancer were a mean of 27 months from diagnosis. 62% had wide local excision and 38% had mastectomy; 79% radiotherapy; 42% chemotherapy and 81% hormone therapy. The most common chemotherapy regimen was E-CMF and 7% were treated with taxanes. 68% had been treated with tamoxifen and 25% with aromatase inhibitors (AIs).
On the BPI 62% of women with breast cancer reported that they were experiencing pain '*today*' compared to 49% of women without breast cancer ($p < 0.005$). Furthermore, significantly more women with cancer also reported '*pain right now*' ($p < 0.006$).
Logistic regression analysis of the dataset showed that cancer ($p = 0.00$ odds ratio 1.9; CI 1.26, 2.87), age ($p = 0.03$ odds ratio 0.98; CI 0.96−1.00) and pre-existing arthritic conditions ($p = 0.00$ odds ratio 4.17; CI 2.49, 6.98) were predictive of pain. Marital status, BMI, prior surgery on joints or bones, educational level, other illnesses and menopausal status were found not to be predictors of pain.
In the cancer data set logistic regression analysis showed predictors of pain were taxane chemotherapy ($p = 0.03$ odds ratio 6.01; CI 1.21−29.90), aromatase inhibitors ($p = 0.02$ odds ratio 2.75; CI 1.21−6.26), tamoxifen ($p = 0.01$; odds ratio 2.47; CI 1.20−5.07) and lymphoedema ($p = 0.04$ odds ratio 2.03; CI 1.04−3.94).
Conclusions: This research shows that women who have been treated for breast cancer may experience significant problems due to JAPaMS and that there appears to be an association between the use of taxane chemotherapy, aromatase inhibitors or tamoxifen and pain.

4161 ORAL

Malignant fungating wounds: a survey of nurses' clinical practice in Switzerland

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Background: The care of individuals with a fungating malignant wound represents challenging cancer management not only for patients and their families but also for health care professionals. Understanding the difficulties faced by nurses when they care for patients with such a wound can help guide practice and service development. Little is known about this condition in terms of incidence or current clinical management. The aim of the study was to investigate how many patients with a malignant fungating wounds did nurses see and hat kind of difficulties in caring for patients with a malignant fungating wound did nurses experience.
Material and Method: A survey was conducted in three different geographical regions of Switzerland over a 6 month period.
Results: A total of 269 nurses participated in this survey. 57% of the participating nurses had received higher nursing education. Of all participants 75% indicated that they had not received any further education in fungating malignant wounds. A prevalence rate of fungating malignant wounds of 6.6% was reported. There was a difference in the perceived prevalence between the regions. Most of the patients who had these wounds were aged between 50 and 70 years The most frequent location for such wounds was with 49% the breast in women with breast cancer