manage the emotional aspects of the nurses' work: Emotional Shielding through professional shielding or cold shielding; Emotional Processing through chatting, confirmation seeking, self-reflecting, or ruminating; and Emotional Postponing through storing or stashing. Emotional Competence is a property of Emotional Survival that explains how well emotions are handled since there are more or less adequate ways of dealing with the risk of being emotionally overloaded.

Conclusions: The grounded theory Striving for Emotional Survival can be useful in the nurses' daily work and provides a comprehensive framework for understanding how emotional difficulties are dealt with. We suggest that health care organizations encourage self-care, prioritize time to talk and offer counseling to nursing staff with emotionally difficult working conditions.

**POSTER** 1599

## Severe sepsis - a major complication in the treatment of cancer

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Background and Rationale for Audit: One in three people will develop cancer with an increasing number receiving multi-modality treatment and going on to require intensive care therapy. Severe sepsis remains a major cause of mortality and morbidity in the intensive Care environment, and therefore an important challenge for nursing (Dolan 2003). The main cause of death for patients admitted to non-coronary Intensive Care Units (ITU) has been shown to be severe sepsis (Edbrooke et al 1999). Specialist cancer ITU have the rare opportunity to monitor and treat sepsis in those with a cancer diagnosis. The Royal Marsden Hospital in London has the United Kingdom's only dedicated Cancer ITU.

Aims: This presentation will start with an overview of the current sepsis literature. It will then describe a prospective audit that was undertaken in 2003-2004 on the Cancer ITU in relation to sepsis. The purpose of the audit was to augment our understanding of the pattern of severe sepsis in cancer patients admitted to an ITU.

## Material:

- Cancer diagnosis
- Stage of disease
- Relevant pathogenic data where available
- Outcome data for each patient
- Current microbiological causes

 Implications for practice

Method of Audit: Retrospective case note review of epidemiology of sepsis in a cancer ITU over a period of one year

### Results:

- Coagulase Negative Staphylococcus was evident as the major causative microbiological factor in severe sepsis. The respiratory tract was evident as the major source for sepsis in conjunction with central access lines.
- The Candida family also played a major role in infections within this patient group. Improved infection control practice in the clinical environment put into practice in order to reduce the risk of severe sepsis. Further education and support for nursing staff implemented. Unmet challenges for current cancer nursing practice will be further highlighted.

1600 POSTER

#### Prolonging the infusion time for an implantable hepatic artery infusion pump

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Background: The Codman<sup>®</sup> Model 3000 Constant Flow Implantable Pump with Bolus Safety Valve, hereafter called "pump" is an implantable drug delivery device with an attached silicone rubber catheter intended for longterm delivery of medication to various body parts. In our institution, the current use is to provide a means for hepatic artery infusion. Because the pump has a constant flow rate, a continuous infusion of floxuridine (FUDR) to the liver can be achieved. The standard procedure is to alternate 2-week infusions of floxuridine with 2 week infusions of heparinized saline

Even if the patient is not receiving chemotherapy, the pump must be refilled every 2 weeks. This can create problems for patients, many of whom must travel long distances for a pump refill. Resources in the community are unfamiliar with the pump and are reluctant to assume responsibility for pump refill. For these reasons, we sought a means of prolonging infusion times

The predecessor to this model pump was sometimes filled with glycerin to prolong infusion times. There is anecdotal evidence that infusion times in the current pump can be prolonged by filling the pump with 30 ml glycerin. We performed a pilot study to investigate this use.

Research Question: Is filling the Constant Flow 3000 Implantable Pump with 30 ml glycerin a safe and effective method of prolonging infusion time? Sub-Questions:

- 1. Will using glycerin result in hepatic artery thrombosis?
- 2. Will using glycerin result in infected pumps?
- 3. Can the pump be maintained every six weeks with a glycerin refill? Procedure: Ten patients were treated as follows:

- 2 patients received glycerin over 2 weeks 2 patients received glycerin over 4 weeks
- 6 patients received glycerin over 6 weeks

End Points: Patients were assessed at each visit for:

- 1. Pump rate: 30 ml minus return volume divided by number of days = ml/day.
- Thrombosis: May be detected by no or sluggish flow of pump.
- Dry pump: no infusate returned.
- 4 Infection

Conclusions: The average infusion rate was 0.437 mL/day. No patient developed a thrombosis. All pumps returned infusate when refilled. No patient developed an infection. We concluded that filling the pump with 30 mL glycerin every six weeks is a safe and effective procedure.

**POSTER** 

#### The most frequent nutritional problems of the patients of chemoand radiotherapy

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Introduction: Chemo- and radiotherapy can have similar side-effects, one of which can be loss of weight. This may worsen the prognosis of cancer and tolerance of side-effects. The aim of study was to find out the most frequent side effects of chemo- and radiotherapy and their connection with nutrition in general as well as the preferences of nutrition.

Material and Methods: The study was carried out hospital in Hematology Oncology Clinic of the Tartu University during 01.03.-14.04.2002. 75 patients from the first and second department of surgery, radiotherapy and hematology department were included. Data were obtained by using single self-reported questionnaires. Following questions were presented:

- 1. What kind of nursing problems the patients on chemo- and radiotherapy observe?
- 2. What is the correlation between elongation of the period of radiation and frequency and severity of side-effects?
- 3. What are the nutritional preferences of the patients on chemotherapy and on radiotherapy?

Results: From our study following results can be presented. The most frequent side-effects connected with nutrition were nausea, stomatitis and anorexia. From the patients to whom chemotherapy caused strong nausea 35% had nausea and anorexia, 31% stomatitis in every day of treatment. From those patients 38% preferred to eat fruits, 35% vegetables and low fat soups. From the patients of radiotherapy 30% had anorexia in every day of treatment. Members of this group chose many-sided food - fish, meat, fruits, vegetables and low-fat soups. From the patients to whom chemotherapy caused moderate or mild nausea 15% had nausea, 19% stomatitis and 23% anorexia. Clear food preferences of this group were not obvious. There was a strong positive correlation between the number of days of radiation and frequency of nausea.

## Conclusions:

- 1. The most frequent nutritional problems for the patients of chemo- and radiotherapy were nausea, stomatitis and anorexia.
- The patients of chemotherapy preferred to eat fruit, vegetables and low-fat soups. The patients of radiotherapy preferred to eat fish, meat, fruits, vegetables and low-fat soups.
- 3. There was a strong positive correlation between the number of days of radiation and frequency of nausea. Medium positive correlation was found between the days of radiation and severity of diarrhoea.

1602 **POSTER** 

#### Nurses' perception of parental participation on oncopediatric department

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Background: The admission of a child on oncopediatric department is a very extreme and stressful situation for entire family. It will cause adverse effects on a child's well being and stress to the parents

Objectives: To determine: 1. How parents experience the admission of their child on oncopediatric department. 2. Which conditions are needed for parental participation 3. What is the nurses ' perception regarding parental participation

Material and methods: Subjects were 16 nurses (N = 16), aged between 22 and 54 years, at Oncopediatric Department. We used the method of interview, a questionnaire with 10 opened and closed questions.

Results: We identified the following issues: Parents are essential in the well being of their child; Parents' participation is necessary for Nursing Programme

long-term admission in Oncopediatric Department; Parental participation has consequences for nurses: the workload increases, it requires time-investment, need of training regarding communication, relationship, parental psychology; The role of nurses changes: beside nursing care, they are also counseling and consultative toward family.

Conclusions: Parental participation and family-centered care on Oncopediatric Department benefits the recovery of child. It creates a better situation for child and family, during admission and better outcomes afterwards.

#### 1603 POSTER

# Application of cytostatic therapy in hematological patients presented through studies of nurses

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Chemotherapy is the application of cytotoxic agents for treatment and control of malignant diseases. It is the therapeutical choice for many cancers. In distinction from surgery and radiotherapy, chemotherapy as systemic treatment may reach all metastatic localizations including those not always accessible by other modes of treatment. Combination of specific chemotherapeutics for treatment of any malignant disease is known as "therapeutical protocol", but such synergistic application has to be rationale since drugs may cause different impairments in the process of synthesis of nucleic acids and albumins. In this way, not only the supplementation but also emphasizing of their antitumor effect is achieved.

Nurse as a member of team has significant role both in preparation and application as well as in her self-protection in handling with chemotherapeutics. Controversy regarding the issue of possible health damage of nurses handling with these drugs has been actual since the time of verification of their probable toxic effects to DNA causing genetic defects, as well as cancerogenic, teratogenic, fetotoxic effects, etc. Although the respective studies suggest rather than conclude, they are the foundation of making the guide for safe handling and, accordingly, maximal reduction of possible risks.

This study used descriptive and observation method with the object of establishing the scope of activities of nurses-technicians in preparation and application of chemotherapeutics and their involvement in research work, as well as level of information of patients on their diseases and mode of treatment by chemotherapeutics.

Results have revealed that even 60% of nurses work in departments of chemotherapy for over 10 years, 94% of nurses believe that handling with chemotherapeutics is more hazardous than working in other wards, 100% of nurses use protective equipment pursuant to legal regulations, 68% consider continuous education necessary, as well as acquisition of knowledge in pharmacology, oncology, ethics and particularly in health care of hematological patients.

The majority of subjects, even 80% of them are informed on their diseases and chemotherapeutic treatment, 65% comply with instructions advised by nurses and physicians, and 65% are satisfied with relationship with nursestechnicians and other members of hematological team.

Based on our results, it may be concluded that patients have top-quality collaboration with hematological team what contributes to their faster recovery. Nurses have acquired their skills and advanced training in preparation and application of chemotherapy not during regular studies but during long-lasting working experience. Nurses assume their work as professional challenge and not as occupational burden.

### 1604 POSTER

Confrontation, control of symptoms and vida's quality in women with cancer of breast with treatment of chemotherapy adyuvante

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Target: To analyze the strategies of confrontation of the women in situation of disease (cancer of breast) that they receive treatment of chemotherapy adjuvant and more concretely to study the relation between (among) the mechanisms of confrontation and the psychological tension (satisfaction with the life, well-being, state of mind and perception of symptoms) from the diagnosis and during the treatment. I

**Design:** Cross street Observacional with mixed technologies (skills): Qualitative by means of interviews in depth and quantitative questionnaires, both on the basis of the notable aims (lenses).

Emplacement: Day hospital: Institute Oncológico of San Sebastian Participants: 81 women diagnosed of cancer of breast and with Qt's treatment. Adyuvante in ages understood (included) between 32 and 65

Method: Intentional Sampling. 11 interviews in depth of between 30 minutes and one hour and a half. Recording and trascripción of the same ones previous authorization. Interviews opened with semiconstructed

script, but following(continuing) the riverbed of conversation prioritized by every interviewed one. The quantitative withdrawal of information realizes across them following instruments of autoadministration: questionnaire MAC (Mechanisms of confrontation to the cancer. Spanish version, validated by Zabalegui). Questionnaire POMS (Profile of Mood Status – Profile of states of mind). You climb to measure: Satisfaction with the life (SLSW), Support or Social Subjective Support (SSS). Welfare state (Bradburn's PNA). Survey modified on Toxicity in Chemotherapy Adyuvante according to criteria of the WHO. PNA, SSS, and POMS measure up in six Qt's cycles. The scale SLSW before the first cycle. The MAC in the first and last cycle. And the questionnaire of Toxicity from 2  $^{\circ}$  Qt's cycle.

Results: The active forms of confrontation improve the subjective perception and help to a better managing of the situation of disease. The accompaniment of the pair(couple) is looked of active form and fundamentally there is perceived in this women's sample the importance of which the children are nice, "normal possible mas", which it (he, she) determines where of directing the active search of managing of stressful situation

Conclusions: The kind (genre), to be a woman, influences the way of approaching the symptoms. The subjective well-being of the children is prioritized in a very clear way and is across the interviews like detects the importance of this active search of subjective well-being that also appears across the questionnaires but without being so clear. This type of design marks the need to work with triangular methodology, cuali and quantitative, and is outlined the need to modify the existing questionnaires today in this line of investigation (research), attaching the kind (genre) to the managing of the cancer. These conclusions also help to establish a frame of help to the women to be able to express his (her, your) emotions since the familiar (family) core (nucleus) appears for them as something to protecting and not always the pair (couple) helps in the expression of emotions.

## 1605 POSTER

## Quality of life of long-term colorectal patients

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Background: The aim of the study is to evaluate specific dimensions and the overall quality of life (QOL) of long-term colorectal cancer survivors focusing on how some disease-related factors such as stage at diagnosis and time since diagnosis could modify the level of QOL for this group of natients

Material and Methods: Individuals, of both sexes, with confirmed cancer of colon and rectum and with survival time at least 1 year from initial diagnosis, were recruited for participation in this survey from the archives of a hospital-based medical center and from a large private-practice oncology clinic. Participants completed two self-administered questionnaires: the Functional Assessment of Cancer Therapy Scales for Colorectal Cancer (FACT-C) and the Mental Component of the Medical Outcome Study Short –Form 36 (MOS SF-36). A general information sheet also administered including several demographic questions (ie age, education, socioeconomic

Results: Ninety-nine respondents completed the survey (average age=65 years 54.5% men). In the first 2–3 years after diagnosis the overall QOL was lower and varied for all Dukes' stages. Patients who survived >3 years reported a uniform overall QOL with higher scores (better QOL) at all domains of FACT-C except from those of stage D. The mean physical domain was lower for participants with greater ages while patients with a colostomy appliance experienced a relatively high QOL over time although their emotional and social functioning were affected more. Low income status was associated significantly with poorer outcomes on social and emotional well-being.

**Conclusions:** The impact of colorectal cancer on QOL is not so devastating in survivors, although stoma appliance and low income play more dominant roles in determining the emotional and social well-being.