interactions result in higher reduction in HRQOL and PS. Thus, this crosssectional study was conducted to identify symptom cut points associated with higher reduction in HRQOL and PS, and if its effect on these outcomes were mediated by other symptoms.

Methods: A sample of 115 cancer outpatients was recruited in a university hospital, Sao Paulo, Brazil. The EORTC-QLQ-C30 was used to assess HRQOL (scores 0 to 100) and symptoms (1 to 4). Beck Depression Inventory (BDI) measured depression. PS was assessed by Karnofsky Performance Scale. The classification and regression tree (CART) analysis based on recursive partition analysis (RPA) was used to examine the data. The symptoms analyzed were: pain, depression, fatigue, insomnia, constipation, lack of appetite, dyspnea, nausea and vomiting, and diarrhea. Results: For PS, the most important predictor symptom was pain. For patients who had pain intensity ≥3, fatigue =3 was the next most important predictor and reduced PS from 73.8±11.0 to 58.46, whereas for those with pain <3, fatigue was the most important predictor. For the physical HRQOL domain, fatigue was the most important predictor, and score ≥3 was associated with 55.4% reduction in physical HRQOL score. For those who also had pain >3.5, the physical HRQOL reduced more 27.7%. For the cognitive HRQOL domain, nausea e vomiting (NV) was the most important factor. For patients with NV score >1.5, NV was the only one factor associated with reduction in QOL (from 68.84 to 46.03), but for those who had NV score ≤1.5, insomnia was the next most important predictor. In the social HRQOL domain, insomnia was the most important factor associated with reduction. For those, with insomnia ≥2, insomnia was the only predictor, but for patients with insomnia <2, the presence of any degree of dyspnea was the next most important predictor. For general HRQOL, the only one symptom associated with reduction in HRQOL was depression score >20. For those individual who had depression ≤20, their HRQOL was significantly higher than average.

**Conclusions:** Different cancer symptoms present cumulative effect that result in reduction in performance status and different HRQOL domains.

8175 POSTER

Side effects at the time of rehabilitation as reported by more than 600 cancer patients in response to an open question and a structered, closed questionaire

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Our knowledge of side effects after cancer and its treatment is generally based on observations close to treatment. Much less is known about late complications months or years after treatment.

## Purpose:

- 1. To identify and quantify the side effects reported by cancer patients at the time of rehabilitation.
- To ascertain whether answers prompted by an open question yield results comparable to answers obtained by a structered, closed questionaire.

**Methods:** Before their stay at Rehabilitation Centre Dallund, each patient received a set of open questions related to the stay. One of the questions was: Do you feel discomfort, or do you have complications or side effects following your illness or treatment? The patients also received the Dallund Scale, which is a highly structered one page questionaire qualified to disclose the patients' need of rehabilitation. The scale contains the possibility of checking 64 different complications (practical, work- or family related, psychological, physical or spiritual factors). All 624 patients attending Dallund during 2005 received both the open question and the closed questionaire. the patients attended Dallund 1–107 months after treatment (mean 8.5; mode 2.0 months).

### Results:

- 1. Both the number of different complications and the frequency of side effects picked up by the "open question" are significantly less than those checked on the Dallund Scale.
- Approx 11% of the patients does not respond to the open question, but indicate complications on the Dallund Scale. Their profiles of side effects are similar to the rest of the patients.
- 3. Approx 5% of the patients simply state that they have "several complications" when answering the open question. When investigated by the Dallund Scale, these patients have profiles of side effects similar to the rest of the patients.

The profiles and side effects reported by these 624 patients will be presented.

8176 POSTER

Clinical practice guidelines on distress management in cancer care. Development and implementation at Landspitali-University Hospital in Iceland

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Introduction: It is well known that cancer patients experience significant distress during their illness continuum. It has been recommended that distress should be recognized, monitored, documented and treated promptly at all stages of disease (NCCN, 2006). An interdisciplinary team was formed at Landspitali to improve the evaluation and management of distress experienced by cancer patients. The team decided to translate and adapt the guidelines on distress management developed by the US National Comprehensive Cancer Network (NCCN).

**Methods:** The team has worked on translating and adapting the guidelines on distress management, and translating and adapting an information booklet for patients and their family members based on the NCCN clinical practice guidelines. The Distress Thermometer (DT) a brief screening tool for distress, a single item screening measure from 0 (no distress) to 10 (extreme distress) and a Problem List of 35 items, has also been translated and evaluated for it's psychometric properties. Implementation into clinical practice includes regular meetings with staff, and a conference has been held on the integration of psycho-oncology into cancer care. A pilot test of the guidelines, screening tool and information booklet is scheduled for spring and summer of 2007, followed by a full implementation and evaluation of the project.

Results: The psychometric evaluation of the DT supported that the screening tool is valid, reliable and feasible to use. The results showed a cut-off point of 3 and it took an average of 5 minutes to complete the DT and the Problem list. In the work process a number of challenges have been encountered relating to the translation and adaptation of the guidelines, and the adaptation of new practices. The project is ongoing and a full implementation is scheduled in fall of 2007.

Conclusion: The psychometric evaluation of the DT has added to the growing literature supporting its use both in clinical work and research. The planned evaluation of the guidelines and patient information booklet will determine their usefulness in improving screening and management of distress in cancer patients and hopefully encourage further work on the use of the NCCN'S clinical practice guidelines on distress management.

#### 7 POSTER

Quality of life and rehabilitation needs of Icelandic patients receiving chemotherapy, longitudinal study

T. Saevarsdottir, N. Fridriksdottir, S. Gunnarsdottir. Landspitali University Hospital, Medical & Radiation Oncology Hematology & Palliative Care, Reykjavik, Iceland

The diagnosis and treatment of cancer is known to affect quality of life (QOL). Interest in examining QOL of Icelandic cancer patients is increasing, however longitudinal studies have not yet been performed.

The purpose of this study was to describe QOL and to assess rehabilitation needs, over time in a group of Icelandic cancer patients receiving chemotherapy. QOL and rehabilitations needs were measured with the Icelandic version of CARES-SF (CAncer Rehabilitation Evaluation System, Short Form). CARES-SF contains 59 problem statements, divided into five QOL dimensions. Possible range of the Global QOL score is 0–4, higher scores indicate worse QOL. Rehabilitations needs are evaluated by asking the respondent if he wants help with a particular problem.

The first measure was completed by 144 patients, at the initiation of a chemotherapy protocol (T1), 109 and 89 patients completed the second (T2) and third (T3) measure after three and six months, respectively. Enrolled into the study were 90 women and 54 men, mean (SD) age was 55 (12.1) years. The participants had a variety of cancer diagnoses, 91 (64%) had advanced cancer, and median time from diagnosis was 4 weeks. Participants were receiving a variety of chemotherapy protocols.

Global QOL score (SD) was found significantly higher at T2 (0.96 (0.53)), and T3 (0.90 (0.50)) compared to baseline (0.70 (0.43)). The score at T3 indicates improvement of QOL, however the difference was not significant. At all time points the global QOL score was found highest in the sexual and the physical dimensions. Demographic and disease variables were not found significantly related to quality of life, with the exception of age. Those who were older experienced better quality of life compared to those who

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were younger. The mean number of rehabilitation needs increased over time. The most common needs were related to physical problems.

The participants in this study experienced significantly worse QOL over six months after the initiation of chemotherapy. QOL was most affected in the physical and sexual dimension. Rehabilitation needs increased over time.

8178 POSTER

Construction and validation of an exercise program for early physical rehabilitation of women submitted to mastectomy

M. Gutierrez, E.L. Petito. Universidade Federal de São Paulo, Enfermagem, Sao Paulo, Brazil

**Background:** The benefits of early physical rehabilitation in women that were submitted to mastectomy are widely known but there is no consensus about the best exercises to be prescribed, their periodicity and the duration of the program.

**Purpose:** Identify and select a set of exercises to be performed in a physical rehabilitation program for mastectomized women created for the functional recovery of the surgery's homo lateral member and validate this program with experts.

Methods: Bibliography review of studies on the changes of the shoulder movements width (SMW) after the surgery for breast cancer, or on the effectiveness of physical rehabilitation programs, published from 1997 to 2006 in MEDLINE, LILACS and PUBMED databases. Selection of a set of exercises for the shoulder SMW recovery, clustered according to the kind of movements, and their evaluation by Mastology experts.

Results: Twenty one articles were found regarding mastectomy and physical rehabilitation and twelve of them were studies which reported the testing or the standardization of procedures for post mastectomy physical rehabilitation. All studies emphasized the benefits of a supervised rehabilitation program and its efficiency for fast recovery of shoulder SMW in an average period of two months. As for the classification of the twenty exercises selected and submitted to the experts, eight were considered indispensable and one secondary and the agreement rate was from 80 to 100% for six of them and 60% for three other ones. The exercises that achieved the greater agreement rates were those of cervical stretching, shoulder flexion and of adduction and abduction, and those which achieved the lowest rates were the extension and muscle strengthening ones.

**Conclusion:** There was a homogenous distribution of the different movements for the functional recovery of the surgery's homo lateral member as well as a high agreement rate among the experts. These results represent an important contribution for reorganizing the existing manual at the Onco-Mastology service of the Federal University of Sao Paulo. 22 September 2007 13:45 – 15:45

# Poster Session

#### Transition in care

8179 POSTER

Role of the nurse in patient education and follow-up of people receiving oral chemotherapy treatment: A European Part of International survey

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Oral chemotherapy (CT) treatments increasingly are becoming part of patients' treatment regimens. The aim of the present study was to examine the nursing role in education and follow-up of patients who are taking oral CT and identify the gap in education about oral CT exist in oncology nursing in European Countries, forming part of international study.

MASCC Patient & Professional Education study group replicated a previous study by Kav and Bostanci (2005) in Turkey. All members of MASCC were invited to participate with request to obtain a sample of at least 60 nurses who work with cancer patients at different work sites.

During Nov 2005 – Jan 2007 nurse coordinators from 8 European countries collected data for a total of 724 oncology nurses: Spain (234), Finland (114),

Denmark (85), Greece (68), UK (66), Lithuania (60), Serbia (60), and Israel (37). The coordinators translated the survey into their respective languages and had it back translated for accuracy. Completed data was submitted to the principal investigator for analysis.

Findings showed that about half of subjects work in outpatient/ ambulatory clinics and have given at least two or more oral CT drugs (mostly capecitabine, etoposide, methotrexate, vinorelbine, oral cyclophospamide). Although 57% of the total have some type of guidelines/protocols 39% of the total reported not having received any education about oral CT drugs. 51.7% of subjects indicated a lack of patient education materials that are specifically for oral CT agents. 68.7% report being involved in patient education; yet only 25% stated that they gave all necessary information such as when and how to take, drug safety and storage, side effects and symptom management.

Reasons for not being involved in oral CT education and follow-up included "Physician plans the oral CT and gives patients the necessary instructions"; "Lack of knowledge about oral agents" and "Nurse only see patients who receive IV chemotherapy".

Nurses' suggestions to facilitate better education and follow-up of patients included: nurse education/training; providing written materials for patients; development of guidelines/protocols; collaboration; tool to help patients (diary, video/DVD, checklist, calendar); patient counseling; nurse led clinic/specific clinic and phone follow-up.

The initial findings have revealed the need for nurse education to ensure comprehensive and consistent patient education and development of written materials for patients receiving oral CT treatment. Additional analysis will be used to identify differences between countries.

8180 POSTER

The lived experience of being given a cancer diagnosis in old age

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**Background:** The lived experience of elderly persons being given a cancer diagnosis and the impact of the illness on their lives is little researched. Such knowledge is needed to support elderly persons in dealing with issues arising after a cancer diagnosis.

**Purpose:** The purpose of the study was to illuminate the lived experience of being given a cancer diagnosis in old age.

Material and Method: A descriptive phenomenological method was used to investigate the phenomenon "the lived experience of being given a cancer diagnosis in old age". In total, 16 persons (aged 65+, range 68-83) with cancer were interviewed, all referred to the same oncology outpatient clinic in Copenhagen County. Open-ended interviews were used to get closer to the lived experience of being given a cancer diagnosis in old age. Giorgi's phenomenological analysis was used.

Results: The findings showed that the essential meaning of the lived experience was "Illness as a turning point marking old age". This main essence was represented overall by three essences: "Illness means losing control", "Disturbing the family balance" and "Life and death suddenly apparent". These three essences were signified in seven constituents: growing old in the context of illness, becoming a patient with cancer, everyday life controlled by bodily limitations, managing family reactions, fear of being a burden on others, conscious about dying and death through illness experience and retaining hope, and enjoying life.

**Conclusion:** To identify the specific meaning the turning point has for an elderly person with cancer, and to understand the particular approach he or she uses to handle the awareness of being old is important in clinical practice.

8181 POSTER

Meeting the support and follow-up needs of women with ovarian cancer: an evaluation of a nurse-led telephone follow-up service

S. Faithfull<sup>1</sup>, J. Cockle-Hearne<sup>2</sup>, W. Knibb<sup>2</sup>, E. Toms<sup>3</sup>, H. Thomas<sup>3</sup>, A. Cox<sup>2</sup>. <sup>1</sup>Surrey University, Clinical Academic Unit: Cancer and Palliative Care, Guildford, United Kingdom; <sup>2</sup>Surrey University, Health Workforce Research Centre, Guildford, United Kingdom; <sup>3</sup>St Lukes Cancer Centre, Royal Surrey County Hospital, Guildford, United Kingdom

**Background:** Changes to cancer follow-up services are occurring as a result of pressure on cancer clinics but also as a result of increasing survival of cancer patients. Furthermore follow-up services are often criticised by patient groups for failing to meet supportive and emotional care needs in the transition between active therapy and survival.