adverse events are evaluated with just one instrument, the Common Terminology Criteria Adverse Events (CTCAE) designed by the National Cancer Institute. This scale uses severity grades from 1 to 5: where Grade 1 is mild adverse event (AE); Grade 2 is moderate AE; Grade 3 is severe AE; Grade 4 is Life-threatening or disabling AE; Grade 5 is Death related to AE. Can nurses use this instrument to evaluate nursing sensitive outcomes?

Material and Methods: At the European Institute of Oncology 20 experienced oncology nurses representing surgical, medical and critical areas participated in a nursing record working group. This group created the ONMDS composed of 49 nursing sensitive outcomes recognized as most common and often oncological outcomes regardless of the treatment that the patient undergoes. In the pre-test study the group used a checklist to analyze 50 nursing records of cancer medical patients to evaluate which instruments were used to measure nursing outcomes. The group explored the CTCAE and discovered that all NSOs chosen were also adverse events. Then using case studies the group tested the feasibility of this scale for nursing care and the coherence of nursing-sensitive outcomes evaluation among nurses. The CTCAE was translated into Italian and translated back again into English to validate it.

Results: In the nursing records' analysis no validated scales were found except the numeric rating scale for pain and the Conley's scale for falls. CTC enables a coherent, standardised and consistent evaluation scale among nurses, a common language between other members of the team, continuity of care among different areas, and the possibility to quantify complexity of care, facilitate the case-method and the clinical trajectory.

Conclusions: We commenced a CTC assessment study in the nursing care environmnent and we had preliminary results on its validity in the post-test study with the analysis of other 50 nursing records. The next 6 months monitoring will be able to confirm definitely the feasibility of CTCAE in nursing care.

4156 ORAL

The Development of a Dignity Care Pathway (DCP) for Use by Community Nurses With People Receiving End of Life Care at Home

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Background: People experiencing end-of-life care fear loss of dignity and a central tenet of palliative care is to help people die with dignity. Palliative care should be based on holistic assessments, with the patient and carers, of their physical, social, emotional, cultural, and spiritual care needs and comprise a broad range of care activities addressing distress that might influence on their sense of dignity. This study has developed, implemented and tested an intervention, the Dignity Care Pathway (DCP), providing evidence to conserve the dignity of dying patients/ families receiving end-of-life care at home.

Materials and Methods: This 2 year intervention study is underpinned by the UK Medical Research Council (MRC) complex intervention framework. The DCP is based on the theoretical model developed by Chochinov et al (2002). It has 4 sections; a manual; Patient Dignity Inventory (Chochinov 2008); reflective questions and care actions. Reflective questions and care actions in the DCP were evidenced from a systematic literature review and focus group interviews with patients, carers, and HCPs. Use of the DCP was preceded by an education day. Feasibility and acceptability of the DCP tested in a mixed method qualitative evaluation with a purposive sample of community nurses using diaries; longitudinal in-depth interviews and case studies.

Results: The evaluation shows that the DCP is acceptable to community nurses, helps them identify when patients are at the end of life helped identify key concerns from the patients' viewpoint and aids them providing holistic end of life care. The tool requires the nurse to have excellent communication skills and some nurses found it hard to initiate a conversation on dignity and care. All nurses wish to continue to use the DCP and would recommend it to others.

Conclusion: Community nurses use of the DCP will help patients receive individualized care, which will directly relate to the issues they have identified as most distressing and/or important and their preferred measures to address these issues, and carers to receive information and support relating to the patient's care and their request for support.

4157 ORAL

Developing and Feasibility Testing of Nurse Sensitive Outcome Measures for Ambulatory Cancer Chemotherapy

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There is increasing interest in Nurse Sensitive Outcomes Indicators (NSOI) that can be used to examine and demonstrate the impact of high quality nursing care. As a consequence the UK National Cancer Action Team commissioned us to develop of a set of outcome-based measures that would be sensitive to the work of nurses in ambulatory cancer chemotherapy settings. The initial phase of this work consisted of a systematic literature review that identified three broad areas where evidence for sensitivity to nursing was strongest. Subsequently we evaluated the feasibility, acceptability and preliminary efficacy of our outcome-based measure in clinical practice.

Methods: We developed indicators on those areas identified as most likely to be nurse sensitive in the systematic review − symptom management, safe medication administration and patient experience of the process of symptom management and care provision. Guidance on the selection of the indicators was provided by three reference groups: users, clinicians and experts in the field of outcomes development. Following preliminary piloting, our outcome measures were distributed as patients arrived to receive ambulatory chemotherapy at 10 cancer centres across the UK between December 2010 and March 2011. Data were analysed descriptively and regression-based models were used to adjust for casemix.

Results: The NSOI developed primarily relied on patient self report via a specially designed measure which was completed on 2466 occasions during the study period. Analysis revealed variability both in terms of patient's experience of subjective symptoms and the support nurses provide to patients. For the whole sample moderate to severe nausea was reported by approximately 25% 0% of the sample. For the whole sample the rate for moderate or severe nausea 25%, however examination of scores by centre revealed differences between sites. Thus 75% at Centre P reported moderate to severe nausea as compared to 25% at Centre J. This variability remained even after casemix adjustment. Similar results emerged for other symptoms and these will be discussed in more detail in the presentation. When asked about their perceptions of the process of symptom management, the majority of respondents (80%) reported that chemotherapy nurses ask about their symptoms, are aware of symptom severity and provide useful information and practical advice for symptom management. However, once again, there was substantial variability between centres.

Conclusions: Monitoring outcomes provides a stimulus to develop services to improve the experience and health of patients. Validated nurse sensitive measures open the possibility of demonstrating the 'added value' of specialist nursing services and of using registered nurses in settings where they might be replaced by less qualified staff.

Oral Presentations (Mon, 26 Sep, 09:00−11:00)

Nursing Oncology − Supportive Care

4158 ORAL

The Meaning of Living With an Exulcerated Breast Carcinoma

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Background: Living with an exulcerated breast carcinoma may have a big impact on the lives of women and their families. The aim of this study is to understand the lived experiences of women with a malignant fungating breast.

Material and Methods: The methodological framework of interpretative phenomenological approach according to Heidegger was used. Semi-structured interviews were conducted with nine women. Van Manen's hermeneutic analysis was used to analyse the data.

Results: The results demonstrate how the women had to learn how to live with an unbounded body as the wound became the centre of their life. The women report on the unpredictability, and uncontrollability of the wound due to symptoms such as malodour, bleeding, exudate, pain and itching. Therefore the women developed strategies to bring the wound symptoms under control. Various methods were adopted often using inadequate products of the medicine chest or alternative medicine products. There were also psychosocial consequences to deal with such as embarrassment due to odour and exudate as well as the visibility of the wound, which was a constant reminder of having cancer. The loss of control of the body boundary due to uncontrollable symptoms led to significant levels of distress and suffering for the women.

Conclusions: This study contributes to understanding that the care of women with an exulcerated breast carcinoma needs strategies that are integrated in a palliative, holistic, empathic approach. In particular skills for palliative wound care among medical and nursing staff need to be developed as the women and their carers report a lack of information and advice about how to manage the wound as well as the physical limitations and psychosocial consequences of struggling to maintain the boundedness of the body.

4159 ORAL

The Importance of the Internet for People With Cancer

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The purpose of this study was to describe how important people with cancer consider the social support they receive from the internet. The aim of the study was to produce information that can help nurses to understand the importance of the internet as a source of social support for people with cancer.

The data were collected in May 2010 using an online questionnaire, which was held open from May 3rd to May 24th, 2010. The participants of this study were recruited through four discussion forums from the websites of the Cancer Society of Finland. These four discussion forums included groups such as living on life-support medication, cancer in general, women's cancers and men's cancers.

Seventy-four cancer patients participated in the study. The average age of the participants was 53 years (range 24 to 74). A majority of the participants were women (87%, $n = 64$). Most had a polytechnic or college degree (39%). Nearly one in four (24%) had a university degree. The most common cancer was breast cancer (42%). More than three fourths had suffered from cancer for less than five years and nearly three fourths of the participants felt that the current health was good. The importance of the internet as a source of social support was seen in the way in which support from peers facilitated life: you were not alone with the disease and the loved ones could be saved from getting overburdened. The empowerment generated by the social support from the internet had positive impacts on patients' daily lives, the information received from the internet helped to bear the disease and the independence increased. The social support from the internet could have only a limited effect or the effect was negative. In that case the support had no importance or the support varied. The social support had changed through the internet so that the social support increased, remained unchanged or was felt negatively.

Narrated by the people with cancer themselves the virtual social support facilitates their lives in many ways. In nursing it is essential to learn to recognize the importance of the internet as a source of social support for people with cancer and not think of it as a distrust of our own work.

4160 ORAL

Quality of Life Trajectories in the First Eight Months After Breast Cancer

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Background: Quality of Life (QoL) disruption is common in the continuum of care for cancer. QoL has been reported to decrease after diagnosis and then improve over time. Still, little is known about the individual fluctuation of QoL during the phases of diagnosis, treatment and transition to survivorship in relation to breast cancer. Our objectives were to determine the most common trajectories or patterns of change in QoL among women with breast cancer as well as possible predictors of these trajectories.

Material and Methods: A total of 357 women (84% participation) with newly diagnosed breast cancer were included in a questionnaire study at a university hospital in Denmark. 300 women completed questions on QoL using EORTC QLQ-C30 at time of diagnosis and after 4 and 8 months. Data on surgical treatment and adjuvant therapy have been obtained from the Danish Breast Cancer Cooperative Group.

Data analyses are in progress. The SAS mixture model procedure TRAJ will be used to identify distinct trajectories. The effect of age, cancer treatment, education and available social support in and outside the family on belonging to a certain trajectory will be estimated.

Results: Preliminary results on overall QoL trajectories will be presented. The effect of age, cancer treatment, education and available social support in and outside the family on belonging to a certain trajectory will indicate factors important for developing the different trajectories.

Conclusion: We expect to identify distinct trajectories of QoL, which will provide important knowledge about the timing of QOL in the first 8 months after breast cancer diagnosis. Distinct trajectories may help nurses identify patients who might benefit from enhanced attention.

4161 ORAL

Cancer – a Challenge for the Whole Family

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Background: Experimental data show that cancer has an important impact on the quality of life of both the patient and the people surrounding him with whom he shares experiences and important relationships (Solano, 2001, Grassi, 2003).

The purpose of this research was to assess the quality of life of cancer patients and their caregivers and to identify significant correlations between the well-being of both of them in the physical, psychological, relational and environmental areas.

Materials and Methods: The sample consisted of 72 oncological patients undergoing chemotherapy (30 male, 32 female; mean age: 58.5 years old, range: 36–75), and their caregivers (23 male, 49 female; mean age: 55 years old, range: 25–78; 40 spouse, 15 children, 11 other relatives, 6 friends).

The short version of the WHOQOL test (Murphy, 2000) was administered to both the patient and his caregiver in order to asses their quality of life. Their scores achieved in each area were then compared.

Results: The quality of life in the majority of cases (patients 80.5% and their caregivers 85.5%) was reasonably good. 29% patients and 30% caregivers experienced a very good well-being, while 8% patients and 7.5% partners showed a significant difficulty in one area under test.

5.5% patients manifested problems in two fields of interest and 6% couples had difficulties in three areas.

The statistical analysis, conducted with Spss, showed a highly significant correlation ($p < 0.001$) between the scores obtained by the same person in all areas analysed.

The scores of patients and their caregivers were closely related in each area, being independent of all other variables measured (sex, age, type of cancer, stage of disease and caregivers' rules).

In 90% cases a poor quality of physical life of the patient was related to a similar low level of the physical quality of life of his caregiver. Similarly, the caregivers of 85% patients with psychological problems also manifested psychological problems. In 83.5% cases the patient's interpersonal difficulties were related with similar difficulties in his partner.

Conclusions: Our results confirmed the initial hypothesis and demonstrated that it can be useful to propose activities in order to improve the quality of life of both patients and their caregivers, as the well-being of one is closely related to the well-being of the other.

4162 ORAL

Piccline Related Complications in Oncology Patients

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Background: Peripherally inserted central catheter (PICC) is commonly used in oncology care and treatment to ensure a safe, short or long term intermittent vascular access. PICC are a cost effective way of safely administering chemotherapy in the ambulatory setting. However, as with other types of vascular accesses, some complications have been described in the literature. Complications in an early phase related to the catheter insertion have been reported to be bleeding or wound oozing. Complications in a later phase after insertion have been reported to be infections, local occlusion and vein thrombosis. The aim of this study was to analyse the incidence of complications related to PICC in oncology patients, and also to compare complication rates when introducing a new technique of insertion.

Material and Methods: Using medical records we compared complication rates among cancer patients in an oncology department at the University hospital of Lund in the southern of Sweden. We consecutively selected medical records from patients having PICC before and after a new insertion technique. 250 medical records from patients having PICC inserted in the bend of the arm (group A) and 252 from patients having PICC inserted in the upper part of the arm (group B). The later group had their PICCs with ultrasound guided insertion technique. Data collected from the medical records consisted of demographical data like age, gender, reason for having a PICC and if the insertion succeeded or failed (related to anatomical