**Topic: Symptom management**

**P100**

A pan-European survey relating to cancer therapy and neutropenic infections: nurse and patient viewpoints

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**Introduction:** Patients undergoing chemotherapy face the risk of neutropenia and subsequent infections. The current perceptions and issues relating to cancer therapy and neutropenia/fieber neutropenia (FN)-related infections were explored by a pan-European survey* to identify gaps in understanding between cancer patients and healthcare professionals.

**Methods:** The parallel survey was conducted by PatientView for the European Oncology Nursing Society (EONS) in nine European countries (Austria, Belgium, France, Germany, Italy, Ireland, Spain, Sweden and the UK). Participants were nurses (n = 218) identified by EONS. Patients (n = 475) both male and female, of all ages, with a variety of cancers were identified by patient advocacy groups.

**Results:** The results from the parallel survey showed that more than nine out of ten (95%) nurses stated that preventing neutropenia is extremely important in order to achieve a successful chemotherapy outcome in patients. Approximately one third (30%) of patients surveyed developed an infection while on chemotherapy; nearly half (45%) of the infections in patients undergoing chemotherapy were associated with neutropenia/FN. Of these patients, 37% had to have their chemotherapy delayed or the regimen changed. Not all patients with an infection were seen by their oncologist or haematologist. Seven out of ten (72%) of the nurses reported the prophylactic use of antibiotics and/or G-CSF’s to prevent neutropenia/FN; most (85%) of them expressed some degree of concern over patient compliance. Less than a quarter of surveyed patients reported receiving medication to prevent neutropenic infections. Practically all of the nurses (97%) said they discussed the personal risk of getting neutropenia/FN with patients; however, 48% of patients in the survey reported that they did not remember being told about the risk of developing neutropenia/FN.

**Conclusion:** The survey demonstrated that many patients did not understand/were unaware of the risk of developing neutropenia/FN infections and the impact of this on their chemotherapy, even though information was provided. The survey indicated that improved communication between patients and healthcare professionals is needed with regard to chemotherapy induced neutropenia/FN. Also, improved access to oncologists/haematologists for patients who experience an infection could be advantageous.

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**P101**

A randomized trial of the effect of training in progressive muscle relaxation and guided imagery techniques in improving psychological and quality-of-life for breast and prostate cancer patients receiving chemotherapy

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**Introduction:** The randomized study aimed to determine the efficacy of psychological intervention consisting of relaxation and guided imagery to reduce anxiety, depression, and pain intensity and improve Quality of Life in prostate and breast cancer patients undergoing chemotherapy.

**Material and Method:** Two-hundred patients with breast and prostate cancer were included in this study. The patients were randomly allocated to either the study group (n = 100) or the control group (n = 100). Patients in both groups received chemotherapy, but only the study group patients received training in relaxation and guided imagery. Each participant received 4 sessions of progressive muscle relaxation and guided imagery and saliva was collected before and after the sessions. Two primary systems are particularly involved in setting on the stress response, hypothalamus–pituitary–adrenocortical axis (HPA) and sympatho-adrenomedullary (SAM) system. The activation of HPA causes an increase in cortisol secretion in adrenal cortex. Alpha-amylase is one of the major salivary enzymes in humans, and is secreted from the salivary glands in response to sympathetic stimuli. Salivary cortisol and amylase were assayed as indexes of the HPA and SAM system, respectively. Other measurements included assessment of Quality of Life using the EORTC QLQ-C30 (Breast Module-BR23 and Prostate Module-PR25), pain intensity (numeric-pain intensity- rating scale – NRS), depression (Beck Depression Inventory) and anxiety (Self-Rating Anxiety Scale (SAS)).

**Results and Discussion:** Even though the study has not yet been completed initial results show that the amylase level was significantly decreased after the progressive muscle relaxation and guided imagery sessions to the study group compared to the control group. Quality of life, anxiety, depression ratings also show a positive response to the interventions.

**Conclusion:** Salivary amylase level was more significantly reduced and reacted more rapidly than cortisol to the relaxation and guided imagery interventions, suggesting that it is a better soothing or relaxation index. The use of relaxation techniques and guided imagery is effective in reducing the levels of anxiety, depression and body discomfort (i.e. pain) in patients who have breast or prostate cancer. These simple and inexpensive interventions enhanced the psychological and physical wellness in these patients.

**P102**

The symptom experience of a patient treated for cancer

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**Introduction:** Current research recognizes that many patients treated for cancer experience multiple symptoms, or symptom clusters, to include pain, nausea, depression, anxiety, fatigue, and difficulty sleeping. Infrequently, researchers and health care providers have recognized the presentation of multiple symptoms in patients with cancer and the overall affect of these symptoms on patient functionality.

**Material and Methods:** The purpose of this presentation will be to explore ten symptoms (nausea and vomiting, trouble sleeping, experiencing fatigue, feeling down/blue, feeling anxious, sore mouth, fever and chills, diarrhoea, constipation, pain, and distress about appearance changes) in one patient undergoing chemotherapy for the treatment of cancer over two consecutive cycles of treatment. Through the use of visual graphical analysis (VGA), ten symptoms will be investigated solely and in conglomeration to note the overall potential outcome, or symptom experience, for one real patient.

**Results:** The results of this research will depict the symptom experience of one patient. Further, these results will begin to present the overall effect on patient functionality during the two cycles of chemotherapy in the areas of daily activities, the amount of time in hours spent lying down, ability to work, and amount of liquid consumption.

**Conclusion:** Visual Graphical Analysis will reveal symptom patterns often hidden in traditional analysis. Understanding individual variability is important to the design and implementation of future intervention research and clinical care. Most importantly, this research will present actual data that will help the oncology nurse understand the true symptom experience in patients receiving chemotherapy for the treatment of cancer. There are important educational and research implications arising from this presentation. Health care providers should be educated on the importance of assessing multiple symptoms in patients in order to alleviate those symptoms, to improve quality of life, and to provide...