Goals for this Manual are:
(a) to serve as a reference book for performing the task of research nursing;
(b) to compile all major issues of concern to Research Nurses;
(c) to provide information relevant to nursing practice about the performance of clinical trials (according to Good Clinical Practice).

Conclusion: The process of collaboration with various ECSG research nurses representing many European countries will result in the development of guidelines which will improve research nursing practice throughout Europe.

1346 POSTER

Mirror, mirror on the wall: Evaluating the process of nursing care, the nurses point of view

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During ECCO 8 in 1995, a tool for measuring quality nursing was presented. This measurement tool, which is presently being used in the Netherlands Cancer Institute, is subdivided into 10 modules. Each module deals with specific aspects associated with topics such as pain, medication delivery, nutrition etc. Individual modules consists of 10–12 questions which address specific nursing care. This gives a direct reflection of the quality of nursing care. The NKI quality measurement tool implementation project is complete and nurses have incorporated it in their daily routines. Using the module infection prevention as a model, the following will be outlined:
(a) How the modules are used in daily practice;
(b) The problems incurred when working with the modules;
(c) The effect on nursing care.

This system works as a mirror. A mirror that shows us shortcomings in our daily care for oncology patients. I would like to invite the participants of ECCO 9 to look with me into this mirror to see what possibilities exist to improve the quality of oncology nursing care.

1347 POSTER

Searching for solutions to the problem of fatigue in cancer patients in the United Kingdom: The action on fatigue programme

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Fatigue is one of the most frequently reported and least understood symptoms of cancer and its treatment. The Action on Fatigue programme has been developed in response to the need to educate nurses caring for patients with cancer about fatigue and to aid the development of research-based knowledge to inform the management of this symptom. It is a European educational and research initiative for cancer nurses sponsored by the EONS in collaboration with the ISNCC and funded through an educational grant from Janssen-Cilag Ltd. A professional education course on cancer-related fatigue was developed to launch the programme and was held in Milan, Italy in September 1996. To maintain momentum in the UK a programme of different activities have been undertaken and are planned for the future. On return to their own practice areas delegates who attended the professional education course in Italy were expected to disseminate the information to nursing colleagues. Working in partnership with a local Janssen Cilag representative, delegates have organised a series of study days and workshops in major cancer centres. In order to help nurses in their effective delivery of information to colleagues the preparation of an educational resource is underway. A patient education pack consisting of a video entitled "Positive Steps in Coping with Cancer Fatigue", a series of information leaflets, a fatigue diary, and a nurse guide to assist in the utilisation of this pack have been developed and distributed. UK delegates who attended the event in Milan and a panel of nurses considered to have an in-depth knowledge of fatigue will work together to construct and test a Fatigue Assessment Tool suitable for use in clinical practice. This collaborative approach will have a critical impact on the problem of cancer-related fatigue and is expected to have benefits for both the patient with cancer and the nurse concerned with ensuring the delivery of high quality evidence-based cancer nursing.

1348 POSTER

Evaluation nursing care in neutropenic patients with basic measures of isolations

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Our Service receives oncological solid and hematological patients for treatment and management of their complications derived from their primary disease or their therapy.

Our service does not count with special infrastructure for the environment protection, so that the nursing operation is the fundamental support for the safe management of these patients with severe neutropenic ANC > o = 500.

With the object that our nursing care be efficient and safe we have settled some patterns for the immunodepressed patient treatment.

These regulations are divided in two groups:

Patterns in patients with risk of severe neutropenic: (1) Referred to the patient room: Access, cleanliness, airtight. (2) Referred to the patient him/herself: Unbroken evaluation, mucositis prevention, infection of the skin prevention, feeding.

Patterns in patients with severe neutropenic (ANC < o = 500): (1) Referred to the epidemiological observation. (2) Referred to the protective isolation of patients as well as of the room: Access, room, cleaning, Patient assessment, mucositis prevention, infection prevention, drugs administration, handling of connections and equipments, and venopuncturesites

Measure parameter for the pattern effectivity: (1) Cultures of surveillance, so to be able to decide about the predictor culture. (2) Positive cultures from feverish neutropenic patients. (3) Germ producing the sepsis and spot of origin of primary infection.

Using these patterns the percentage of inter-hospital infections has been of a 2% during the year 1996.

Conclusion: The patterns executed and their surveillance are adequate for the operation of neutropenic patients, since the biggest percentage of sepsis were of endogenous origin without over infection, therefore, they cannot be attributed to environmental factors.

1349 POSTER

Development and validation of a quality of life questionnaire for men who have been cured of testicular cancer

P.V. Nielsen. *The Finsen Center, Copenhagen University Hospital, Denmark*

Background: The incidence of testicular cancer has increased during the last 5 decades. The cure rate exceeds 90% and further research is needed in the field of rehabilitation and quality of life. Matters such as sexuality and infertility are encumbered with taboos and nurses as well as doctors are short of knowledge. These reasons prevent decent counselling.

Purpose: To develop and validate a quality of life questionnaire for these patients.

Methods: A first draft of a quality of life questionnaire has been made in the light of evidence from the literature, patients and experts. The statements from 5 qualitative research interviews are used in the questionnaire in order to try quantifying different 'feelings' that the men might have. 25 men have participated in a pilot study. They have all been interviewed by telephone, as well as having filled in a questionnaire. The validation procedure is carried through in order to ensure validity. In this case validity means how well a question measures what it is intending to measure.

Results: This pilot study is part of a large cross-section investigation. Most of the questions seem to measure what they have been intended to. Many survivors of testicular cancer appear to have a wide range of problems concerning sexuality and infertility considerations etc.

Conclusion: Although the questionnaire seems to be a useful tool in providing knowledge about the above mentioned issues, much more work has still to be done before the presentation of the final draft of a useful questionnaire.

1350 POSTER

Infections at a hematology ward in a university hospital – Cost and preventive nursing

Inger Berg, Gunnar Juliusson. *Dept of Hematology, University Hospital Linköping, Sweden*

Infections, especially septicemias, are major complications in patients with hematologic diseases. With decreasing number of hospital beds and fewer

staff members due to cost reductions, the need for action to prevent spread of disease is increased. Our hospital is referral center for a population of about 1 million. In 1995 and 1996 we treated 34 patients with acute leukemia and performed 61 stem cells transplantations. The total cost for the ward with 15 beds and 700 hospitalizations was ≅10 million US$ during 2 yrs, with 10% spent on drugs. The cost of chemotherapy and antibacterials were ≅250 kUS$ each, antifungals 110 kUS$, antiviral therapy 40 kUS$, and microbiology 120 kUS$/2 yrs. Blood cultures are always taken from patients with hematologic disease and fever; there were 1283 blood cultures/2 yrs, of which 15% were positive, and 126 individuals with sepsis were diagnosed. Of 361 positive blood cultures, 32% grew coagulase-negative staphylococci, 16% E coli, 9% S aureus, 9% enterococci, and 6% alpha-streptococci.

Single-bed rooms, adequate hygiene routines and staff education are essential for the prevention of infections. We use barrier nursing, with frequent desinfection of hands with spirits, gloves when in contact with body fluids, cover coat/plastic apron during direct patient care, protective glasses when needed. Central venous catheters are dressed during sterile conditions at least once weekly. Premature withdrawal of central catheters due to infections have been very rare.

1351 POSTER

Prevention of extravasation during application of cytostatics via peripheral veins

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In Slovenia, application of cytostatics is performed by nurses. The procedure entails a risk of extravasation – spilling of the drug into the skin and subcutis.

An occurrence of extravasation was registered in pt. record only when it was associated with true necrosis and ulceration which required skin transplantation.

In 1995 the Nursing Service of OI proposed a standard on the steps to be taken in the case of extravasation. On presentation of this program, we organized brief group discussions with nurses; 7/27 admitted to having an experience with extravasation. Disrupted monitoring, insufficient informing of patients and technically inadequate venous puncture were identified as possible reasons.

In 18 months following the introduction of our standard, we registered 15 extravasations of degree 1–2, and only 2 cases of degrees 3 and 4 (WHO toxicity criteria). In all the cases the affected site was treated according to the standard accepted. The affected site was upper side of the palm (10×), inside of the lower arm (5×), and back side of the lower arm (2×). Most frequently extravasation occurred after Adriamycin application (8×), while the most severe sequels were noted after Mitomycin (1×); cytostatics were always given in infusion (up to 30 min), using a 0.8/25 mm needle, in patients who had already had >3 cycles of ChT. In 12 cases the symptoms were noted by the nurse, and in 5 cases by the patient.

It can be concluded that the occurrence of extravasation could be either prevented or its consequences brought down to minimum by the use of the standard accepted. However, further training and education of nurses in the correct technique of cytostatic application is indispensable.

1352 POSTER

Coping effectiveness in patients on chemotherapy for metastatic cancer

Adelaida Zabalegui. *New York University Medical Center, USA*

Purpose: To examine the effectiveness of the coping strategies of cognitive escape-avoidance, behavioral escape-avoidance, distancing, focusing on the positive, and seeking social support in advanced cancer patients receiving chemotherapy.

Methods: The Lazarus and Folkman stress and coping model (1984) guided the study. Data were collected in a convenience sample of 132 patients, age 33 to 83 from the metropolitan area of New York. Most of the patients had breast (30%), ovarian (20%), lung (13%), and colorectal (10%) cancer. Coping strategies were measured using the Ways of Coping Inventory for Cancer Patients (Dunkel-Schetter et al., 1992). Coping effectiveness was assessed by level of psychological distress using the Profile of Mood States (McNair et al., 1992). Data were analyzed using the Person product moment correlation and multiple regression analyses.

Results: The coping strategies of distancing, cognitive and behavioral escape-avoidance relate individually to psychological distress. Distancing was negatively related ($r = -0.25$) and cognitive and behavioral escape-avoidance were positively related ($r = 0.38$) to psychological distress ($p < 0.01$) Collectively the coping strategies explained 36% of the variance of psychological distress.

Conclusion: Distancing was found to be an effective coping mechanisms in advanced cancer patients; while cognitive and behavioral escape-avoidance were found to be ineffective

1353 POSTER

Central venous access removal in a haemato-oncology unit: A prospective audit

Moira Stephens. *Oncology nurse practitioner, Bud Flanagan Ward, The Royal Marsden NHS Trust, Downs Road, SUTTON, Surrey, SM2 5PT, England*

Patients receiving intensive treatment (including blood and marrow transplantation) for haematological malignancies will often require placement of central venous access devises. Resultant neutropenia increases the risk of developing systemic sepsis arising from a break in skin integrity with staphylococcus aureas being a common organism.

In many clinica areas central venous access is removed is removed when the patient becomes pyrexial and unresponsive to antibiotic therapy. Within the leukaemia and myeloma units an audit was undertaken over a 6 month period of all central venous access removal to determine reason for removal and any effects on pyrexia and incidence of systemic infection.

1354 POSTER

Developing a model for evidence based practice within an acute cancer centre

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Purpose: A model of nursing based on evidence was developed to meet patient and professional needs, and the demands of purchasers within the internal market of the health service.

Method: The paper describes the impetus for the development of evidence based practice as a network of variables including; the needs of patients and relatives, nursing and multi-professional priorities and the emergence of new knowledge within an acute cancer treatment centre. Effective sources of evidence are reviewed, and both advantages and constraints are discussed with particular reference to specific standards set: "a psycho-social approach to care of patients with cachexia" and "an innovative approach to the care of patients of varying cultures and religions".

Results: The benefits of the standards set are reviewed from the perspective of both patient need and the professional development of nurses involved in the process.

Conclusion: The model adopted was effective in bringing about an improvement in the quality of care

1355 POSTER

Mucositis prevention (PM), nursing protocol

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The chemotherapy agents present different toxicities, therefore, the associated problems to them can be very varied, including those that affect our population of patients that receive chemotherapy (QT) and/or radiotherapy (RT) approximately the 40% develops oral mucositis (M) or gastrointestinal one causing a damage in the life quality according to literature. This is due basically to two mechanisms: a direct effect of the drug over the mucosa and an indirect mechanism produced by the mielosupresion.

Mucositis is mostly associated to antimetabolites and antibiotics, increasing with the concomitance of RT and the conditions related with the patient (age, nutrition state, feeding habits, consumption of tobacco and alcohol).

PM in our Service comprises daily review of cavities, nursing evaluation, treatment and use of solution developed in the unit (bicarbonate, 5.6% + nistatine, 0.5% diluted in bi-distilled water), which is indicated as colutory every 4 hours, plus nistatine oral every 6 hours, that according to the protocol is used from the beginning of the QT up to 7 days afterwards. Because of the use of this protocol severe mucositis has showed in 4 patients in a period of 3 years, corresponding to the 0.2% of patients. Even though it is not a comparative study, the preventive therapy seems to obtain important benefits as it reduces complications. This year it will be done a random study to evaluate counter other protocols.