side-effect to cancer and cancer treatment was however different. Patients had minimal knowledge about fatigue and they were not prepaired for this side-effect and as a result of this they did not know how to handle fatigue and fatigue was seen as a very frightening experience.

As a result of the findings I wanted to carry out a intervention study, where the aims were to develop a educational programme about fatigue and to evaluate the effect of the programme.

Materials and Methods: The study has a randomised experimental design. A intervention- and a control group, each consisting of 100 Breast Cancer patients (Stadium I or II) receiving chemoterapy or/and radiation therapy after surgery were included in the study. On a VAS-scale (0-10) the patients had a fatigue score of 2.5 or more to be included in the study.

The intervention was an educational package of 120 minutes x 3 over three weeks. The education was given in goups of 10 patients. Both groups are responding to questionnaires just before the intervention, just after the intervention and three months after finnishing the intervention. The educational package consisted of basic knowledge about fatige, and strategies or techniques for coping with fatigue. The questionnaires consisted of: Lee Fatigue Scale, Fatigue Questionnaire, Brief Pain Inventory, General Sleep Disturbance Scale, Hospital Anxiety and Depression Scale, Herth Hope Index, Social Provision Scale, Self-Care Diary, Comorbidity Index and Fatigue Intensity Scale.

Result: At present, the project is in the final stage of data collection. Data will be analysed during Summer of 2007 and ready for presentation at ECCO-14.

Conclusions: Without a systematic analyses of the data the impresion is that the patients are more fatigue then assumed, and the fatigue seems to last longer than expected. Still the patients are lacking information about fatigue and knowledge about what to do to reduce the experience of fatigue when they attend the education programme. The knowledge level is significant higer after completed the educational programme. Comparison between the intervention groups and the control groups has not been made so at present, there is no proved documentation of the effect of the intervention.

### **8056** ORAL

### Developing a web-based multidisciplinary cancer education forum

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Introduction: There is a growing expectation that health professionals provide evidence of continuing professional education and learning. This paper describes how the first continuing professional development website was developed by a scientific journal as a result of research into reader feedback, existing resources and learning methods. The European Journal of Cancer Care first demonstrated its commitment to continuing professional education in 1998. However, there are now greater constraints on professionals' time and frequently less financial support available. This has led to the journal reviewing its continuing education section in order to respond to these changes and launch www.onlinecancereducationforum.com

**Problem:** We wanted to develop an innovative approach that would appeal to a variety of different cancer professionals practicing in different countries. At the same time it needed to be rooted in sound educational principles and reflects current technology.

Solution: After exploring different options, we decided on an online initiative. e-learning is a method of delivering educational modules that can be accessed at any time and any place. We have worked with an experienced proponent of interactive e-learning to develop the structure for the content of the new programme and with the web producers of the publisher for the journal. The result is www.onlinecancereducationforum.com which was launched in March 2007. A new topic is introduced on the website for each issue, along with a printed abstract in the journal. For every topic there will be learning objectives, background information, activities and signposts to resources required to complete the activities. Journal readers and visitors to the website are encouraged to comment on and discuss the current topic through the online discussion board. We hope that this will generate a lively debate and encourage the participants to share examples from their area of practice. All discussions will be summarised and archived. This will enable us to build a 'library' of professional debate for the wide range of health professionals within cancer care.

ORAL

State of the art in prostate cancer recovery: Self management what is it, what works and how can it help men with coping?

2057

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Background: Despite improvements in diagnosis and treatments for prostate cancer, men still remain dissatisfied with the supportive care they receive especially with aspects of emotional well being and recovery post treatment. The incidence of a cluster of longer-term urinary symptoms such as nocturia, dysuria, frequency, urgency and leakage following radiotherapy plus bowel and sexual changes all impact on quality of life. These are reported as occurring in 30–50% of men 1–2 years after therapy and this can impact on perceptions of recovery. However there is little evidence to base nursing rehabilitation interventions following treatment. Furthermore, it is well known that men are reluctant to seek help or counselling following treatment and feel they should be grateful for survival. New ways of integrating psychosocial care within a self-management model provide use patient education, exercises and cognitive behavioural approaches in helping men cope more effectively with longer-term symptoms.

Aim: To provide a critical overview of the existing evidence base in relation to prostate cancer self management and define intervention approaches. Materials: A review of the last 10 years of medical and psychology literature was conducted through Medline, ISI web science, Ovid and Psychology plus a search of references identified in each paper. Papers were reviewed for level of evidence, quality of research process, context of provision, theoretical and interventional approach plus treatment and demographic characteristics, outcomes of study

Results: A wide range of self management approaches were used within the studies with diverse use of theories to support self management interventions for men with prostate cancer. Outcomes from self management were apparent with more targeted interventions. Research could be characterised in two main intervention approaches; self management focusing on adaptation and that which provided symptom specific targeted intervention. The adaptation provided cocktails of interventions with patient education and knowledge about illness, general exercise and well being whilst the symptoms specific focused on cognitive and behavioural interventions.

**Conclusion:** This review identifies the diversity of the definition of self management and a new model to understand rehabilitation interventions. Many studies failed to provide interventions that would be feasible in clinical practice because of the lack of clarity of what the active ingredient of the self management package provided. These studies were often design led rather than able to be applied as intervention approaches in practice. Despite the increase in self management studies more evidence is needed before we can apply such interventions into practice.

Joint EONS/SIOP symposium (Wed, 26 Sep, 09.15-11.15)

### Adult survivors of childhood cancers

Meeting the ongoing care and support needs of adult survivors of childhood cancer: how might we do it?

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The number of childhood cancer survivors is increasing each year. This is placing demands on our ability to provide quality health care for this ever increasing population who, it is argued, should be followed up for life to improve detection in late-effects and provide information and advice. There is a lack of agreement amongst health care providers as to what form future follow-up should take and rarely have young people been consulted about what they would prefer.

We undertook a study to find out what young people want from a follow-up service and to develop alternative models of care incorporating their views with those of health care professionals. A sequential phased approach was undertaken. Data were collected using participatory research methods organised in a one-day workshop that included peer interviews, headline generation and mind mapping. Young people aged between 16–24 years from four of the Children's Cancer and Leukaemia Group centres in the UK participated. Data were analysed using thematic coding and resulted in a typology of need alongside alternative models of care. Data were shared

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and models developed further at a consensus meeting with professionals and the young people.

Our aim is to give a brief overview of this study and focus on the findings exclusively to encourage participants to reflect on the possibilities and challenges of service provision for adult survivors of childhood cancer. This joint presentation by a nurse and cancer survivor will enable both professional and survivor perspectives to be shared and debated.

8059 INVITED

### The cure from childhood cancer: is it still a mystery?

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The use of the word "cure" in the framework of childhood cancer survivors is very controversial. The term cure from cancer should refer only to the first cancer since childhood cancers are generally speaking, highly curable. The appropriate timing for speaking about cure is not a definitive nor precise one and the interval for having a reasonable definition of cure differs from type of tumors. We recognize, however, that some late recurrences cancers may occur, but when their risk becomes negligible we all agree that the term cure from original cancer may and should be used.

In some cancers, as in many other disorders, side effects may occur. The effects may or may not affect the quality and length of life after cancer. The physician in charge should offer standardized follow-up programs which allow to determine risk factors for each former patient. Risk factors may refer either to other organs or to the possibility of second cancer. for these cases the physician in charge should determine the specific amount of advice and follow-up care important for the specific patient. In all cases the pediatric cancer unit should maintain a leading role as a memory and record of former therapy. If possible, the medical history should be made available possibly in a computer friendly format in order for the patient to carry forward throughout his life, and if necessary to other physicians. The pediatric health care team should endorse the transition to adult care. However, we understand reluctance of some long term survivors in participating in follow-up programs and we respect they right not to participate.

Pediatric oncologists are also interested in those former patients who are doing exceptionally well in their life in order to for us to have a true picture of survivorship (resilience). Even if some late effects are present, the person can consider himself as cured of the original cancer. We consider side effects as a separate issue to be dealt with in specific cases. The pediatric oncologist should become aware that they former patients have learned coping strategies from their cancer history and are willing to enter in an independent adulthood beyond the pediatric clinic (let us grow up!!).

In Erice, in October 2006, a statement on this topic was discussed and approved, and a final document will be published in the European Journal of Cancer. Details on this topic, following what is reported in the abstract, will be presented.

8060 INVITED

### What consequences of childhood cancer do young adults consider important?

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**Background:** The overall aim was to explore whether, and if so in what ways, long-term survivors from childhood cancer experience that their life is influenced by having had cancer.

Material and Methods: All patients diagnosed with childhood cancer between 1985 and 1999 at Karolinska University Hospital, Stockholm, were invited to participate in the study and 253 (response rate 72%) accepted participation. Semi-structured interviews were conducted by telephone using the extended Swedish version of The Schedule for the Evaluation of Individual Quality of Life-Direct Weighting (SEIQoL-DW). Respondents were asked if anything in life was bad or good due to having had cancer. The respondent could mention as many aspects/areas as wanted and each aspect/area was subsequently rated regarding how troublesome or satisfying it was perceived on a category scale. The aspects/areas mentioned as influencing life today were analysed by content analysis.

Results: Mean age at interview was 24 years (47% female, 53% male). Seventy-four percent of the long-term survivors reported at least on negative consequence and 51% reported at least one positive consequence due to having had cancer. Only 14% did not report any consequences at all due to having had cancer. The most frequent reported negative consequences were: physical and functional impairments, psychological impact, altered body appearance, effects on interpersonal relationships,

working and educational issues and cognitive limitations. The most frequent positive consequences reported were: a more positive view and broader perspective in life, personal development, improved relationships to others, and increased empathy for others.

Conclusions: Young adults report both negative and positive consequences due to their experience of childhood cancer that may affect their quality of life. More negative than positive consequences are reported, however, the most frequently reported impairments are mentioned by a small proportion of the patients.

8061 INVITED

## Post-traumatic stress symptoms in adult cancer survivors of childhood cancer – implications for care

N.E. Langeveld. Emma Kinderziekenhuis, Dept. of pediatric Oncology F8–257. Amsterdam. The Netherlands

Previous research suggest that posttraumatic stress disorder (PTSD) is present in survivors of childhood cancer. PTSD is considered one of the anxiety disorders. It is characterised by symptoms that can be grouped into three clusters: reexperiencing, arousal and avoidance. To receive a diagnosis of PTSD, one must have been exposed to a traumatic event, defined as imminent threat to life or a serious injury. Furthermore, the person must have manifested some psychological reaction, usually fear, to this event. Subsequently, a constellation of symptoms develops, such as nightmares, intrusive memories of the event, avoidance of trauma-related stimuli, constricted affect, anger, and an exaggerated response.

Several authors identified a cluster of anxiety and avoidance symptoms in childhood cancer survivors. These symptoms were consistent with a trauma response and have led researchers to propose that the long-term psychosocial impact may best be understood by using the framework of posttraumatic stress. The framework of PTSD in childhood cancer survivors make sense, given the potentially traumatic nature of the cancer experience. The threat to life, intensive treatment regimens, painful invasive procedures, and dangerous complications may compound these extremely stressful experiences. In addition, long-term effects of treatment, such as growth retardation, cognitive impairment, physical changes such as amputation, and infertility can serve as life-long reminders.

It is important that health care professionals understand risk factors for PTSD because it can be related to impairment across several realms of functioning in survivors, There may also be specific implications for oncology follow-up care as survivors with PTSD may be less likely to follow-up with their health care. Reminders of the traumatic experience or extreme distress when thinking about cancer could influence behavior, making it less likely that survivors follow through with medical care and recommendations. In this presentation the current research base on PTSD in childhood cancer survivors will be reviewed. Furthermore, preventative interventions as well as the importance of screening for PTSD symptoms are discussed. Discussion will focus on what nurses and other health care professionals

# Teaching Lecture (Wed, 26 Sep, 09.15-10.00) Developing clinical guidelines in IV access

3062 INVITED

### Developing clinical guidelines in IV access

E. Johansson. Division of Hematology Karolinska Univerity Hospital, Department of Medicine. Stockholm. Sweden

Most patients with hematological disorders or cancer are in need of a venous access device in order to facilitate the intravenous administration of chemotherapy, parenteral nutrition, fluid therapy, blood products, antibiotic therapy, other medication and blood sampling. There is well known that the use of venous access devices is strongly associated with a high risk of catheter related complications during time in situ such as thrombophlebitis, infection and thrombosis. The incidence varies, for example depending on type of IV device, the patient's physical condition, the location of the catheter, hygiene and use of aseptic technique.

The high risk of complications highlights the importance of handling venous access devices in accordance with best evidence. Guidelines in IV access are available, for example the CDC Guidelines for the prevention of intravascular catheter-related infection. Guidelines are systematically developed statements to assist health care personnel about appropriate care for specific clinical circumstances. These statements generally reflect broad healthcare recommendations based on valid and up-to-date empirical evidence. However, they seldom include how to perform recommended procedures step-by-step.