agreed with the prescription of a lethal injection and if so, if nurses should do this injection.

Results: Response rate was 78% among district nurses (n = 602), and 60% among hospital nurses (n = 1502, including 550 nurses of haematology/oncology units).

49% of nurses agreed with the prescription of a lethal injection for a patient with unremitting pain (vignette with the higher level of agreement) versus 10% for a patient who views life as meaningless (vignette with the lower level of agreement). However, only 21% argued that nurses should do this lethal injection for a patient with unremitting pain (higher level) versus 5% for a patient who views life as meaningless (lower level). Agreement of haematology/oncology unit nurses was significantly lower for each clinical vignette.

After multiple adjustment using logistic models, individuals characteristics of nurses (age, gender, religious beliefs, training, attitudes toward end-of-life patients . . .), individuals characteristics of the patient (age and gender) and external factors such as professional context (intervention of association in the hospital unit) were associated with the level of agreement with lethal injection.

Conclusion: Findings indicate that attitudes of nurses toward euthanasia not only depend on individuals' factors but also depend on external factors. Indeed, interventions of associations specialized in end-of-life management should be promoted in order to help nurses to face stressing situations as euthanasia requests from patients or relatives.

Oral presentations (Tue, 22 Sep, 14:45−16:30)
Service delivery and care initiatives

4180 ORAL

Development of nurse-led, cancer follow-up clinics in community hospitals

L. Adams[1], E. Taylor[2], D. Lynch[3], K. Wardlaw[3], K. Smith[2], E. Chisholm[2], W. Johnston[2], B. West[1], G. Macdonald[3], L. Samuel[3]. [1]*NHS Grampian, Cancer Services, Aberdeen, United Kingdom;* [2]*NHS Grampian, Aberdeenshire Community Health Partnership, Aberdeenshire, United Kingdom;* [3]*Aberdeen Royal Infirmary, Cancer Services, Aberdeen, United Kingdom*

Background: A growing elderly population, earlier detection of cancer, a rise in the incidence of some cancers and declining mortality all challenge the traditional way of delivering cancer services. The development of a novel, nurse-led follow-up clinic for cancer patients in four community hospitals in North East Scotland is presented as an alternative model of high quality care. Patients with colon cancer on completion of their potentially curative treatment, including surgery +/− adjuvant chemotherapy, were the first group to be included. This development supports both local and national policy:

- strengthening health care in remote and rural areas
- developing practitioners with extended roles
- educating health care professionals for practice in local hospitals
- supporting self management in cancer survivors.

Prior to establishment of these clinics, patients were seen by medical staff at the regional cancer centre. Now patients are seen by generalist nursing staff in community settings.

Methods: Before establishing clinics the following was undertaken – activity analysis; service development analysis; budget identification for nurse staffing and education; development of clinical management plans, operational policies and protocols; patient inclusion and exclusion criteria; delivery of education programme and identification of competencies required; agreement of audit and evaluation requirements; and the development of a framework document to aid others who wish to develop such a service.

Results: Evaluation identified support from patients and staff for a service close to patients' homes, providing continuity of care, avoiding travel to the cancer centre, and reducing the carbon footprint of the service. The education programme met nurses' needs, particularly the clinical sessions at the cancer centre. Furthermore, this development optimised nurses' skills and provided opportunities for role development. The need for robust referral and communication systems between community and cancer centre was also identified.

Conclusion: A safe, acceptable, cost effective, 'green' and sustainable service has been developed. This has been a hugely successful project. In addition to the achievements described, it resulted in cancer centre and community working effectively together on common issues relating to cancer care and management. However, the main benefits achieved are undoubtedly the benefits to patients living in the North East of Scotland.

4181 ORAL

Nurse case managers in oncology

K. Dieperink[1], M.B. Poulsen[1], A.G. Andreasen[1], S. Larsen[1], P. Andersen[1], L.S. Hansen[1]. [1]*Odense University Hospital, Onkologisk Afd. R, Odense C, Denmark*

Background: Department of Oncology at Odense University Hospital receives annually 2700 new patients. As cancer patients they experience a variety of treatments including in some cases a change from curative to palliative treatment. This causes an increased level of anxiety and many questions. Since many patients reported difficulties in finding the correct staff person or unit to address these questions, the department appointed two nurse case managers (NCM) for a one-year project period. These case managers were expert cancer nurses with insight into symptoms related to either disease or treatment, and to the protocols applied. The NCM were on phone call weekdays from 8 to 15, and received calls from patients, relatives and collaborators. The study had two primary aims: 1) To answer the questions from the patients and reduce their anxiety. 2) To reduce the interruptions of the staff caused by incoming phone calls, hopefully reducing staff stress and improving patient safety. This study describes the first experiences with cancer NCM in Denmark from an organisational perspective.

Material and Methods: The study was conducted as a point-survey over 2 working days 3 months before the NCM initiative, repeated nine months after. The survey had 3 parts: 1) All incoming calls were registered. 2) All doctors, secretaries and nurses answered a questionnaire about interruptions and their influence. 3) A simultaneous questionnaire asked patients to which degree they felt safe and had the support they needed, and if they knew the person who had the comprehensive view of their treatment.

Results: We observed a significant reduction (218 calls) in questions to the staff during the study period despite increased activity in the department. The NCM had answered a significant part (127) of these. The staff response rate was 81%. The staff members reported the decline in phone interruptions to have a positive impact on quality of work. The patients' response rate was 85%. The patients reported a significant improvement in continuity of care.

Conclusion: The appointment of NCM relieved other staff members, who were less frequently interrupted by phone calls during work. Patients experienced improvements in continuity of care. Therefore, the department has continued and expanded the NCM initiative.

4182 ORAL

The use of a prefilled medication box results in improved care for patients receiving chemotherapy

J. Salome[1], E.M. Ponsioen[1]. [1]*Sint Franciscus Gasthuis, Oncology, Rotterdam, The Netherlands*

Background: Patients on chemotherapeutic treatment experience problems in the correct use of anti-emetic drugs. Medication schedules often appear to be to complex for patients, leading to inadequate dosage and timing of anti-emetic drugs. In addition, anti-emetic medication is not uniformly prescribed. Furthermore, side effects interfere with optimal anti-emetic treatment. Our goals were to enhance uniformity in prescribing anti-emetic drugs and to improve correct use of these drugs in order to alleviate symptoms of nausea, vomiting and constipation.

Material and Methods: A baseline questionnaire was carried out with patients to gain insight in the use of anti-emetic drugs and the prevalence of side effects of chemotherapy. We reviewed all available cytostatic drugs with respect to emetogenicity and divided them into classes ranging from 1 to 4 (1 being slightly emetogenic and 4 being highly emetogenic). We defined a policy regarding the use of anti-emetic drugs, related to emetogenic class of chemotherapy. We developed a medication box, in which medication could be prefilled. Drugs were separated by day and hour, and by class. The box contained anti-emetic drugs, a laxative and a sedative (the sedative only for class 3 and 4) with extra written information about these drugs. After four, sixteen months and 3 years we sent a questionnaire to patients, physicians, nurses and employees of the pharmacy department to evaluate the project.

Results: Patient satisfaction increased significantly with the uniform anti-emetic drug prescription combined with the prefilled medication box (7.4 baseline vs 8.4 last evaluation) After the first evaluation, only the anti-emetic schedule for 5Fu-Epirubicine-cyclofosfamide (FEC) chemotherapy needed to be reclassified into a higher class. In addition anti-emetogenic medication schedules were simplified into 3 classes in stead of 4. After 16 months patients (n = 59) had fewer complaints of nausea, vomiting and constipation (34±12% vs 54±19%, 14±9% vs 23±16% and 36±13% vs 72±17%, respectively) as compared with baseline results (n = 26). Additional prescription of drugs against nausea, vomiting or constipation was rarely indicated. The boxes resulted in an easier prescription (only an indication of box type is needed). There was an agreement between all interviewed subjects that the use of the prefilled medication box resulted in an improved medication usage with less side effects.

Conclusions: The introduction of a uniform policy regarding anti-emetic drugs using a prefilled medication box resulted in alleviation of chemotherapy associated symptoms.

4183 ORAL

Oncology patients' experience at the interface between hospital and community care: a mixed method investigation

E. Muller[1], M. Vorobeichik[1], H. Admi[2], E. Shadmi[3]. [1] *Rambam Medical Center, Oncology, Haifa, Israel;* [2] *Rambam Medical Center, Nursing Management, Haifa, Israel;* [3] *Haifa University, Nursing Studies, Haifa, Israel*

Background: Oncology patients often experience breakdowns in care when transitioning between care settings.

Aims and Objectives: To examine the experience of oncology patients at the transition between hospital and community care and identify factors which promote or inhibit fragmentation.

Methods: We used a complementary mixed method approach. Qualitative phase: semi structured interviews and focus groups were conducted with patients and their caregivers, nurses, social workers, physicians and medical administrators. Quantitative phase: a survey was administered to 400 oncology patients of a large tertiary medical center in Northern Israel. Patients who were discharged from the hospital were asked to complete a validated questionnaire on their transition from the hospital to the community and on their perceptions of the quality of their primary care. The surveys were administered in Hebrew, Arabic, and Russian.

Results: The qualitative data analysis revealed four broad themes: (1) lack of clear boundaries regarding the responsibility for care, (2) the burden posed by the administrative and bureaucratic demands of each of the organizations, (3) the creation of informal routes of communication and care management in an effort to overcome the breakdowns in care, (4) cultural barriers exacerbate problems with information flow and ability to coordinate care. The regression analysis examined the effect of patient characteristics and showed that patients' language accounted for most of the variance in quality scores (XX). Russian speaking patients reported poorer quality of care and Arabic speaking patients reported better quality of care, as compared to Hebrew speakers, in all primary care domains. Both Arabic and Russian speakers scored significantly higher on the Care Transition Measure than Hebrew speakers.

Conclusions: The differences between sub-groups found here suggest that avoidable variations in care exist. To enable a more streamlined process, cultural issues need to be addressed at the interface between care settings. Further research should examine the causes for such cultural differences.

4184 ORAL

Oral Chemotherapy: a collaborative project between acute hospital and community services

B. Quinn[1], J. Campbell[1], G. Best[2], J. Brookes[3], R. Jjumba[2], L. Igoe[3], F. Lofts[1], D. O'Connell[1], P. Grayston[1], C. Oakley[4]. [1] *St George's NHS Hospital, Oncology, London, United Kingdom;* [2] *Wandsworth PCT, Community Team, London, United Kingdom;* [3] *Sutton & Merton PCT, Community Team, London, United Kingdom;* [4] *Guys & St Thomas NHS Trust, Oncology, London, United Kingdom*

Background: The toxic effects of chemotherapy are serious and distressing: appropriate response to side effects is essential. Patients receiving intravenous chemotherapy attend hospital and have the opportunity to discuss concerns with chemotherapy trained staff. However patients taking oral chemotherapy do not always have this interaction and may rely on support from non-specialist professionals. The aim of this project was to improve outcomes for patients taking oral chemotherapy and to address problems arising from incorrect administration and storage, and the inadequate reporting and care of side effects. We also aimed to improve communication between hospital and community.

Methods: Health care professionals from primary and secondary settings met to review practice and create an improved patient pathway. A baseline survey was carried out on patients receiving oral chemotherapy in the 2 months prior to the new interventions. The new interventions comprised of enhanced hospital and community support. The latter was enabled by a programme of education to community nurses delivered by the hospital team. Four months following the intervention, surveys were sent to patients who had received the enhanced hospital and community support. At the completion of the pilot, a focus group was held with the community nurses to explore their experience.

Results: The response to all surveys showed that patients felt well informed and supported. However, respondents who received enhanced intervention reported increased severity of all reported symptoms suggesting a heightened awareness of treatment side-effects. Interestingly, patients who received enhanced hospital support only, reported missing fewer doses than those in the baseline survey and those who received enhanced hospital and community support. Community nurses who took part in the project felt more confident in addressing side effects and valued the improved communication with the referring hospital.

Conclusion: The main difficulty was in matching patients with the limited number of trained community nurses. However, all patients receiving oral chemotherapy are now given structured information and ongoing support. Each patient meets with a specialist nurse at the beginning of each new cycle of treatment for symptom assessment and guidance on symptom management. In addition all patients will be offered community support in the form of a home visit or telephone support following the commencement of treatment.

4185 ORAL

The development of evidence-based guidelines for a nurse consultation in a breast unit, part 1: the perspectives of breast care nurses

E. Decoene[1], E. Vandenberghe[2], M. Daem[3], M. Grypdonck[3]. [1] *UZ Gent, Oncology Department, Gent, Belgium;* [2] *UZ Gent, Oncology – Radiotherapy, Gent, Belgium;* [3] *University Gent, Nursing Science, Gent, Belgium*

Background: The objective of this project is to develop evidence-based guidelines for the organisation and content of a nurse consultation in a breast unit. The guidelines are meant for all breast care nurses (BCN) in Belgium and their significant others. In the literature there is evidence for the added value of working with specialist (breast) nurses and information about their role in practice. The development of these guidelines must offer the practice more detailed information about the content of the interventions of a BCN trough the total clinical pathway of a patient with breast cancer.

Material and Methods: The project exists out of five major phases: (1) a literature study of the information- and psychosocial needs of breast cancer patients, (2) a qualitative study with BCN and patients about their experiences of the care, (3) developing the guidelines based on the literature and the results of the qualitative research and evaluating them by an expertgroup, (4) a monocentric implementation of the guidelines in a breast unit and (5) an evaluation of the outcomes based on interventions by the BCN following the new guidelines. Information about the perspectives of BCN about their role supporting a breast cancer patient was collected through five focus group interviews. A phenomenological approach was used. Participants were 30 BCN working 1 to 6 years in a breast unit. Three topics were explored: the role, the position and the competence of a BCN.

Results: Two main themes were identified: patient centered roles en organisation centered roles. In the first role themes such as assessing physical and psychosocial status of the patient, providing information, providing psychosocial support and being their for the family are explored. Having an important role as BCN in the total organisation of a breast unit was translated in themes as coordinating the entire care and acting as an important player in the multidisciplinary team.

Conclusions: In Belgium, the role of a BCN is not informed or implemented by evidence-based guidelines and there isn't a national education program for these specific (rather new) nurse roles. By this project the guidelines must provide information and support for the BCN how to organize a specialised nurse consultation at each important phase in the total clinical pathway of a patient with breast cancer. The guidelines will be flexibel and acceptabel for implementation in all breast units in Belgium.

4186 ORAL

Development of a sexual rehabilitation service for cancer patients

D. Brandenburg[1]. [1] *Centre Centre, Cancer Psychology, Birmingham, United Kingdom*

Background: Approximately 35−50% of cancer survivors suffer a sexual dysfunction as a consequence of their treatment. Psychosexual therapy has been found to be of potential benefit to a majority of patients and can encourage adjustment and facilitate optimal sexual functioning even when all medical treatment options have been exhausted. Unfortunately, professionals rarely initiate discussions about sexuality and sexual rehabilitation is not provided in most oncology settings.

A pilot-funded sexual rehabilitation service for cancer patients was set up to assess acceptability, uptake and outcomes.

Materials & Methods: A descriptive statistical analysis of referral patterns and length and types of interventions required is presented. Patient