Proffered papers

1423 ORAL

MEASURING QUALITY OF ONCOLOGY NURSING CARE

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In the Netherlands the concept quality of care is receiving ever more attention by patient interest groups and the Health Care Council. They define quality of health care as being goal oriented, patient centered, efficient and effective. Unfortunately there is no consensus on the definition of the concept quality of care. A team consisting of oncology nurses and a nursing researcher have started a project with the aim of operationalizing this concept as it applies to oncology patients in our institute.

Quality of care was operationalized by developing a matrix, using the job profile of oncology nursing and Gordon's 11 health patterns. Basic requirements for care were developed and sent to a cross section of nursing experts for content verification. After consensus was achieved, a measurement tool was developed and throughout the hospital quality of care was measured on every nursing department.

We want to share this new development in measuring quality. It contributes to the present knowledge base of oncology nursing as well as the improvement of care for the oncology patient.

1424 ORAL

PROSPECTIVE RANDOMIZED TRIAL TO STUDY THE BEST TIME INTERVAL BETWEEN CATHETER (KT) DRESSING

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High dose chemotherapy followed by bone marrow transplantation (BMT) is often complicated by toxidermia. The presence of the KT dressing increases the intensity of cutaneous lesions at its implantation site. Until 1990 we used to change systematically KT dressing every 4 days. Taking into account the role of these changes, we wondered whether in increasing the time lapse between each KT dressing it would be possible to decrease the cutaneous complications without infectious side effects. To answer this question a prospective randomized trial testing two intervals between KT dressings was undertaken. Eligible patients were randomly assigned either to group 1 (4 days) or group 2 (15 days). They were followed up during hospitalization for BMT.

KT dressing was checked every day and changed early if one or several of these features was observed: dirty compresses, unsticking dressing, perfusion or KT problems, positive bacteriologic contacts. At each occasion of changing the KT dressing cutaneous lesions were quoted according to a toxicity grading.

Between July 1990 and April 1993, 112 children entered this study. 1064 dressings were performed during the study. 56 children were treated with 4 days interval, 56 with 15 days interval. Median age, underlaying disease, conditioning regimens, were not different between the two groups. 86% of group 2 children (15 days) experienced a local cutaneous toxicity of grade < 2. As opposed to 43% of group 1 (4 days) who presented lesions of grade $>$ or $= 2$. No difference was observed between the two groups according to incidence of local and systemic documented infections, duration of fever, incidence of positive contacts. However, in group 2, the median observed interval between KT dressing was 8 days essentially because of premature unsticking of the dressing.

1425 ORAL

PHASE I TRIALS IN CANCER PATIENTS: PARTICIPANTS' PERCEPTIONS OF SUPPORT RECEIVED

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Cancer patients undergoing phase I clinical trials are a particularly vulnerable group of patients due both to their diagnoses and because there are few treatment alternatives available to them (Hubbard and Donehower, 1980). Support of this special group of patients is paramount. Cancer patients ($n = 28$) were interviewed using a questionnaire containing a range of open and closed questions. Results were analyzed statistically and by content analysis. When compared with previous treatments, most patients felt that the quality and amount of their nursing and medical care was better in a phase I trial. Patient satisfaction was high and when asked about the benefits of taking part in a phase I trial, individualized care and intensive monitoring by the health care team was a clearly emergent theme. Patients' perceptions of helpful aspects of nursing care were determined, and it is concluded that support from nursing and medical staff was considered superior by patients participating in phase I trials, when compared with previous treatments.

1426 ORAL

RELIABILITY AND VALIDITY OF THE DUTCH VERSION OF THE "ADAPTED SYMPTOM DISTRESS SCALE"

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The purpose of this study was to test reliability and validity of the Dutch version of the "Adapted Symptom Distress Scale (ASDS)" (Rhodes, 1987). The ASDS is a 26-item Likert scare measuring symptom occurrence and distress as a result of chemotherapy. The Dutch version of the ASDS was tested a first time in 1994. Based on results of this study modifications were introduced and tested in a new study.

A descriptive correlational design was used. The convenience sample consisted of 150 patients of the Oncology Department of the University Hospital Leuven in Belgium. Selection criteria included minimum two cycles of palliative, curative or adjuvant chemotherapy, age of 18 years or older, being able to speak and read Dutch and informed consent. A variety of cytotoxic schedules were included to test instrument sensitivity in detecting different patterns of symptom distress. Four types of cancer were included: breast cancer, ovarian cancer, lymphoma and sarcoma.

The following variables were measured: symptom occurrence and symptom distress, medical diagnosis, cancer stage, functional status, disease onset, chemotherapy regimen, administration time and demographics. Data are currently being collected and analyzed. Descriptive and inferential statistics (Cronbach's alpha, factor analysis, correlation analysis) are used. Results will be reported at the conference.

These psychometrically tested instruments will assist oncology nurses to evaluate chemotherapy symptom control in a more reliable and valid way.

1427 POSTER

"ONE POINT SET UP" IRRADIATION? IMPLEMENTATION ON THE QUALITY OF NURSES WORK

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We implemented a one point set up technique (OPSUT) for a 3-field irradiation of head and neck tumour and breast cancer. In this paper we will present an evaluation of the accuracy and quality on daily pt. set up. *Materials and methods* PTS. were immobilized using an individually moulded fixation mask when indicated. A field matching plane was constructed by abutting half-beams, made by independent collimation. The number of manipulations inside the treatment room were compared between the OPSUT and the classical techn. (control group). Data on daily variations in precision were acquired from 14 pts. in the control gr. and 20 pts in the OPSUT. *Results:* The number of manipulations decreased from 36 to 23. Those susceptible to human mistake are reduced from 27 to 15. Measurements of table height give a standard deviation of 0.76 cm in the control group and 0.11 cm in the OPSUT. These reductions are significant (P 0.001) and will be present. *Conclusion:* The OPSUT gives us more quality.

1428 POSTER

NURSE'S OUTPATIENT TELEPHONE APPOINTMENTS AT A REGIONAL HOSPITAL'S DAY-CARE WARD FOR PATIENTS UNDERGOING CYTOTOXIC THERAPY

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Cytotoxic therapy is given mainly on the day-care ward. The patients receive extensive instruction before treatment. Usually they visit the day-care ward only for intravenous cytotoxic therapy. The nursing staff attaches much value to contact with patients in between treatments for

advice and support. Deterioration of their general condition should be recognized early. Hofpoort is a regional hospital. Visits on the day-care ward imply a lot of time, energy and stress. As part of a quality assurance program routine telephone contacts in between treatments were initiated if the interval exceeded one week. The patients are informed about the aim of the contacts and if they agree, the contact is scheduled. During the conversation the situation of the previous week is assessed and adequate advice can be given. If necessary the patient is referred to his/her physician, a dietician or a social worker. A well kept patient report is maintained. This setup has proven to be feasible and effective.

Patients are able to get answers to important questions and many problems can be prevented. The level of care for patients on the day-care ward is improved and relations between nurses and patients are optimized.

1429 POSTER

I.V. TUBING CHANGES EVERY 4 DAYS VERSUS 2 DAYS IN PATIENTS WITH CENTRAL ACCESS CATHETERS. A PROSPECTIVE RANDOMIZED STUDY

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An increased risk of infection is associated with repeated manipulation of I.V. tubing. It would be preferable therefore to limit the frequency of venous line changes.

Guidelines in documented studies recommend changing tubing every 2 to 3 days. The aim of this study is to show whether changing I.V. tubing every 4 days rather than 2 days, the current protocol in I.C.U. at IGR, increases the risk of catheter infection.

Method

A prospective randomized study aims to show the equivalence of 2 methods of I.V. tubing change, 4 days versus 2 days, on the incidence of catheter infection. 125 patients will be included in each of the 2 groups.

Parameters studied include assessment of catheter site, patient temperature and blood culture results. The I.C.U. blood sampling policy has not been modified apart from the addition of a routine blood culture from the central catheter on admission to the unit. Patients are surveyed throughout their stay in I.C.U. Patients discharged with a catheter in situ are followed up for 48 hours after leaving I.C.U.

Results

50 Patients have been included in the study so far. Preliminary results show the two methods to be equivalent. If these findings are confirmed in the completed study, a considerable economy in time and material will be obtained.

1430 POSTER

ORAL ETOPOSIDE IN THE ELDERLY WITH AN ASSOCIATED PHARMACOKINETIC (PK) STUDY: THE RESEARCH NURSE'S CONTRIBUTION

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For the elderly cancer patient (pt) standard intravenous chemotherapy (CT) treatments may cause many logistical problems as well as being costly in terms of hospitalisation. In a trial conducted at the above centre in Italy, oral etoposide (VP16) was administered to a group of elderly patients with various tumours and included a PK study. The aims were to evaluate (i) toxicity; (ii) bioavailability and other PK parameters; (iii) feasibility of a Limited Sampling Strategy (LSS) in the PK study; (iv) patient compliance and quality of life (QOL). Dosage and modality of drug administration was standardized for all patients (oral VP16 100 mg for 14 days). The research nurse was responsible for all aspects regarding drug administration and PK blood sampling. Four days of hospitalization were required in the 1st cycle in order to conduct the PK study. All other CT cycles were conducted on an outpatient basis and at home.

Conclusions: The research nurse proved to play an important role in quality assurance in the following ways: (i) general protocol compliance improved; (ii) consistency and accuracy in PK sample collection and data recording was seen; (iii) continuity of pt care by one nurse seemed to be beneficial and pt compliance was improved; (iv) decreased hospitalization resulted in less physical and psychological stress and increased patient QOL; (v) LSS demonstrated that 3 samples would be sufficient for PKs and it would thus be possible to perform in the Outpatient Dpt without overburdening staff or being too invasive for the pt.

1431 POSTER

NURSING DIAGNOSIS IN LEUKEMIA AND LUNG CANCER PATIENTS

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A descriptive study was conducted to identify and describe nursing diagnosis, their related factors and defining characteristics in leukemia and lung cancer patients and to categorize nursing diagnosis within Functional Health Patterns (FHP). Content analysis of 30 nursing records and interviews with 16 oncology nurses were used. In the leukemia population 47 nursing diagnoses were identified and classified within 10 FH. In the lung cancer population 28 nursing diagnoses were identified and classified in 9 FHP. Most of the diagnoses were formulated in the Nutritional-Metabolic Pattern, the Cognitive-Perceptual Pattern, the Activity-Exercise Pattern and the Coping-Stress Pattern. Diagnoses that occurred frequently in both populations were sleep disturbance, pain and self-care deficit. Although most of the diagnoses identified in the interviews were also found in the records, the interviewed nurses emphasized psychosocial problems. Diagnoses which were difficult to deal with for nurses were anxiety, uncertainty, denial and ineffective coping of patient and family.

1432 POSTER

EXPERIENCES WITH THE "PATIENT'S BOOK"

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Cancer patients, in particular, have a need to communicate with caregivers on their own terms. To meet this demand, we created an individual "patient's book" based on; (A) objective, written information dealing with diagnostic procedures, radiotherapy, chemotherapy, surgery and discharge. We followed the quality assurance process, dividing the information problems into structure, process and outcome. (B) an artistic lay-out to meet the patient's feelings of distress. To add a psychological dimension to the book, an authoress, a nature photographer and a painter were engaged. Patients in the ward evaluated A in 1993/94. This time patients evaluated both A and B one week after discharge, by filling in an anonymous questionnaire with four-level scales or yes/no questions. Preliminary results show that patients now are more aware of side-effects of their treatment. Other results may indicate that patients receive written information alone, not in combination with oral, as clearly was the intention. Furthermore, the evaluation reveals that the patients are very happy with our "patient's book".

1433 POSTER

COMPARISON OF THREE INTRAVENOUS CONNECTION SYSTEMS ON A HEMATOLOGY WARD

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Most of the patients treated in the hematology ward have a Central Venous Catheter (CVC). The care for the CVC is complex and has to be done as hygienically as possible. Last year several systems were introduced which seem to have resolved most of the complex care for the CVC. The hematology ward has done three comparative studies between intravenous connection systems. The following systems have been under study: Standard system (Terumo), Click-Lock system (Vigon) and Bionecteur (Vigon).

Research items were: efficiency, safety and the utility value. The items were defined and measured as following: (a) efficiency: time necessary to change the system, time to take blood samples, time to administrate medication and the costs of the material (b) safety: needlestick injury, leakage, and (c) utility value: is the system easy to handle for the nurse as well as the patient? In the study 15 nurses were involved. The results for the standard system, Click-Lock and Bionecteur were as follows: (1) Time to change the system: resp. 4 minutes, 30 seconds, 34 seconds, (2) Basic costs of one changement of the system: F3.28, F5.67, F3.32. As third item no needlestick injury was found by one of the systems. The incidence of the leakage was 1×, 2× and 2×. Both the Click-Lock and the Bioncenteur were found positive in the fact of utility. Based on these results the hospital is changing the standard intravenous connection system into Bionecteur system. At this moment a new study has been started on the same research items for the Interlink system (Baxter/Dickinson). The study will be finished in July this year and presented in the congress.