Background: The SIG N&V's primary aim is to improve the care for cancer patients with nausea and vomiting. Since its foundation in 1994 SIG N&V has focused on educating oncology nurses in the aspects of nausea and vomiting and developing national clinical standards and guidelines for nurses as well as information regarding antiemetics and self-care guidelines for patients and relatives. The SIG N&V has produced a standard with focus on the result, process and structural criteria of nausea and vomiting at cancerpatients recieving chemotherapy. The result criteria is based on litterature studies. An audit was initiated in autumn 2002 to help to set realistic result criteria.

Methods: The purpose with the audit was to investigate on both patient experience and the strucutural factors. The investigation of patients experience was a prospective structured questionnaire of 9 questions to 144 cancerpatients. The registration of the structural criterias was based on questions to 12 wards at 6 hospitals on; annual education in nausea and vomiting; the presence of standard for antiemetic use; standards of nursing concepts; self care guidelines for the patient about how to prevent nausea and vomiting when receiving chemotherapy, or how to treat nausea and vomiting when the cancer patient actually suffers from it. Also in addition the presence of antiemetic information and a diary for selfassessment of nausea and vomiting.

Result: 50% of the patients had nausea and 28% had vomiting. 96% did get antiemetics but only 51% received information on antiemetics. 66% of those who got oral and written information were able to use it. There were standards for antiemtic use and annual education in nausea and vomiting, but only in 24% of the nursecharts the nursing care was documented. The anamnesis of nausea and vomiting was not documented in any medical journal or nursecharts. The antiemetic treatment was documented many different places causing confusion of the actual chosen antiemetic.

Conclusion: It is obvious to adjust the existing standard and to implement it as soon as possible.

1211 POSTER

Evidence based symptom management for patients with breast cancer: clinical pathways teach process, implementation and evaluation

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Background: Providing care based on the best available scientific evidence is essential for optimal disease management, and can be best accomplished by collaboration of all disciplines within the health care team. Clinical Pathways (CP) are tools which permit multidisciplinary collaboration in the planning and delivery of care, and the evaluation of treatment outcomes.

Materials and methods: The Breast Cancer Clinical Pathway project was undertaken in 1998 and is ongoing at the National Cancer Institute in Naples, where CPs were developed for patients undergoing breast cancer surgery, radiation therapy, and ambulatory follow up. Initial outcome measures were reported on fatigue incidence, surgical complications, and control of nausea and vomiting. As nurses gained more familiarity with the process, we identified 4 areas for providing evidence based symptom management: oral mucositis, fatigue, lymphedema and cognitive dysfunction. This process was to be used institute wide as a model for teaching evidence based practice (and some of its inherent difficulties) to nurses.

Results: Oral mucositis was selected for the large amount of existing studies spanning decades. Our guidelines were based on existing systematic reviews and including standard grading and oral care instructions. Fatigue was selected as a follow up to our previous results of its incidence in our patient population, and to show recent progress in reduction of fatigue through nursing interventions. Assessment and interventions are based on the NCCN fatigue guidelines and allow for tailored nursing interventions. Lymphedema prevention was selected for lack of evidence regarding prevention. Guidelines based on physiologic rationale and the National Lymphedema Network with standardized measurement criteria were integrated with patient education materials. Early diagnosis and prompt referral for lymphedema treatment are key outcomes measures. Cognitive dysfunction is the most recent symptom for which we routinely screen, and allows for subjective patient reports of symptoms and thresholds that prompt further investigations based on clinician findings.

Conclusion: The clinical pathway model provides a method for planning evidence based care with clear measurement and outcome criteria. The model facilitates teaching nurses the process of evaluation of evidence with its application in clinical practice.

1212 POSTER

Evidence based prevention and management of lymphedema in patients affected by melanoma with lymphadenectomy

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Background: Sentinel lymph node biopsy permits correct staging of patients with cutaneous melanoma, and positive biopsy is followed by subsequent radical lymph node dissection. Lymphedema is a potential morbidity of this procedure, and can profoundly impact both functional status and quality of life of affected patients.

Materials and Methods: We evaluated the current practices of prevention and management of lymphedema in melanoma patients who had undergone lymphadenectomy, and the actual incidence of lymphedema in these patients, in order to evaluate our practice and implement evidence based guidelines. Data was analysed for 209 consecutive patients admitted to our surgical oncology unit affected by cutaneous melanoma with lymphatic micrometastasis from 1997 to 2002.

Results: Of 118 patients who underwent axillary lymphadenectomy, 2.5% developed moderate lymphedema (grade II). Of 60 patients who received deep groin dissection lymphadenectomies 5% developed moderate lymphedema (grade II). Of 31 patients submitted to superficial groin dissection, 6.4% developed grade II lymphedema. No cases with modified radical neck dissection developed lymphedema of any grade. Overall incidence of lymphedema for grade II was 3.82%, and for grade III 1.43%. Standard postoperative measures for prevention of lymphedema of the extremity included: elastic compression banding of the extremity for 24 hours followed by elastic compression stocking and early mobilization. Patients who developed lymphedema were treated with sequential mechanical lymph drainage; magnetic therapy; ultrasound therapy, laser therapy and/or other drug therapy. Lymphedema grading was done at the discretion of the surgeon in follow up visits, standard measurement criteria and documentation were not used. Guidelines for patient education regarding prevention of lymphedema were lacking. We identified 3 areas where nursing could play a key role 1) developing a patient education brochure regarding risks of lymphedema and strategies for its prevention based on the National Lymphedema Network guidelines and physiologic rationale 2)adopting standardized cirtieria for the evaluation of lymphedema and implementing screening measures preoperatively and during follow up so early and accurate diagnosis can be made 3)collaborating with the rehabilitation department for prompt referral when lymphedema occurs.

Conclusions: Nurses can play a key role in the areas of prevention and early detection of lymphedema through evidence based guidelines, early diagnosis and prompt treatment. Clear outcome criteria will facilitate our ongoing program evaluation, and current research is focused on evaluating effectiveness of nursing interventions, compliance with guidelines and incidence of lymphedema.

1213 POSTER

Implementing change in a inpatient chemotherapy service

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The standard of care offered to patients receiving inpatient chemotherapy was identified as an area that required urgent attention. Problems with the quality of the service were identified by both patients and staff therefore a nursing post from the ward establishment was identified to lead on the improving the service provision to patients. This post commenced in September 2002.

The first priority was to obtain an understanding of the main problems within the chemotherapy inpatient service. Lead by the chemotherapy sister a multi-professional review of the existing service was conducted and data from an annonymous patient questionnaire was collected over a 3 months period. Collation of the information from these helped to identify areas for service improvement and development.

Key problem areas identified:

- No clear point of contact for patients having inpatient chemotherapy.
- Varying consistency in information giving
- Long waiting times for patients for their beds and treatments
- Poor documentation
- Limited time from ward nurses due to other ward demands.

From these areas the following priorities were identified and addressed:

- Patient's and multi-disciplinary members had a single point of contact
- New patients talks were consistent and given only by the chemotherapy sister

- Waiting times for treatment dramatically reduced due to the role having a sole focus on chemotherapy patients on the ward
- Chemotherapy prescribed and ordered one week in advance speeding up the delivery of cytotoxic drugs to the ward.
- New documentation was implemented by comparing 5 Oncology Centres nationally
- Good working relationships with multi-disciplinary team members developed

The desire to provide a seamless service is constantly being challenged by lack of resources and capacity issues. However, by collaborative working these changes had a huge impact on patient care by improving the quality of the inpatient chemotherapy service.

1214 POSTER

A large scale chemotherapy quality improvement project; initiating standardized treatment, administration and information in the hospitals in the region of the Comprehensive Cancer Centre Rotterdam

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The CCCR is a network organisation that provides advice and support to professionals in the field of oncology, such as medical specialists, general practitioners and nurses in the south-western part of the Netherlands. The region covers 17 hospitals. In 1998 the nursing network in this region identified differences in the chemotherapeutic drug administration protocols between the hospitals. From 1999 - 2002 a chemotherapy quality improvement project was performed in the region in order to optimise this treatment modality. The quality improvement project consisted of five steps: implementing the Common Toxicity Criteria (CTC) checklist in order to score the treatment toxicity, initiating and coordinating the process of medical consensus to obtain regional standardized treatment guidelines for chemotherapy in solid tumours, developing standard chemotherapy administration forms based on multidisciplinary consensus, developing patient and GP information on chemotherapy in the nursing network of the National Association of Comprehensive Cancer Centres and finally providing the standard chemotherapy administration forms with an electronic application for dose calculation. All steps were performed subsequently and were evaluated on implementation success.

The use of the CTC checklist was not mandatory but proved to be helpful to obtain data in trial patients. It was used in 11 hospitals. Chemotherapy treatment guidelines for colon, breast, SCLC, NSCLC and ovarian cancer were established. The compliance to these treatment guidelines was audited in breast cancer adjuvant chemotherapy patients and was excellent with a Relative Dose Intensity less than 85% in only 7/159 patients. All hospitals complied with the standard chemotherapy administration forms, which now all have the same content. All hospitals used the developed patient information, either as an implementation project or by checking and updating their initial patient information. Finally, the standard chemotherapy administration forms were placed on the Internet together with the calculation formulas and an instruction brochure on how to insert the formulas in administration forms. A helpdesk was established. An agreement regarding the maintenance and updating of the treatment guidelines and the standard chemotherapy administration forms finalized the project. The CCCR will continue to provide the hospitals with the CTC checklists.

This quality improvement project demonstrates that a large scale project can run successfully in a network setting when innovations can be adjusted to the individual hospital standards.

1215 POSTER

Cancer nurse coordinator: the introduction, development and impact of a new oncology nurse specialist role in Ireland

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Introduction: In the Irish Health Strategy Shaping a Healthier Future'(1996), cancer was identified as one of three major sources of premature mortality. The effect of cancer on health status in Ireland is striking; cancer accounts for one third of all deaths in those aged under 65. Certain trends were highlighted in the Health strategy which caused concern fe.the mortality rate from cancer was higher than the EU average.

Following on from the Health Strategy a National Cancer Strategy was published (1996). Its two main objectives are:

1. To take all measures possible to reduce rates of illness and deaths from cancer in line with the targets of the Health Strategy, and

2. To ensure that those who develop cancer receive the most effective care and treatment so that their quality of life is enhanced to the greatest extent possible.

Background: Treatment services for cancer in Ireland compared very well with standards in other countries. However, the organisation and delivery of services needed to be changed, to improve coordination and communication. Services also needed to be distributed more evenly around the country. The Cancer Nurse Coordinator Role was created to help fulfill the objectives of the National Cancer Strategy. In 1999, 24 posts were piloted in the capital city and the posts were evaluated by the government in 2002.

The role was designed to address the particular issues facing those diagnosed with cancer in Ireland eg. the need to be referred from hospital of diagnosis to another hospital for treatment, travelling long distances for treatment, or having to wait for treatment. The objectives of the role included provision of information and support for patients and families from diagnosis onwards, and being a constant contact for them along the cancer continuum.

Apart from the core concepts of the role, described above, the role has developed very differently in each hospital. Variables such as the individual nurses and the services already existing in each hospital have shaped role development.

Conclusion: This was a brand new nursing role in Ireland. It has been positively evaluated and has been recommended for roll out to other parts of the country. The introduction of the role was timely, addressing the particular problems in caring for patients in the Irish system whilst services were being developed.

1216 POSTER

Education in groups - the path for improved clinical practise? - a comparative study on benefits from preparatory education in radiation therapy measured before and after modified educational procedure.

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Background: Every year 250 new patients with cancer of the head and neck are admitted to our clinic. Two years ago all patients and their relatives received their preparatory education in relation to their first visit. Nurses and doctors found that there was too much information for the families to relate to in a short period of time. They decided to modify the preparatory education so that the individual case was taken care of at the first visit, and the general information was given in groups of 10 to 12 patients and the same amount of relatives. The purpose of the study is to show if there is any difference in the benefit for patients and their relatives due to the two educational procedures.

Material and methods: 103 persons completed a questionaire with 40 standardized questions. The measurments was made in three groups; before the modification of procedure, just after and after one year using the group procedure. This last measurement was made in order to show if the experience in using group education had any impact on the benefits. Criteria of succes was set in order to make this measurement possible.

Results: All answers from the questionaires were put into tables by a key punch operator. The tables showed that group education provided an improved overall benefit. In some topics such as smoking, care of the skin, mouth and teeth the differences in benefits are statistically significant.

Conclusions: If we take these results into consideration, new perspectives opens for our daily clinical practise in our outpatient clinic. Is it likely to expect the same outcome for patients who are facing chemotherapy?

1217 POSTER

Nurse-led peripheral inserted central catheter (PICC) program: an audit of the St James's experience

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The Nurse-led PICC line insertion program for Haematology/Oncology patients in St James's Hospital was established in January 2002. As with all new developments, close monitoring and appraisal of it merits are a necessity. Therefore we reviewed all procedures carried out in the initial 6 months; in addition we compared this with the established X-ray department directed PICC line insertion program. 141 procedures were assessed during the study period – 46 nurse inserted and 95 X-ray inserted catheters. There was an overall complication rate of 34.7% found in the nurse inserted PICC lines, comparable to a rate of the 51.5% in the X-ray department