Results: Cluster analysis resulted in the identification of two groups as the optimal number of groups based on symptom severity, one with high symptom severity and another with low symptom severity. These groups differ in their symptom severities with effect sizes ranging from 0.53 to 1.92 as a function of their corresponding standard deviations. Significant difference was only observed in presence of metastases ($p = 0.046$) but not in demographic characteristics, and prior cancer treatment between the groups. The group of patients who reported high symptom severity had significantly ($p < 0.001$) lower scores in PS, and general, physical, emotional, cognitive and social QOL. This group also had higher chance for poor PS (OR = 4.13, 95% CI = 1.6−10.8) adjusted by presence of metastases, and for lower HRQOL (general, OR = 4.01, 95% CI = 1.8−9.1; physical, OR = 4.43, 95% CI = 2.0−10.9; cognitive, OR = 2.83, 95% CI = 1.8−6.9; emotional, OR = 4.91, 95% CI = 2.0−12.5; social, OR = 3.15, 95% CI = 1.2−8.6) independent of gender, age, and economic condition.
Conclusions: Patients who present multiple symptoms with high severity are more likely to have poor physical, emotional, cognitive, and general HRQOL and impaired PS than those who present multiple symptoms with lower severity.

8071 ORAL

Patients' symptom experience: 'being on a desert island' – anxiety and management options following the acute treatment phase

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Background: Providing clear information to patients with cancer before and during acute treatment and in palliative care is well recognised. However little is known about the information needs of patients who are about to finish their acute treatment phase and receive a further prognosis. This is important because great anxiety is experienced at this stage which migh be easily managed.
Methods: We recrutied 124 cancer patietns who were interviewed at 4 timepoints in their illness trajectory: immediately after diagnosis, at 3, 6 and 12 months. Here we present the qualitative part of the research from the first 2 time-points. We analysed the narrative data using the framework approach faciliating thematic analysis.
Results: Patients enter cancer treatment totally committed to the goal of having their disease cured or of slowing down its progression. At the acute treatment stage patients receive a wealth of information. They are also involved in highly structured, well supported and organised management regimes. At the end of this treatment phase, there is often a substantial delay in receiving feedback on the succes or otherwide of treatment. This period is full of unavoidable existential anxiety deriving from uncertainty regarding treatment outcomes. Compounding such anxiety however, are substantial concerns deriving from uncertainty over follow-up arrangements: the when, where and how of follow-up. Patients report information at this time to be insufficient or indeed contradictory, resulting in concerns over whether they should be adopting a more proactive attitude in organisaing treatment follow-up. In comparision with their previous experience of a highly structured and organised treatment period, patients feel like they have been left 'on a desert island'.
Conclusions: Nurses, as providers of holistic care, must offer more structured, clear and concise information to patients on follow-up procedures at the end of their acute treatment phase and improve coordination between healthcare professionals.

Joint EONS/ESO symposium
(Wed, 26 Sep, 13:45−15:45)
The role of the breast cancer nurse

8072 INVITED

The role of the breast care nurse

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In Europe a lot of women each year get the diagnose breast cancer. There is more and more social awareness which leads to an increase of worried patients who visit out patient (breast) clinics. Therefore it takes more and more time to rule out breast cancer.
Nowadays patients are better informed (internet), more articulated and critical. Guidelines are more individualized and there are more decision-making points. Patients appreciated more time for communication in the diagnostic as well in the follow-up period of their treatment. It takes a lot of time to inform the patient thoroughly. The specialist doesn't have that amount of time. These developments were reason for the Netherlands to employ breast care nurses (BCN). It is highly recommended in the Dutch guidelines and now a days every hospital has one.
The role of the BCN is different in many countries of Europe and there is a severe lack of an evidence-based description of the role of the BCN. Each country and even each hospital has it's own opinion whether or not they want to employ a BCN and if they do, what the role of that person must be.
Definition of a breast care nurse: In general a BCN is a nurse who gives nursing care to women with breast cancer before, during and after treatment. The BCN has advanced knowledge of the health needs, preferences and circumstances of the patient. There are five domains of practice identified: supportive care, collaborative care, coordinate care, information provision and education and clinical leadership.
Patients are very satisfied and report receiving a lot of support, counseling and information from the BCN. The availability of a BCN would affect their choice of hospital.
Tasks of a BCN: *Preoperative*: Information delivery (operation procedure, procedure around operation, expectations), nursing history for ward, coordination/continuity of the care, intermediary between patient and specialist (patients advocate), psychological guidance and support and easily reachable and accessible. *Postoperative*: Visiting patient at ward, information delivery (wound/breast prosthesis, dismissal procedure, mode of life), drain removal/wound check-up, fluid puncture, psychological guidance and easily reachable and easy accessible.
Conclusion: The BCN is an important person for the breast cancer patient during diagnostic, treatment and follow-up period. It is therefore important to do scientific research in all of Europe to prove importance and to create a uniform role of the BCN.

8073 INVITED

A nurse is a nurse? A systematic review of the effectiveness of specialised nursing in breast cancer

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Objective: In Anglo-American and Scandinavian countries, the nursing of women in breast centres has been provided by specialised nurses, namely Breast Care Nurses (BCN), for at least the past 20 years. Nevertheless effectiveness of specialised nursing care in breast cancer has received limited attention. Therefore a systematic literature review was conducted, aiming at presenting and discussing role models of specialised nursing in the area of breast cancer and suggesting avenues for future research in this field.
Method: The review is based on a systematic search of the medical databases MEDLINE and CINAHL for articles published between 1980 and 2006. Studies were selected according to predefined inclusion and exclusion criteria. All randomized controlled trials or clinical trials were included. Study selection, data extraction, and assessment of methodological quality were performed independently by 2 reviewers.
Results: 12 studies could be included in the review. Outcomes of specialised nursing were classified in six inductively developed dimensions: improvements of physical impairment, psychosocial problems, patient satisfaction, decision making processes, collaboration in a multiprofessional teams, and improvement of costs. The studies differ with respect to the roles of specialised nursing as well as of the measured outcome variables; thus, the comparability and generalisability of results are limited. Findings indicate that specialised nursing in breast cancer may contribute to improved physical and psycho-social well-being.
Conclusion: In view of the limited comparability, the authors call for (i) a more uniform definition of models of specialised nursing in breast cancer care, as well as (ii) rigorous confirmatory studies to evaluate their effectiveness. These two aspects are pivotal in providing a reliable basis for future health care strategies.

8074 INVITED

European survey of the breast care nurses' role

Y. Wengström. *Sweden*

Abstract not received.

8075 INVITED

Accreditation of breast care clinics in Europe

A. Costa. *European School of Oncology, Director, Milan, Italy*

In October 1998 the First European Breast Cancer Conference took place, jointly organised by the EORTC Breast Cancer Cooperative Group, EUSOMA and Europa Donna.

Delegates agreed a consensus on research, genetic predisposition, psycho-social status, treatment and notably quality of care. “The Florence Statement” demanded that all women have access to multidisciplinary breast clinics based on populations of around 250,000; also it called for mandatory quality assurance programmes for breast services. With the intention of assuring a high quality specialist service Europe-wide, a working party was established to consider what should comprise a specialist service. These resulted in the publication of the “Requirements of a Specialist Breast Unit”, which represents the opinion of the European Society of Mastology (EUSOMA) and EORTC on the standards required for forming high quality Breast Unit across Europe.

These Guidelines have been generally well received and have been influential in the introduction of the multidisciplinary working in several Countries. “The Brussels Statement” following EBCC2 drew attention to these guidelines and demanded that processes of accreditation of breast units be implemented. The importance of the establishment of multidisciplinary breast units was again stressed in “The Hamburg Statement”, which followed EBCC4. Attention was drawn to the approval given to this in the European Parliament (2004).

Meet the Manager (Wed, 26 Sep, 13:45−15:45)

Implementing new technology in health care

8076 INVITED

Innovations in technology and impact on healthcare

S. Kav. *Baskent University Faculty of Health Sciences, Nursing, Ankara, Turkey*

Rapidly evolving technologies such as computer information systems and molecular biology are critical for cancer care. Health information technology considered to be key to improving efficiency and quality of health care. Health information technology has been shown to improve quality by increasing adherence to guidelines, enhancing disease surveillance, and decreasing medication errors.

Information technology is becoming increasingly important, as a communication medium and a means of involving patients in their care. Information technology also being used to improve patient care. The use of handheld computers has been studied to assess and manage symptoms for patients receiving chemotherapy by Kearney et al (2006). The patients in this project used handheld computers to monitor and assess chemotherapy-related side effects, send this information to the cancer centre and to automatically provide them with tailored information on effective and appropriate self-care strategies. Patients believed the handheld computer had improved their symptom management and felt comfortable in using it. The health professionals also found the handheld computer to be helpful in assessing and managing patients’ symptoms. This project suggests that a handheld-computer based symptom management tool is feasible and acceptable to both patients and health professionals in complementing the care of patients receiving chemotherapy.

Electronic patient records and telemedicine have enormous potential for communication and networking across geographical boundaries. Advances in computer and telecommunications technologies are allowing nurses to transport nursing care to patients in alternate care sites and remote geographic areas. Telehealth technology broadly encompasses computers, the internet, televisions, voice and video systems, and distance-learning devices, when coupled with communication lines, enable patient care, education, and/or provider contact to occur over long distances. As the application of information technology to the healthcare industry becomes increasingly important, the actual storage and dissemination of health information in electronic form raises concerns about patient privacy and data security. These concerns have increased as more sensitive material in stored in medical records, such as HIV status, psychiatric records, and genetic information.

The delivery of cancer care will continue to be affected by developments in the field of healthcare informatics and rapid changes in information technology. The use of technology, such as that covered in this discussion, has obvious implications in relation to patients receiving treatment for cancer in helping them to understand the effects of their cancer and treatment whilst supporting them to achieve a balance between seeking professional care and developing their own self-care abilities.

Aim: To explore and discuss innovations in technology and how it is impacting on health care. Main topics are:

i. Scope of new technology in health care
ii. Interface between industry and health development
iii. Evidence for benefits
iv. Implementation into practice
v. Evaluation and management costs

Podium session (Wed, 26 Sep, 16:00−17:30)

Managing new treatments and side effects in innovative approaches

8077 INVITED

Hand-foot Syndrome: Cause, Effect and Management. Nurse-led monitoring using new technologies

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Background: Hand-foot Syndrome (HFS) or palmar-plantar erythrodysesthesia is a common side effect of specific cytotoxic drugs with prolonged serum levels. HFS is rarely serious, not life-threatening but can be inconvenient, interfering with normal activity. The pathophysiology of HFS is unclear but early identification and vigilant monitoring by the patient and the nurse play a vital role in the prevention of worsening of symptoms.

Management: Dose interruption if possible and dose reduction of drugs rapidly lead to a reversal of symptoms. Conclusive evidence for topical and pharmacological treatments to alleviate pain and cutaneous integrity, is still lacking. More adequately powered randomised trials are required. As the goal of care for HFS is to prevent grades 3 and 4 toxicity, we have successfully used real time symptom monitoring of HFS utilising novel mobile phone technology linked to a server which communicates patients’ symptoms to healthcare professionals. Chemotherapy side effects including HFS are registered and advice on symptom management is rapidly provided.

Content: The presentation will cover the nature of HFS in patients receiving chemotherapy, its recognition, severity and the nurse-led management of HFS including monitoring by mobile phone technology.

8078 INVITED

Bowel problems: The role of a nurse endoscopist in the diagnosis of bowel cancer in a surgical outpatient clinic

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Introduction: Since the introduction of the NICE GP Referral Guidelines for bowel cancer in 2002, and the ‘Two Week’ clinic, there has been an increasing demand for Nurse Endoscopist (NE) led clinics. The success of NE led clinics is dependent on the efficiency of the NE in detecting bowel cancer at these clinics, both on endoscopy and referral for total colonic imaging.

Method: All patients attending a surgical colorectal outpatient clinic in Portsmouth (2005 and 2006) were studied to determine the proportion of examinations carried out by the NE, compared with other clinicians, and to compare the effectiveness and efficiency of examination by the NE. All patients seen in the clinic had the outcome of their initial visit entered on to a proforma and recorded on to a database, and if they were referred for barium enema, colonoscopy or CT colonography. Results of investigations were recorded on to the database.

Result: 29% (1544/5391) of surgical colorectal outpatient clinics were carried out by the NE in 2005 and 2006. A mean age of 61, and gender distribution of 55% female was the same for both NE led clinics and ‘other clinician’ led clinics.

Flexible sigmoidoscopy was carried out in 96% (1484/1544) of NE clinics, and 90% (3458/3847) in ‘other’ clinics. In NE led clinics 42% (618/1484) of patients were referred for colonic imaging (BE, CT Pneumocolon, Colonoscopy) compared with 35% (1196/3458) by ‘other clinicians’.

37% (1822/4942) of the surgical colorectal outpatient clinics were ‘fast track’ clinics. 43% (643/1484) of NE led clinics were ‘fast track’ referrals, compared with 34% (1179/3458) for ‘other clinicians’. The NE saw 35% (643/1822) of all ‘fast track’ referrals. In ‘fast track’ clinics only, there was a diagnostic yield (DY) of 11% (69/643) of cancer for NE led clinics, compared with a DY of 9% (104/1179) for ‘other clinicians’.

A median distance of 50 cm was reached by both NE and ‘other clinician’. The NE detected a polyp on flexible sigmoidoscopy (FS) in 15% (223/1484) of patients, this compared with 11% (391/3458) detected by ‘other clinicians’. A biopsy was taken of the polyp at FS in 54% (121/223) of examinations by the NE, and 51% (198/391) by ‘other clinicians’. 36% (44/121) of biopsies taken at FS by the NE were found to be an adenomatous polyp on pathology, this compared with 58% (115/198) for ‘other clinicians’.

One distal cancer was missed on FS by the NE. No distal cancers were missed by ‘other clinicians’. Two proximal cancers were missed after initial examination by the NE. One was referred and received full colonic imaging but the cancer was missed during colonoscopy. And the other did not have ‘high risk’ symptoms for proximal cancer (IDA or abdominal mass) to indicate referral for proximal colon imaging. Five proximal cancers were