It is a great pleasure for the Organizing Committee to welcome researchers, health care professionals and administrators working in the field of cancer rehabilitation to participate in the first Nordic Cancer Rehabilitation Symposium, 20-21 September 2010, in Copenhagen, Denmark.

We have put together an outstanding program with international top scientists presenting an overview of what is known about the physical, psychosocial and mental problems cancer patients are facing and what kind of interventions that may help the patients to gain a better quality of life. Experiences with the implementation of rehabilitation programs in different countries and health care settings will be presented by researchers and health care professionals. The symposium days will give us a great opportunity to discuss the results of the existing research and how to optimise future research in this area. Across cancer diagnoses, health care sectors, and research traditions many aspects are to be discussed, i.e. screening and identification of needs among cancer patients and relatives, outcome measures, social inequality, communication and cooperation across health care sectors, and obstacles for implementation into future cancer care.

Please accept our warm welcome to this first Nordic Cancer Rehabilitation Symposium. We hope you will enjoy your stay and have many stimulating exchanges with colleagues from around the world. We also hope that you will be able to find time to enjoy the city of Copenhagen.

All the best for a wonderful meeting!

Best regards,
The Organizing Committee
Information

Venue
Radisson BLU Falconer Hotel & Conference Center
Falkoner Allé 9
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Telephone number: +45 38 15 65 00

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www.cancer.dk/ncrs

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Language
The official language of the symposium is English

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<tr>
<td>8.00 - 10.00</td>
<td><strong>Registration inclusive coffee</strong></td>
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<tr>
<td>10.00-10.15</td>
<td><strong>Welcome remarks</strong>&lt;br&gt;Dorte Gilså Hansen (DK) &lt;br&gt;Frede Olesen (DK)</td>
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<td>11.15-11.30</td>
<td><strong>Short Break</strong></td>
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<td>19.30 -</td>
<td><strong>Symposium dinner &amp; Poster Award</strong></td>
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<tr>
<td>7.30 - 8.00</td>
<td>Coffee and light breakfast</td>
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| 8.00-9.30   | **Rehabilitation of depression and anxiety**
08.00-08.15 Chair: Robbert Sanderman (NL): Delivering psychosocial services to patients with emotional problems – some experiences from the Netherlands [5.1]
08.15-08.30 Chair: Robert Zachariae (DK): Cancer-related distress among cancer patients and survivors – risk factors and rehabilitation needs [5.2]
08.30-08.45 Anne Kari Aarstad (NO): Distress, quality of life, neuroticism and psychological coping are related in head and neck cancer patients during follow up [5.3]
08.45-09.00 Hanne Würtzen (DK): Mindfulness based stress reduction – too stressed to participate? Psychosocial characteristics of participants and non-participants in a randomized controlled trial (MICA) [5.4]
09.00-09.15 Marie Höyer (SE): Health-related quality of life among women with breast cancer – a population-based study in central Sweden [5.5]
09.15-09.30 Nis Palm Suppli (DK): Factors associated with the prescription of antidepressive medication to breast cancer patients [5.6] |
| 9.30-10.00  | Coffee Break                                                                                                                                                                                             |
| 10.00-11.00 | **Social inequality in cancer and rehabilitation**
10.00-10.15 Chair: Susanne Oksbjerg Dalton (DK): Addressing social inequality in cancer rehabilitation [6.1]
10.15-10.30 Gitte Bjørn Hvislom (DK): Socioeconomic position and breast reconstruction in Danish women [6.2]
10.45-11.00 Anders Bønde Jensen (DK): Treatment related pain and socio-economic factors 15 months post-surgery in a nationwide cohort of women treated for primary breast cancer [6.4] |
| 11.00-11.15 | Short break                                                                                                                                                                                             |
| 11.15-12.15 | **Cancer survivors’ perspectives**
11.30-11.45 Karen la Cour (DK): Rehabilitation needs of people with advanced cancer in relation to everyday life [7.2]
11.45-12.00 Maria Kristiansen (DK): Ethnicity and cancer – differences and similarities in access to emotional support among Danish-born and migrant cancer patients [7.3]
12.00-12.15 Nina Henriksen (DK): A literary study of the Danish cancer narrative, its subgenres and ideologies [7.4] |
| 12.15-13.00 | **Relatives of cancer patients**
12.30-12.45 Chair: Mariët Hagedoorn (NL): Distress and support processes in couples coping with cancer [8.2]
12.45-13.00 Nanna Fridriksdóttir (IS): Unmet needs, quality of life and symptoms of anxiety and depression among family members of cancer patients [8.3] |
| 13.00-14.00 | Lunch break                                                                                                                                                                                            |
| 14.00-15.00 | **Survivorship**
14.30-14.45 Søren Christensen (DK): Sexual quality of life 15 months post-surgery in a nationwide cohort of disease-free women treated for primary breast cancer [9.3]
14.45-15.00 Ulrika Fallbjörk (SE): Is breast reconstruction a part of the rehabilitation process? Differences between women choosing or abstaining breast reconstruction after mastectomy? [9.4] |
| 15.00-15.30 | Coffee Break                                                                                                                                                                                            |
| 15.30-16.30 | **Screening for psychological distress**
15.45-16.00 Remille Envold Bidstrup (DK): Accuracy of the Danish version of the ’distress thermometer’ [10.2]
16.00-16.15 Annika Thalén-Lindström (SE): Health-related quality of life in an unselected population of oncology patients screened for anxiety and depression [10.3]
| 16.30 - 16.45 | **Perspectives**
Christoffer Johanson (DK) |
Keynote speakers

Agnes Smärddottir (IS), MD
Agnes Smärddottir works as an attending physi-
cian at the Department of Medical Oncology at
Landspítali University Hospital in Reykjavik, Iceland.
She graduated from medical school at the University of
Iceland in 1995.
In 1999 she moved to Connecticut, USA and re-
ceived her clinical training in internal medicine and
in hematology-oncology at the University of Connect-
icut. She is board certified from American Board of
Internal Medicine, in internal medicine and medical
oncology. Her clinical work is mostly in the field of
lung cancer and gastrointestinal cancers. One of her
main interests is rehabilitation during and after che-
motherapy. Research interests include lung cancer,
endoscopic cancer.

Alex Mitchell (UK), MRCPsych
Alex Mitchell is consultant in psycho-oncology at
Leicester Partnership Trust-Honorary Senior Lecturer
at the University of Leicester and maintains the website
www.psycho-oncology-info
In 2009 he was co-editor of the book “Screening for
Depression: An Evidence based Approach” from Ox-
ford University Press. His research interests includes the
scientific approach to clinical diagnosis and im-
proving quality of care. In 2009 he was awarded the
Hiroshi Kawano New Investigator Award for best
international researcher psycho-oncology.

Christian Graugaard (DK), MD, PhD
For nearly two decades Christian Graugaard has
been working solely within the field of sexuality,
both scientifically and clinically.
He is currently senior researcher at The University
Library of Copenhagen, lecturer at the Department
of Psychology (University of Copenhagen), and
chairman of The Danish Family Planning Association,
“Sex & Samfund”.
Furthermore he is editor-in-chief of the world’s oldest
medical journal “Biblotek for Læger”, and has pub-
lished extensively on sexual issues.
His primary research interests are sexuality and
disease, adolescent sexuality, and the history and
sociology of body, gender and sex.

Christoffer Johansen (DK), MD, PhD, DSc (Med)
Christoffer Johansen is the first professor in cancer
rehabilitation research inaugurated in 2010. The
research conducted by Dr. Johansen includes the
hypothesis of an association between mind and cancer
both as a risk factor and as a prognostic factor as
well as various issues within psychosocial interven-
tion and cancer rehabilitation.

Corinna Bergelt (GER), MSc in psychol-
ogy, PhD
Corinna Bergelt holds a PhD in psychology from the
University of Hamburg, Germany. Her PhD thesis
focused on individual goals in cancer rehabilitation.
She is currently a part of the psychosocial research
research group at the Institute of Medical Psychol-
ogy at the Hamburg University Medical Center. In
addition to her research activities she is also involved
in the education of medical students and teaches
medical psychology and rehabilitation.
Her research covers various aspects of psychosocial
including psychosocial aspects of predictive
testing, cancer and the family, psychological
risk factors for cancer, the evaluation of different
cancer rehabilitation programs and occupational
cancer rehabilitation.

Corina Johansen (DK), MD, PhD, DSc (Med)
Since 2001 Dr. Johansen has been the Head of the
Department of Psychosocial Cancer Research at the
Danish Institute of Cancer Epidemiology. The depart-
ment conducts research using epidemiological meth-
ods, clinical and anthropological investigations.
Dr. Johansen has been a member for 5 years in the
National Strategic Research Council in Denmark.
Currently he is a member of the Swedish Cancer
fonden and serves as co-editor of the Scandinavian
cancer journal Acta Oncologica. He is furthermore on
the Editorial Board of European Journal of Can-
cer and PsychoOncology.

Dorte Gisla Hansen (DK), MD, PhD
Since 2009 Dorte Gisla Hansen has been Head of the
National Research Center of Cancer Rehabilita-
tion Research, University of Southern Denmark.
Furthermore she is a Senior Researcher at the Research
Unit for General Practice, University of Southern
Denmark.
Among her main research topics are cancer rehabili-
tation: diagnostic pathways, organization and interdis-
iplinary collaboration, socioeconomic inequality and
epidemiology.
Over the years Dorte Gisla Hansen has been greatly
involved in establishing and implementing various
medical and multidisciplinary quality improvement
projects in general practice in Denmark and in the
European countries.

Eva Grunfeld (CA), MD, DPhil, FCFP
Dr. Eva Grunfeld is a psychiatrist and the Chi-
tario Institute of Cancer Research, Health Services
Research Program and Director of the Knowledge
Translation Research Network.

Fredie Olsen (DK), MD, PhD, DSc (Med)
Fredie Olsen is Director of the Research Unit for
General Practice and Professor at the University of
Aarhus, Denmark.
He was the founding President of the European
Society of General Practice/Family Medicine. Vice-
President of the World Organization of General
Practitioners/Family Physicians (WONCA) and a
member of the European working party on quality
in family practice. In 2009 he received the Danish
Medical Association’s most prestigious award. Since
2006 Fredie Olsen has been Chairman of the Dan-
ish Cancer Society.

Gunnar Steineck (SE) MD
Gunnar Steineck is professor at the Institute of Karo-
linka at Göteborg University.
At the same time she is the Gibbon Professor and
Director of Family Medicine Research at the Depart-
ment of Family and Community Medicine, University
of Toronto.
Her research focuses on evaluation and knowledge
translation of cancer health services, covering the
entire spectrum of cancer control activities. Among
her many ongoing research projects, she is currently
PI on a multicentre RCT evaluating survivorship care
plans.

Helle Pouls Hansen (DK), RN, Extended
MA, PhD
Helle Pouls Hansen is professor in the research unit
Man, Health & Society, Institute of Public Health and
the National Research Center of Cancer Rehabilita-
tion at the University of Southern Denmark. She is
furthermore head of the Milieu for Humanistic
Cancer research and maintains the website www.
milieuh.dk.
Her research interests include an anthropological ap-
proach to patients’ experiences, needs and perspec-
tives on cancer. Her present research is on cancer
rehabilitation using different kind of theory based
qualitative research strategies. Her publications cover
various aspects of psycho-social and cultural aspects
of cancer focusing on themes such as stigmatiza-
tion and normalization, body image, narratives and
governmentality.

Jon Håvard Loge (NO), MD, PhD
Jon Håvard Loge holds a position as senior re-
searcher at the Norwegian Cancer Society - Pathology-
ology, PhD
He is a member of the European Organisation for
Research and Treatment of Cancer (EORTC) Qual-
ity of Life Group. Currently she is a part of a psy-
chosocial research group at the Department of Oncology-Pathology, Karolinska Institutet. Her main
focus of research is patient information, patient satisfaction and quality of life.

Mia Bergenmar (SE), RN, PhD
Mia Bergenmar holds a position at the Unit for Out-
come and Quality Assessment at the Department of Oncology, Karolinska University Hospital.
She is a member of the European Organisation for
Research and Treatment of Cancer (EORTC) Qual-
ity of Life Group.

Matti Rautalahti (FIN), MD, PhD
Since 1998 Matti Rautalahti has been the Chief
Medical Officer of the Cancer Society of Finland.
One of his primary tasks is to coordinate and de-
velop the cancer rehabilitation services the regional
cancer societies offer and arrange. This includes small
scale studies of the efficacy of rehabilitation. Besides
this Matti Rautalahti is involved in various preventive
programs, projects and campaigns. His clinical,
research and work publications are mostly from the area
of cancer epidemiology.

Robbert Sanderman (NL), MSc in Psy-
chology, PhD
Robbert Sanderman is a trained clinical psycholo-
gist. Since 1999 he has been professor in Health
Psychology at the faculty of Medicine and Faculty of
interventions aimed at restoring quality of life among
such groups of patients. He is furthermore scientific
director of the European Health Psychology
Psychology at the University of Groningen.
Robbert Sanderman’s is among others Chair of the
Board of the Research Institute Psychology and
Health; and Honorary Fellow of the European Health
Psychology Society. He is also member of the Scientific
committee of the Consumer Quality Index in the
Netherlands (SHARE), a research school and re-
search institute of the University Medical Center
Groningen.
Robbert Sanderman’s research is focused on psy-
chological and social adaptive processes in patients
with chronic somatic diseases and he is involved in
studying the efficacy of psychosocial interven-
tions aimed at restoring quality of life among such
patients.
### Keynote speakers

#### Robert Zachariae (DK), Professor, MSc, MDSc

Robert Zachariae is head of the Psychooncology Research Unit at the Department of Oncology, Aarhus University Hospital, and Department of Psychology Aarhus University. His current research activities include socioecological, clinical, and psychosocial predictions of Quality-of-Life and prognosis in a large national cohort of women treated for breast cancer, effects of Emotional Disclosure Intervention in cancer patients, cognitive impairment related to cancer and cancer treatments, and information and communication needs of cancer patients.

#### Sophie D. Fosså (NO), MD, PhD

For 40 years Sophie D. Fosså has been working at the Norwegian Radium Hospital as a Medical oncologist and radiotherapist. The last 15 years she has been chairman of the National Resource Centre for longterm studies after cancer. Sophie D. Fosså has published widely in the international literature and have ca 500 publications on PubMed. She is especially interested in urological oncology and has done thorough research on testicular cancer.

#### Susanne Oksbjerg Dalton (DK), MD, PhD

Susanne O. Dalton is working as a senior researcher at the Department of Psychosocial Cancer Research, Institute of Cancer Epidemiology, Danish Cancer Society. Her main focus of research is social inequality in cancer outcomes and she has conducted a number of population-based studies on social position and risk for and progress after cancer. Other areas of research include depression both as a risk factor for and late effect of cancer as well as other aspects of cancer rehabilitation including returning to work.

### Abstracts

#### Presentation number: 1.1

**Specific rehabilitation needs in testicular cancer survivors (TCSs)**

- Sophie D. Fosså, Oslo University Hospital, Radournhospital, Dept. of Oncology, National Resource Centre, Long-term studies after cancer, Norway.

Rehabilitation of a TCS aims to restore the patient’s physical and psychosocial function at a maximal degree, taking into account that cancer treatment may have left him with unavoidable adverse effects (AEs) in spite of risk-adapted treatment strategies.

Rehabilitation starts with pre-treatment information about the type and incidence of expected adverse effects (AEs), and treatment possibilities of physical and psycho-social AEs, thus initiating the necessary coping process. Post-treatment rehabilitation includes therapeutic tasks if available and help to live with persistent AEs typically observed in TCSs. No evidence-based therapy is known for oto-neurotoxicity. Some affected patients may need help to change their occupational activity, avoiding cold environments. Assistance to reduce infertility problems is necessary. In cases of symptoms related to biochemical hypogonadism testosterone substitution should be considered. Regular checkups by the family doctor are recommended for cardiovascular diseases (blood pressure, serum lipids, weight, lifestyle adjustment if necessary [smoking, physical activity, hormones]). In high-risk patients testicular self-examinations and regular ultrasonography contribute to early detection of a contralateral TC.

Probably due to response shift overall quality of life in TCSs is comparable to that of the age-matched male general population without clear association to prior treatment. However, about 25% of the patients after chemotherapy report AEs compared to 15% after the surveillance strategy.

Fatigue and being without work represent the strongest risk factors for poor quality of life.

**Conclusion:** In TCSs the rehabilitation needs as to physical long-term effects, are relatively easily recognised and can often, though not always, be met. Psychosocial needs frequently require extensive evaluation of the affected TCS social environment, his personality and vulnerability, and are often not met without resource-demanding multimodal therapeutic management.

#### Presentation number: 1.2

**Rehabilitation after breast cancer**

- Marianne Ewertz, Department of Oncology, Odense University Hospital, Institute of Clinical Research, University of Southern Denmark, Denmark.

Breast cancer is the most frequent malignant disease among women worldwide. Combinations of loco-regional and systemic treatments have increased the survival resulting in an increasing number of breast cancer survivors. While cure remains the most important goal for treatment, we can no longer ignore how cure is achieved. At the same time, it must be recognised that breast cancer keeps recurring for up to 20 years, especially if the tumour was oestrogen receptor positive.

Therefore, the process of rehabilitation includes dealing with not only effects of completed treatments, but also management of side effects to ongoing treatments, such as endocrine therapy.

Local therapies, such as surgery and radiotherapy, may cause pain and impaired movement of the arm and shoulder in 20-50% of patients depending on time since treatment. Lymphedema arises through damage to the lymphatic vasculature by lymph node dissection and radiotherapy in around 15-15% of the patients. The state-of-the-art therapeutic approach of lymphedema relies on physiotherapeutic techniques to reduce limb volume and to maintain the health of the skin and supporting structures.

Chemotherapy is associated with a number of toxicities of which some may persist after completion. These include effects of early menopause, such as decreased fertility and increased risks of cardiovascular disease, vasomotor symptoms, vaginal dryness, dyspareunia, weight gain, and osteoporosis.

In addition, being diagnosed with cancer can lead to many psycho-social problems, such as depression, fear of recurrence, sleep disturbances, cognitive problems, and fatigue.

There is a need to rethink our strategy with respect to follow-up after treatment in relation to rehabilitation. Specific goals for rehabilitation should be formulated and implemented into national guidelines for follow-up. High priority should be directed towards research programs aiming at developing and testing new interventions for alleviating symptoms and side effects experienced by breast cancer survivors.
Rehabilitation of cancer patients in Denmark – an upcoming field

Jette Vibe-Petersen, Director of Health Care Centre for Cancer Survivors in Copenhagen, Denmark

In Denmark, rehabilitation is defined as a targeted and temporary process of collaboration between individuals, their relatives and the professional, with the aim to promote independence and a meaningful life. Rehabilitation is by The Health Act managed partly by municipalities and partly by hospitals, but a clear definition concerning division of responsibility is needed before a coherent trans-sectional rehabilitation program can be established.

The Health Care Centre for Cancer Survivors in the City of Copenhagen was established in 2007 by the Health and Care Administration in collaboration with the private organisation The Danish Cancer Society, and is so far the only centre of this kind in Denmark. The municipal part of the centre offers individually planned cancer rehabilitation to a population of 530,000 citizens in Denmark. The emphasis of the centre is on non-invasive approaches and on strategies that include the participation of the patient and their family in the rehabilitation process.

The Finnish model for cancer rehabilitation is based on the following principles:

- the services cover the whole period from symptoms to post-treatment follow-up
- different needs are met with specific services
- all patients do not need all the services
- patients have individual needs for common problems
- effective rehabilitation is multidisciplinary teamwork
- rehabilitation is an integral part of treatment and recovery
- need for rehabilitation should be considered for all cancer patients

The more intensive and targeted out-patient rehabilitation and psycho-social courses are financed mainly by the National Social Insurance Institute (for those under 65 years of age) or through grants from the National Slot Machine Association (65+ years). Currently about 10% of the 27,000 annual patients participate on one of the longer courses (over 100 annually) and many more take advantage of the shorter or less intensive courses or services.

The national cancer plans have included some aspects of rehabilitation. During the last 5-10 years, Norwegian politicians and health authorities have strongly advocated the need for rehabilitation and a national strategy was launched in 2007. This points to cancer rehabilitation as an important area for development of new services. The Norwegian Cancer Society has for several years had a strong focus on service development within cancer rehabilitation. It has supported the establishment of several in- and outpatient services.

The exact number of rehabilitation services, their contents and how many cancer patients that utilize them and for what reasons are not available. For in-patient services this is partly related to the many services that are offered by private institutions contracted by the regional health authorities. Registry data indicate that the number of cancer patients admitted during the last 5 years has been reduced.

Out-patient rehabilitation services are offered at oncological departments and at local hospitals. Some of these are designed for specific groups of cancer patients. The oncological departments also offer supportive care with somewhat different content. The London Cancer Centre, for example, offers a wide range of services including physiotherapy, occupational therapy, and psychological support.

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Current focus on cancer rehabilitation in Sweden has taken a new direction. In early 2010 the Swedish government initiated a rehabilitation council where cancer rehabilitation is included.

The purpose is to define evidence-based rehabilitation intervention facilitating return-to-work. Cost-effectiveness evaluation has also become more important, in addition to outcomes in terms of quality of life.
Patients’ needs and improve cancer care

Despite these obstacles there is genuine interest in improving priority. There has been a trend to cut down rehabilitation services when inpatient care is not effective, e.g. there is no official policy and it’s not considered priority. It is not supported by the hospital, and there is also rehabilitation centers that offer inpatient rehabilitation for cancer patients. Presently a cancer patient can be referred to outpatient rehabilitation for cancer patients. The problem that cancer rehabilitation has faced in Iceland is that the cancer rehabilitation team was dissolved because of changes within the hospital structure. Despite the set back another multidisciplinary team was established to re-organize rehabilitation for cancer patients within the hospital. Presently a cancer patient can be referred to outpatient physical therapy sessions. Individual relaxation training sessions have been available for several years. Most patients have an interview with social worker regarding insurance issues as well as support for families and many patients and/or their family members are referred for an interview with a psychologist. There are also rehabilitation centers that offer inpatient rehabilitation for cancer patients. In addition a privately run organization offers different programs for people with cancer.

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Purpose: To meet cancer patients’ needs for rehabilitation, the Comprehensive Cancer Centres in The Netherlands recognized a deficiency in cancer care and developed a health-oriented rehabilitation programme Herstel & Balans (Recovery & Stability). Implementation strategies are combined with a nationwide network to make high standard cancer rehabilitation available to all patients.

Methods: The Comprehensive Cancer Centres developed and implemented a multidimensional rehabilitation programme by working together with rehabilitation centres, hospitals, health professionals, patients and insurance companies. In multicentre settings effects of the rehabilitation are evaluated. The strategies for nationwide implementation and quality control combine professional education, protocols, licences, and a multifunctional website including a quality monitor. A nationwide network is developed for the dissemination of cancer rehabilitation innovations, knowledge, professional guidelines and protocols.

Results: A multidimensional cancer rehabilitation programme is developed. Multicentre evaluations of the programme showed a significant increase of patients’ quality of life and a decrease of fatigue. The implementation strategies were successful in making cancer rehabilitation nationwide available to all patients (www.herpelbalans.nl). Oncologists in Belgium have also adopted the programme. The quality system is useful to control the programme’s quality and outcomes at more than 65 locations. The initial financial problems have been minimized. The implementation of the programme for cancer rehabilitation supports the dissemination of cancer rehabilitation improvements, knowledge and education, guidelines and protocols. The professional expertise in this relatively new working field increased immensely. The initial single concept has developed into modular cancer rehabilitation which meets the different needs of cancer patients during and after curative and palliative treatment.

Conclusion: The development, implementation strategies and quality system for the rehabilitation programme Herstel & Balans in the Netherlands were successful. The rehabilitation proved to be an important innovation in cancer care. The nationwide cancer rehabilitation network enables the dissemination of innovations, knowledge and guidelines. More research and innovation are necessary.

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Results: A multidimensional cancer rehabilitation programme is developed. Multicentre evaluations of the programme showed a significant increase of patients’ quality of life and a decrease of fatigue. The implementation strategies were successful in making cancer rehabilitation nationwide available to all patients (www.herpelbalans.nl). Oncologists in Belgium have also adopted the programme. The quality system is useful to control the programme’s quality and outcomes at more than 65 locations. The initial financial problems have been minimized. The implementation of the programme for cancer rehabilitation supports the dissemination of cancer rehabilitation improvements, knowledge and education, guidelines and protocols. The professional expertise in this relatively new working field increased immensely. The initial single concept has developed into modular cancer rehabilitation which meets the different needs of cancer patients during and after curative and palliative treatment.

Conclusion: The development, implementation strategies and quality system for the rehabilitation programme Herstel & Balans in the Netherlands were successful. The rehabilitation proved to be an important innovation in cancer care. The nationwide cancer rehabilitation network enables the dissemination of innovations, knowledge and guidelines. More research and innovation are necessary.

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Abstracts

Presentation number: 3.4

Project Rehabilitation of cancer patients / Building group support for cancer patients

- May Vest Avordal & Anne Grev, Gjøvik kommune, Norway
- Aud-Inger Ystgaard, Gjøvik kommune, Norway
- Anne Grev, Gjøvik kommune, Norway

The municipality of Gjøvik with 28.700 inhabitants, county of Oppland, Norway - gives priority to rehabilitation of cancer patients. This is done in collaboration with the corresponding Hospital and the Cancer Society. The municipality has in 2009 – 2010 a rehabilitation project founded by the Cancer Society and the organization of Health and Rehabilitation. The project target cancer patients in curative and palliative phase. This is in accordance with the municipality’s Cancer Plan 2007 – 2011. The municipality has a professional network of cancer contacts led by a cancer coordinator.

The main focus is to give cancer patients back empowerment of their own lives and to ensure patients and their families the best follow-up through targeted interdisciplinary services.

Areas in the project were the following:

- Systematic introduction of the use of “Individual Plan” for palliative patients
- Systematic introduction of the use of the ESAS (Symptom identification tools)
- Competence elevation
- Diet /nutrition
- Support education
- Building group support for cancer patients

Results:

- Several methods have been developed in the above areas, which should contribute to improved quality of life for cancer patients. The methods will be saved in the municipality’s internal computer system.
- A weekly offer for 2 different groups of cancer patients has started. The program includes physical activity, information on key topics, opportunity for conversation and fellowship. The groups are divided according to functional level, and about 40 receive a weekly offer.
- The neighboring municipalities want their patients in the offer, but the capacity limits this.
- Recent information topics include: The importance of physical activity for cancer patients, energy conservation, diet /nutrition, recipes and taste samples, coping strategies, social rights, psychological reactions, dental care and wellness.
- 22 employees in the municipality have attended courses and are practicing in current issues in cancer care.

Evaluation: The feedback on questionnaires to participants has been very positive. It shows that this was a huge, long awaited offering that participants did not hesitate to sign up on. Already the day after newspaper reports, most participants registered. It has been a very stable attendance at the group offers.

Presentation number: 3.5

The GPs role in cancer rehabilitation: A randomised, controlled study

- Sine Knudsen Berghøj, Research Unit of General Practice, University of Southern Denmark
- Jakob Krøger, Research Unit of General Practice, University of Southern Denmark
- Jens Søndergaard, Research Unit of General Practice, University of Southern Denmark
- Dorte Gilså Hansen, National Research Center of Cancer Rehabilitation, Research Unit of General Practice, University of Southern Denmark

Background: Attention to cancer patients needs for individually designed rehabilitation is increasing, taking physical, psychological, social, economical and work-related consequences of the cancer disease into consideration. Patients’ shifts between different sectors require ongoing adjustments of the organisation and procurement of rehabilitation offers to optimize the continuity of care. It is often stated that general practice is in a unique position to undertake the overall responsibility for the rehabilitation course of cancer patients. This study focuses on the role the general practitioner can play in improving cancer patients’ quality of life by being involved in the rehabilitation process.

Purpose: We aim to test the hypothesis that a targeted effort to motivate the general practitioner (GP) to act proactively with regard to the patients’ rehabilitation can, as the primary objective:

- improve cancer patients’ health related quality of life and as secondary outcomes
- improve the patient satisfaction with the GP’s contribution to the rehabilitation
- reduce the number of sick days
- facilitate a proactive conduct among the GP’s

Methods: This randomized, controlled study was designed to assess the effect of a new practice aiming to facilitate rehabilitation among newly diagnosed cancer patients compared to standard routines. In this new practice, the concept of rehabilitation was introduced to the patients by hospital nurses early after diagnosis. The different needs for physical, psychological, social, work and economy related rehabilitation were identified and communicated to the GP along with more general information about cancer patient’s rehabilitation needs and an encouragement to the GP to be proactive according to individual patient’s rehabilitation course.

In total 1028 cancer patients receiving treatment at Vejle Sygehus were included, across departments and type of cancer. The data will be obtained from public health registers and questionnaires to patients at 6 resp. 14 months after diagnosis (measuring Health-Related Quality of Life, satisfaction with and use of rehabilitation activities and satisfaction with their GP) and to the patients GPs 14 months after diagnosis (measuring satisfaction with the information from the hospital and activities to meet the patients’ rehabilitation needs).

Results: Collection of data is completed April 2010. Preliminary results concerning the GP questionnaire data will be expected and ready for presentation at the symposium.

Oral Presentations

Presentation number: 3.6

Is intensive inpatient cancer rehabilitation more effective than outpatient cancer rehabilitation?

- Line Oldervoll, Department of Cancer Research and Molecular Medicine, Norwegian University of Science and Technology, Trondheim, Norway
- Jon Håvard Loge, National Resource Center for Late Effects, Department of Oncology, Oslo University Hospital and University of Oslo, Norway
- Anne Holstad, Røros Rehabilitation Centre, Røros, Norway
- Roy Nygård, Division of rehabilitation, Oslo University Hospital, Norway
- Gro Bertheussen, Department of Circulation and Medical Imaging, Norwegian University of Science and Technology, Trondheim, Norway
- et al.

Purpose: To study the effects of and compare the effects between intensive inpatient- (IPR) and outpatient-rehabilitation (OPR) programs for cancer patients on physical fatigue (FAT), physical (PF) and emotional functioning (EF).

Method: Breast and gynaecological cancer patients aged 18-67 years who had completed primary treatment were included. Patients in the IPR program attended a 4 week stay, 3 weeks primary- and a one-week follow-up stay. The OPR-patients attended once a week for 7 weeks. Both programs were administered to groups of 10-15 participants and consisted of physical exercise, education and group discussions concerning “living with cancer”. FAT was measured by the Fatigue Questionnaire. EF and PF were assessed by two scales in the European Organization for Research and Treatment Core Quality of Life Questionnaire. Assessments were performed at start (T1) in both programs, at arrival of the follow-up stay approximately eight weeks after the primary stay (IPR-program) and by end of OPR-program (T2).

Paired sample t-tests were used to analyze for changes in FAT, EF and PF within each program. Linear regression analysis adjusted for baseline differences was used to detect differences in outcomes between the programs.

Results: Fifty eight participants in the IPR and 53 in the OPR completed assessments at T1 and T2. Mean age was 52 and 50 years. FAT was reduced (p < 0.05) and PF and EF improved (p < 0.05) in both programs. The reduction of FAT in the IPR-program was statistically significantly better than in the OPR-program. No differences between the programs on improvement in PF and EF were found.
Purpose: Growing evidence suggests that diet and exercise interventions favorably influence health-related outcomes after a cancer diagnosis. While clinic-based programs appear effective, given barriers of time, travel, and cost, there is a need to develop minimal interventions that can promote healthful lifestyle behaviors in this growing, high-risk population. RENEW (Reach out to Enhance Wellness in Older Cancer Survivors) tested a home-based, diet-exercise intervention to determine if it could reorient functional decline in elderly cancer survivors.

Methods: A 1-year diet-exercise, telephone-counseling and mailed material intervention was delivered either immediately or after a 1-year waiting period to 641 overweight survivors of breast, prostate and colorectal cancer; all participants were followed for 2 years. At baseline, 1- and 2-year follow-up, functional status, body weight, physical activity (PA), and diet quality were assessed.

Results: Compared to the delayed intervention arm, those assigned to the immediate intervention experienced significant reductions in functional decline (−2.15 vs. −4.84) and body weight (−2.06 vs. −0.92 kg), as well as improvements in PA (+67.8 vs. +31.5 minutes/week) and diet quality (4.8 vs. 1.8) (p-values <.05). Changes in PA, diet quality and BMI were durable at 2-year follow-up, as demonstrated by negligible changes, e.g. 0.2 minutes/week of PA, +0.8 diet quality units and 0 kg from 1 to 2 years. Moreover, effects were reproduced in the delayed intervention arm, as manifest by 2-year follow-up data that were essentially identical to those who received the immediate intervention. As compared to the projected rate of functional decline of −11.1 points over 2 years in this population, both study arms had rates of −5.5 and −6.7 points, respectively.

Discussion: Home-based lifestyle interventions are effective in promoting healthful changes in behavior that translate into improved weight and functional status. Further research is needed to determine the most cost-effective and sustainable interventions for this growing population.

Conclusions: Both programs reduced fatigue and improved functioning. However, although the statistically significant improvement favored the IPR regarding fatigue, the difference between the programs was not clinically significant. Selection and other confounding factors can have affected upon the findings and randomized clinical trials are warranted.

Home-Based Diet-Exercise Interventions to Improve Health Behaviors, Body Weight, and Functional Status in Cancer Survivors: Results of the RENEW trial

- Wendy Demark-Wahnefried, University of Alabama at Birmingham Comprehensive Cancer Center, USA
- Miranda Money, Duke University Medical Center, Durham, NC, USA
- Dorothy Palmer, University of Alabama at Birmingham Comprehensive Cancer Center, USA
- Denise Snyder, Duke University Medical Center, Durham, NC, USA
- Richard Sloan, Duke University Medical Center, Durham, NC, USA
- et al.
Delivering psychosocial services to patients with emotional problems – some experiences from the Netherlands

Robert Sendeman, Faculty of Medicine & Faculty of Psychology at the University of Groningen, the Netherlands

Three issues will be dealt with very briefly: (1) psychosocial services for distressed patients with cancer; (2) thoughts on whether (and how) screening for distress is helpful; and (3) development of protocols for patients with cancer (individual, couples and groups) and research which is set out on testing its efficacy.

First, a short description of the kind of psychosocial services for patients with cancer available in the Netherlands, will be given. Patients experiencing depressive and/or anxiety symptoms might see a psychologist in the hospital, go to a ‘first line psychologist’, could go to a specialized cancer centre or follow a cancer rehab programme. Based on research we do, an indication of the kind of patients seen in various forms of services will shown.

Secondly, we obviously need to look which patients need these kinds of services and at what moment in the disease trajectory. Guidelines which are recently introduced for psychosocial help, point to the need to screen patients for distress and deliver treatment for those high in distress. This is done for example using the Distress Thermomenter. It will be shown how this works and what kind of problems come into play. Although quite a number of patients are distressed and want psychosocial help, one might wonder whether such a system is very helpful and what likely alternatives are. The issue will be illustrated on the basis of a project on screening and psychological therapy we carry out at the moment.

Thirdly, it is important to design protocols which are helpful to treat patients who are distressed. We are and have been active in doing so; for example focusing on couples using a social support paradigm, a problem solving therapy programme and a protocol to use in ‘first line psychology’. The question is whether they are effective. A major problem here is to set out research which meets scientific standards and at the same time is clinically relevant with respect to the group of patients which need help.

Purpose: The aim of the present study was to study the relation between distress, quality of life (QoL), personality and choice of coping in successfully treated head and neck squamous cell carci-noma (HNSCC) patients, and to study whether distress could be regarded as a QoL variable.

Methods: We determined distress by the general health questionnaire (GHQ). QoL by the European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC-QLQ). C30 and H&N35 personality by the Eysenck Personality Inventory and coping by the COPE questionnaire. All patients younger than 80 years who had been diagnosed with HNSCC in Western Norway in the period from 1992 to October 2001, and who had survived at least 12 months without evidence of disease were interviewed. In addition, treatment level (T/N) stage, alcohol consumption history as well as smoking history were determined. One hundred and thirty-nine patients (96.5% response rate) were included.

Results: Distress and QoL indexes were scored with a common variance (CV) between 20 and 35%. The measured variables account for 40-48% of the variance of the QoL/GHQ scores. Between 3% and 10% of the GHQ/general QoL scores and 10% of the variance of the H&N35 QoL scores were predicted by the T/N stage. The measured psychological factors accounted for 20% of the H&N35 QoL scores and 40% of the measured variance of the general QoL and GHQ responses. High neuroticism (CV=20-35%), present avoidance coping (CV=10-30%) and coping by suppression of competing activity (CV=10-20%) were associated with low QoL and high distress.

Conclusion: GHQ and QoL scores are scored similar and are to some extent predicted by treatment related factors, but between 2.5 and 10 times more closely associated with psychological factors. Distress may possibly be regarded as a QoL variable.

Purpose: Mindfulness based stress reduction (MBSR) is a well-described eight-week course, including 24 contact hours + 45 min home practice six days a week, thus quite demanding for patients. A randomized controlled trial is being conducted to evaluate the effect of MBSR on various psychosocial, lifestyle and existential outcome among Danish women with non-metastatic breast cancer (BC). Data on psychosocial characteristics of participants and non-participants will be compared in order to determine possible significant psychosocial differences.

Methods: A total of 338 women diagnosed with BC stage I-III, receiving standard medical care were randomized to either 8-week MBSR intervention or assessment only, while 120 eligible non-participating women only filled out the baseline questionnaire. The questionnaire contains standardized scales measuring levels of depression and anxiety, elements of mindfulness, personality, psychological symptoms, wellbeing, sleep, late effects, diet and existential well-being. Study specific questions on socio-demographic factors, smoking, alcohol consumption, and exercise habits are included.

Results: The results of statistical analysis of similarities and differences between participants and non-participants with regard to personality, psychosocial symptom burden, existential well-being and lifestyle choices, all potentially related to stress, will be presented.

Conclusion: Firm knowledge of both differences and similarities between participants and non-participants will inform clinicians about the acceptability of the MBSR intervention among non-metastatic BC patients in standard medical care.
Aim: We evaluated factors associated with use of antidepressant medication subsequent to a diagnosis of breast cancer. We also evaluated the effect of participation in a cancer rehabilitation program on use of antidepressants.

Material and methods: We conducted a register-based cohort study of 1247 women with breast cancer diagnosed between 1998 and 2006 who attended a week-long rehabilitation program and a matched comparison group of 2903 women who did not attend the program. The associations between breast cancer-related, treatment-related, and sociodemographic factors and use of antidepressants were evaluated in multivariate Cox proportional hazard models separated on use of antidepressants and use of antidepressants were evaluated in multivariate Cox proportional hazard models.

Results: Among women who did not use antidepressants before breast cancer diagnosis, a diagnosis of a new primary cancer increased the hazard ratio (HR) to 3.34 (95% CI, 1.50–7.76), and relapse increased the HR for first use of antidepressants to 2.56 (95% CI, 1.86–3.52). Unemployment was associated significantly with the development and implementation of rehabilitation efforts in cancer patients.

Intervention studies in cancer survivors have documented social differences in both participation rates and attrition of intervention studies and thus this talk will point to the need for addressing social inequality with the development and implementation of rehabilitation efforts in cancer patients.

Purpose: Breast cancer is the most common cancer diagnosis in women, especially in working ages, with a five-year survival rate of almost 90%. Thus, a clearer focus is needed on effects of disease and treatment. One aspect of psychosocial effects often emphasized in cancer survivors is problems related to work ability, return to work, and sickness absence, aspects that may have long-term consequences for these women's health and quality of life. The aim is to study factors that influence work ability and quality of life in women of working ages after breast cancer surgery.

Methods: In this prospective cohort study, 756 women, 20-63 years old, who have undergone surgery for breast cancer, are followed for two years. A wide spectra of data is collected via repeated comprehensive questionnaires (six measurement points in total), here results from the baseline and first follow up will be presented, focus group interviews, registers, and medical records. Inclusion started in 2007 and continued through 2009. Follow-up data will be collected until 2012.

Results: The results in this presentation will be focusing on the immediate post-breast surgery and during the first period of anti-tumour treatment. Conclusion: As scientific knowledge about work and sickness absence regarding specific cancer diagnoses is lacking this type of research is warranted in order to get scientific based knowledge for development of appropriate interventions for these women.
Rehabilitation and the problem of context

Introduction: One challenge in rehabilitation studies is to measure the effects of the interventions and to determine whether an effect is caused by the intervention or if it is due to contextual parameters such as human interaction, context of the intervention, staff, timing, or physical surroundings.

Objective: The aim of this presentation is to draw attention to contextual dimensions in relation to rehabilitation from the cancer survivors’ perspectives. Interventions cannot be meaningful or adequate understood without reference to context.

Methods: Ethnographic fieldwork at different residential cancer rehabilitation centres in Denmark including participant observation and in-depth interviews formed the basis for the research. The results in this presentation stems primarily from fieldwork at Rehabilitation Centre Daallund. A conceptual framework of three parameters of context was used in the analysis: setting, the behavioural environment and language.

Results: We demonstrate how the aesthetics of the castle, the physical surroundings and the temporal organisation of the courses (the setting) provided a social, spatial and temporal context for the activities. The behavioural environment in terms of work commitment, the care provided by the staff and the extravagance of food and meals created for most of the cancer survivors’ an experience of being a unique human being. Language and verbal interaction between the participants had a prominent place in facilitating a kind of community opening up a social space in which stories about a life with cancer could be exchanged. This seemed to reduce the cancer survivors’ feelings of loneliness and stigmatisation.

Conclusion: In conclusion the results of this study show that cancer treatment as well as disease symptoms influence the affected person’s ability to carry out and engage in desired and necessary activities of daily living. Furthermore, the study points out the importance to assess and understand rehabilitation needs beyond disease symptoms according to the consequences for function, activity and participation. Such knowledge is needed in order to develop goal and client directed rehabilitation, which can enable people with cancer in managing and creating a meaningful everyday life.

Cancer survivors’ perspectives

Purpose: The purpose of this study was to explore the activities of people with advanced cancer and describe their everyday life rehabilitation needs.

Methods: Forty-five adult participants were sampled from an oncology outpatient unit representing the three cancer diagnoses: lung, colon, and breast cancer. Data was collected by a Time Geographical Method including diaries reported for 124 days and short interviews of all participants. In addition a sub-sample of seven participants was subject to in-depth qualitative interviews and participant-observations conducted in the participants’ home environment. The data were organized by a specific software program producing time-use graphs and analyzed with a constant comparative method.

Results: The results showed that the participants’ days were spent mostly at home, dominated by self-care and leisure activities and limited social engagement. Fatigue, sensibility problems and increased muscle-strength among other symptoms were reported to influence the participants’ ability to carry out daily activities at home.

Conclusion: In conclusion the results of this study show that cancer treatment as well as disease symptoms influence the affected person’s ability to carry out and engage in desired and necessary activities of daily living. Furthermore, the study points out the importance to assess and understand rehabilitation needs beyond disease symptoms according to the consequences for function, activity and participation. Such knowledge is needed in order to develop goal and client directed rehabilitation, which can enable people with cancer in managing and creating a meaningful everyday life.

Ethnicity and cancer – differences and similarities in access to emotional support among Danish-born and migrant cancer patients

Purpose: To present results from a study on access to emotional support provided by social networks, healthcare professionals and the Danish Cancer Society and discuss implications for securing ethnic equality in meeting psychosocial needs among cancer patients.

Methods: Narrative interviews with 18 adult Danish-born and migrant cancer patients recruited in a purposive strategic sampling process. Analysis was inspired by phenomenological methods.

Results: Migrant patients experienced more dispersed social networks compared to Danish-born patients. However, common difficulties in asking for and receiving emotional support were related to cancer being perceived as a fatal disease among the social network and thus leading to fear that articulating needs for support would result in loss of normality and non-patient identity. Both Danish-born and migrant patients perceived support delivered by healthcare professionals as available, empathic and valuable. Prerequisites for providing emotional support were (1) setting aside time for the patient to feel safe and able to verbalize emotional concerns, (2) continuity in relationships with healthcare professionals, and (3) professionals’ ability to understand the patient’s emotional reactions without creating additional distress. Most Danish-born patients had considered or utilized psychosocial interventions offered by the Danish Cancer Society, whereas migrants lacked awareness of interventions or perceived them to be inadequate to meet their psychosocial needs.

Conclusion: While fragile social networks were more common among migrant patients, even more dense social networks may find it hard to provide emotional support to cancer patients. Efforts are needed that prepare and support social networks for coping with cancer. Healthcare professionals are of great importance in filling this lack of support but may be restricted by organizational and individual factors.

Rehabilitation needs of people with advanced cancer in relation to everyday life

Purpose: To explore the activities of people with advanced cancer and describe their everyday life rehabilitation needs.

Methods: Forty-five adult participants were sampled from an oncology outpatient unit representing the three cancer diagnoses: lung, colon, and breast cancer. Data was collected by a Time Geographical Method including diaries reported for 124 days and short interviews of all participants. In addition a sub-sample of seven participants was subject to in-depth qualitative interviews and participant-observations conducted in the participants’ home environment. The data were organized by a specific software program producing time-use graphs and analyzed with a constant comparative method.

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Oral Presentations

A literary study of the Danish cancer narrative, its subgenres and ideologies

Purpose: The purpose of this study was to explore the activities of people with advanced cancer and describe their everyday life rehabilitation needs.

Methods: Time Geographical Method including diaries reported for 124 days and short interviews of all participants. In addition a sub-sample of seven participants was subject to in-depth qualitative interviews and participant-observations conducted in the participants’ home environment.

Results: The results showed that the participants’ days were spent mostly at home, dominated by self-care and leisure activities and limited social engagement. Fatigue, sensibility problems and increased muscle-strength among other symptoms were reported to influence the participants’ ability to carry out daily activities at home.

Conclusion: In conclusion the results of this study show that cancer treatment as well as disease symptoms influence the affected person’s ability to carry out and engage in desired and necessary activities of daily living. Furthermore, the study points out the importance to assess and understand rehabilitation needs beyond disease symptoms according to the consequences for function, activity and participation. Such knowledge is needed in order to develop goal and client directed rehabilitation, which can enable people with cancer in managing and creating a meaningful everyday life.
Bereaved parents are at increased risk of psychological morbidity and even mortality due to both natural and unnatural causes for a long time following the loss. Mothers are more likely to report long-term depression as compared to fathers; the same is true for lowered psychological well being. Most often the seriously ill child suffers from more than one symptom prior to death.

This will affect the parents many years ahead. Unrelieved pain in the child has been found to affect the parents still four to nine years after the loss. It is important to identify modifiable or avoidable factors in the care of these children in order to improve their well being and to reduce psychological morbidity in family members. Several such health care related factors have been identified e.g. symptom control, communication and psychosocial support.

The importance of information in health care is well known, yet there seems to be a barrier to communicate bad news. In particular, this applies to making parents aware of the transition from curative to palliative care. Parents who receive information about their child’s poor prognosis and the decision to end their child’s suffering has to deal with the disruption of daily life, anxiety, depressive symptoms, worries about cancer recurrence, and fear of loss and dying/bereavement. It is widely accepted that dealing with cancer is a family affair.

Purpose: Family members of cancer patients have multiple needs, many of which are not met by health professionals. This may affect emotional distress and quality of life (QOL) and therefore clinically relevant. The purpose of this study was to identify unmet needs, QOL symptoms of anxiety and depression and to examine the relationship between those variables.

Material and method: A cross-sectional, descriptive design. Family members of 332 cancer patients at Landspitilinn agreed to participate and 223 (67%) completed the study. Data was collected with Family Inventory of Needs (FINA), Quality of Life Scale (QOLS) and the Hospital Anxiety and Depression Scale (HADS).

Results: Of 20 needs the mean (SD) number of important needs was 16.6 (4.3) and mean (SD) number of unimportant needs was 6.2 (5.6). At least 40% considered 12 needs to be unmet. Women, younger family members, other family members than spouses, and those working outside the home were more likely to have unmet needs. The mean (SD) QOL score was 84.9 (14.7), similar to what is reported for healthy populations. Spouses scored lower than other relatives, indicating worse QOL (p=.02). A weak positive significant relationship was found between number of unmet needs and QOL. The mean (SD) anxiety score was 5.5 (2.8) and the mean depression score was 7.3 (2.7), both higher than among the Icelandic population and among cancer patients starting chemotherapy.

Women experienced more symptoms of anxiety than men (p=.01) and those who showed symptoms of anxiety had a higher number of unmet needs than those who did not (p=.05).

Background: Breast cancer is the most common cancer diagnosis in women, especially in working ages, with a five year survival rate of almost 90%. Thus, a clearer focus is needed on effects of disease and treatment. One aspect of psychosocial effects often emphasized in cancer survivors is problems related to return to work and sickness absence, aspects that may have long-term consequences for these women’s health and quality of life.

Purpose: The aim is to study the influence of encounters from health care professionals and social insurance officers to work participation and sickness absence in women of working ages after breast cancer surgery.

Methods: In this prospective cohort study, 756 women, 20–63 years old, who have undergone surgery for breast cancer, were followed for two years. A wide range of data is collected via repeated comprehensive questionnaires (six measurement points in total), here results from the baseline and first follow up will be presented, focus group interviews, registers, and medical records. Inclusion started in 2007 and continued through 2009. Follow-up data will be collected until 2012.

Results: The results in the presentation will be focusing on the immediate period after surgery and during the first period of anti-tumoral treatment.

Conclusion: Scientific knowledge about work and sickness absence regarding specific cancer diagnoses is lacking. This kind of prospective longitudinal studies are warranted in order to get scientific based knowledge for development of appropriate interventions on encounters in health care and social insurance offices for these women.

Background: Sexual quality-of-life (QoL) is an important dimension of overall QoL. However, little is known about the prevalence of treatment-related impacted sexual QoL and the relative importance of treatment and cancer related distress as potential risk factors in breast cancer survivors.

Aim: To explore the prevalence of sexual QoL and to identify risk factors for impaired sexual functioning in a nationwide prospective study.

Methods: The study cohort consisted of 3334 Danish women (aged 26–70) treated for primary breast cancer according to standard guidelines. A questionnaire was mailed out 3- and 15-months post-surgery (follow-up). The response rate at follow-up was 94%. DBCG and the surgical departments provided data on eligibility, clinical variables and comorbidity. Data on demographic and socioeconomic factors were obtained from national registers. Post-prognostic cancer stress disorder (PTSD) was assessed with the Impact of Events Scale as a measure of cancer related distress. Prevalence of impaired sexual functioning was assessed at follow-up by a like-type question (range: “much worse” to “better”).

Results: At follow-up, 30% reported sexual QoL, to have deteriorated since the time of surgery while only 4% reported an improvement (no change: 51%; not relevant: 13%). Younger women were most affected (≤50 y: 39% vs. >50 y: 26% p<.001). Mastectomy (OR=1.50, 95%CI: 1.27–1.77) and hormone treatment (OR=1.29, 95%CI: 1.09–1.54) were significant risk factors (age-adjusted), while no significant effects were found for radiotherapy or chemotherapy. PTSD measured at baseline was a risk factor for impaired sexual functioning.
Validation of the Distress Thermometer using Activities of Daily Living: What is the relationship between distress and dysfunction?

- Alan J Mitchell, Department of Psycho-oncology, University of Leicester
- Karen Lord, Department of Cancer and Molecular Medicine, University of Leicester
- Paul Symonds, Department of Cancer and Molecular Medicine, University of Leicester

Purpose: There has been much research on the NCCN DT but current cut-offs are arbitrary. In 2008 the NCCN suggested a cut-point of 3 v 4 for significant distress. We wished to clarify appropriate thresholds for distress as well as defining mild, mild, moderate and severe distress using a measure of impaired function.

Method: We analysed data collected from Leicester Cancer Centre from 2008-2010 involving 511 people approached by a research nurse and two therapeutic radiographers. We examined distress using the DT and daily function using the question: “How difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?” We used a scale “Not difficult at all = 0; Somewhat Difficult = 1; Very difficult = 2; and Extremely Difficult = 3”

Results: The mean DT score was 3.2 across all patients. There was a highly significant association between distress and dysfunction (Adj R2 = 0.177; p < 0.001). We stratified DT scores by severity of functional impairment. The mean DT score for unimpaired function was 2.1 but 6.5 for those with severely impaired function. Conversely the mean impairment score was 0.35 across all patients. Relatively few people had moderate or severe impairment (n=31; 7%) or severe impairment (n=14; 2%). The percentage with unimpaired function ranged from 80.6% for those with no distress to 18.8% for those with maximal distress (mean 54%). Using the presence of impaired function (yes/no) a cut-off of 2 v 3 on the DT gave the optimal balance of sensitivity and specificity: a cut-off of 4 v 5 gave the optimal balance of PPV and NPV. 3 v 4 may offer a reasonable compromise.

Conclusions: There is a significant association between distress and impaired function and this can be used to select optimal cut-points for minimal, mild, moderate and severe distress.

Screening for psychological distress

Presentation number: 10.1

Health-related quality of life in an unscreened population of oncology patients screened for anxiety and depression

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Objective: Systematic screening for anxiety and depression is feasible in clinical settings with oncology patients. HRQOL is low at baseline, increases over time but is still affected at 6 months follow-up in patients with potential anxiety or depression across the spectrum.

Methods: A cross-sectional, descriptive design, Family members of 186 cancer patients completed the study, 62% women. In addition to demographic information, data was collected on distress and associated problems with DT, a single-item screening measure in the form of a thermometer where each person rates their level of distress by marking from 0 (no distress) to 10 (extreme distress) and the Problem List where they choose from a 35 item list issues that have been problematic in the past week. Symptoms of anxiety and depression were assessed with the Hospital Anxiety and Depression Scale (HADS).

Results: A fair number (39%) of participants experienced symptoms or possible symptoms of anxiety and 40% experienced symptoms or possible symptoms of depression. Observed scores on DT ranged from 0-10 with a mean (SD) of 3.15 (2.68).

Oral Presentations

Using the Icelandic Version of the Distress Thermometer and Problem List to Screen for Distress among Family Members

- Sigurd Gunnarsdottir, University Hospital of Iceland and University of Iceland
- Nanna Fridriksdottir, University Hospital of Iceland
- Birgitta Johanson, University Hospital of Iceland
- Svandis Iris Halldardottir, University Hospital of Iceland
- Arndis Jonsdottir, University Hospital of Iceland

Objective: The purpose of this study was to evaluate the psychometric properties of the Distress Thermometer (DT) and Problems List in a sample of family members of cancer patients at the National University Hospital of Iceland.

Methods: A self-report questionnaire was given to the family members of 186 cancer patients who were invited to participate in the study. Part of the measurement instrument was the DT and Problems List. Families were contacted by phone and asked for further consent to receive a questionnaire by mail and return it via mail.

Presentations number: 10.4
A significant moderate correlation was between DT and both subscales on HADS, as well as between DT and the QOL scale. A significant correlation was also found between the DT severity score and the problem list in whole as well as all five subscales. A Roc-analysis based on comparison with HADS (possible symptoms and symptoms) supports that a cut-off score of 3 on DT maximizes sensitivity (72% depression, 74% anxiety) and specificity (71% depression, 78% anxiety).

Conclusions: Initial support was found for psychometric properties of the DT.

Rehabilitation of spouseto cancer patients: A pilot project with19 participants

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- Tina Broby Mikkelsen, Rehabilitation Centre Dallund, Danish Cancer Society, Denmark

Aim: To describe the need of rehabilitation of spouses to cancer patients and evaluate a 5-days rehabilitation program with focus on the spouses.

Background: Rehabilitation Centre Dallund has provided a 6-days rehabilitation stay for Danish cancer survivors since 2001. Until now, more than 5000 cancer survivors have participated. Some of the survivors have stayed, with their spouses and others have talked about the problems of being a close relative to a cancer patient. We developed a 5-days stay for spouses to a cancer patient with focus on the need of spousal support. The spouses evaluated the intervention.

Materials and methods: 19 spouses (14 women and 5 men) participated. Before the stay the participants filled in a questionnaire about their expectations and a distress scale. At the end of the stay and three months after they filled in the distress scale and a written evaluation. Furthermore, the comments from talks at the end of the stay were written down and evaluated.

Results: There was an unmet need of being seen and heard among spouses. They reported benefit of being together with other spouses with focus on their own needs. At the symposium results of the problems (practical, work related, family, psychological and existential) and evaluation of the self-reported benefit among the spouses before, immediately after and three months after, will be presented.

Discussion and conclusion: It seems that spouses of cancer patients have benefited from a 5-days rehabilitation stay, where they could have focus on their own situation. Some participants were interested in more knowledge of cancer and late effects and others had minor suggestions of things that could be done differently. The overall evaluation was very good; 18 (95%) of the participants evaluated their satisfaction with the stay at the highest score.

Cancer survivorship plan in The Netherlands; an evidence-based guideline for professionals in oncology

- Brigitte GM Gijsen, Association of Comprehensive Cancer Centres, The Netherlands
- Yvonne Snel, Association of Comprehensive Cancer Centres, The Netherlands
- Jeanette AH Heldando-van Vreeswijk, Association of Comprehensive Cancer Centres, The Netherlands
- Ria AG Kopjepan-Renaenbrink, Association of Comprehensive Cancer Centres, The Netherlands

Purpose: Due to the immense increase of cancer survivors foreseen in the forthcoming years, a shortage of health care and the dysfunction of the cancer follow up system is expected in The Netherlands. The Ministry of medical oncologists, health care professionals and cancer patients emphasize the lack of evidence for the present follow up strategies in detecting new cancer manifestations and the inadequacy in dealing with side effects of cancer and its treatments. The Comprehensive Cancer Centres developed an evidence-based guideline to improve cancer survivorship care.

Methods: The general method for evidence-based guideline development is followed. Multidisciplinary working groups have formulated the guideline regarding the optimal system of cancer survivorship care. Based on twenty key questions, the evidence for cancer after care has been systematically investigated and analyzed. The shortage of evidence demanded professional practice-based consensus input for the guideline. Cancer patients’ perspectives regarding after care was identified in an Open Space conference. The concept guideline has been reviewed by professionals in oncology nationwide.

Results: An evidence-based guideline for cancer survivorship care is developed. This includes recommendations for the period of after care, detection of new cancer manifestations, a cancer survivorship care plan, patient education and a format for tumor specific guidelines. The guideline is available at the guidelines website for oncology: www.oncoline.nl. The implementation is supported by a decision-making card, a web-based TV broadcast and an e-learning tool.

Conclusion: The guideline promotes the efficiency and quality of cancer survivorship care to meet increasing needs for after care. By this, self management, recovery and quality of life of cancer survivors are promoted. The guideline is the onset of a crucial innovation in cancer survivorship care in the Netherlands. Based on the guideline the Comprehensive Cancer Centres are developing new concepts for cancer after care.

A systematic review of studies on psychosocial late-effects of childhood cancer: Structures of society and methodological pitfalls challenge the conclusions.

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- Kjeld Schmiegelow, The Pediatric Clinics, Julianne Marie Centre, the University Hospital Rigshospitalet, Denmark
- Christoffer Johansen, Department of Psychosocial Cancer Research, Institute of Cancer Epidemiology, Danish Cancer Society, Denmark

High survival rates of childhood cancer have increased the focus on psychosocial late effects. We conducted a systematic review of the literature from January 1994 to the end of January 2010 focusing on (I) predictors of poor psychological and socio-economic outcomes based on diagnosis, treatment, and socio-demographic parameters, (II) interactions between somatic late effects and psychosocial problems, and (III) methodological problems.
Material and method: A total of 1048 persons diagnosed with mixed cancer types filed in a questionnaire between 1 May 2006 and 1 December 2008, prior to participating in a rehabilitation program. In addition to single items on ideas and experience of religious belief, the questionnaire included FACT-Sp, DUREL, POMS SF, Mini-MAC, socio-economic and demographic data and information from medical records.

Preliminary results: A total of 39% find strength in faith or spiritual beliefs; 59% believe in a god; 34% believe in a god who they can talk to; 30% have had experiences where they connect with God or a higher power; 30% say a prayer; Regression analysis of the association between religious beliefs and distress and coping showed that, believing in a god gives 30% to 50% more strength, strength and coping. Significant methodological problems represented.

Conclusion: Religious beliefs seem to play a significant role to at least half of the respondents, and some aspects of religious beliefs seem to be associated with aspects of distress and coping strategies. These findings indicate that cancer patients who at the time being have a more active faith and a more personal relation to a god are more anxious but also have more fighting spirit—maybe in search for comfort, strength and relief.

Poster number: 107

Religious beliefs associated with distress and coping

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Purpose: To be presented at the conference.

Conclusions: To be presented at the conference.

Method: To be presented at the conference.

Poster number: 108

Coaching as a method to clarify choices for cancer patients

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Getting cancer raises for many patients a lot of questions, like: Am I living the life I want? Am I having the right job? How is the balance between work, family and friends? The patients wonder if they can make changes and how they can start a process.

Coaching is a popular method to clarify choices and finding new paths in life. It gives people a feeling of control through the interaction with the coach. I have wanted to research if coaching is a suitable method for cancer patients to see if changes give answers to their dreams to remodel their life.

Coaching sessions are offered to cancer patients who have finished their treatment and want to go back to work and maybe make new choices in their life. The offer is 1 to 4 coaching sessions with focus on returning to work.

My results show that the patients benefit from coaching sessions. They bring items about work, e.g., should I follow my dream and find a new job, take a new education, work more or less, spend more time with my family etc. The coaching method is about seeing possibilities through finding contradictions, alternatives and questions about the present situation and the dreams and not at least the path to the dreams.

Most of the patients end up wanting to stick to their present situation and their job, maybe with minor changes.
Involvement of Relatives in Cancer Rehabilitation. A randomized controlled trial

Purpose: The purpose of this study is to analyze the effect of a rehabilitation intervention (supportive conversations and a residential rehabilitation course) offered to cancer patients and their relatives in pairs. The hypothesis is that the intervention can improve the pairs’ health related quality of life and that patients and their relatives in the intervention group will show a better improvement than the patients and their relatives in the control group.

Methods: A randomized, controlled study is designed to assess the effect of the rehabilitation intervention. Patients admitted to the hospital and diagnosed with cancer and their relatives in pairs will be randomly assigned to the intervention or control group. The intervention group will receive supportive conversations and a residential rehabilitation course. The control group will receive no intervention.

Background: Social inequality is significant in many aspects of cancer. Several studies using socio-economic measures have shown that deprived people have higher incidence rates for many cancer types and also poorer survival from the disease. The increasing number of cancer survivors, the need to introduce rehabilitation addressing the physical, psychological as well as social sequelae of cancer is increasing. It is likely that social factors also influence rehabilitation with regard to demand, participation and quality of life.

Purpose: The purpose of the study is to analyze the influence of socio-economic factors on cancer patients’ rehabilitation with regard to demand, participation and quality of life.

Methods: A population-based study comprising all cancer patients diagnosed with their first cancer disease between 1 October 2007 and 30 September 2008 identified through a nationwide hospital discharge register covering one region of Denmark. At inclusion some 8,000 cancer patients will report their individual need for rehabilitation, participation in various rehabilitation initiatives and quality of life. Follow-up will take place 14 months after date of diagnosis. Questionnaires will include EORTC QLQ-30 and POMS. Information on socio-economic characteristics includes income, education, occupation, cohabitant status, ethnicity along with morbidity obtained from population-based registries. A multilevel analysis will be used to estimate the association between socio-economic position and measures of rehabilitation.

Results: Data collection of follow-up questionnaires was completed February 2010. Measures from population-based registries will be retrieved in the fall of 2010 and the first results will follow hereafter.

Conclusion: In order to support the development of profession- alism among primary health care professionals in this field, national continuing professional development research initiatives needs to be strengthened considerably within this field.

Young Adult Cancer Patients - an International challenge for Primary Care

Purpose and aim: Young adult cancer (YAC) patients are a popu- lation with unique medical and psychosocial morbidity. Young adults (YA) are also particularly vulnerable, especially when their treatment and often long term contact with specialized oncology clinics ends, sometimes abruptly seen from a subjective perspec- tive. YAC social support mechanisms may or may not include parents, significant others and friends. Coping skills are often complex in this group and outcomes measures such as fear of cancer recurrence, body image and fertility/sexuality issues can be especially problematic.

The aim of the study is to 1) describe medical and psychosocial issues specific to young adult survivors of cancer 2) compare and contrast integrative medical care in primary care internationally.

Methods: Literature study and comparative method.

Results: As cancer among YACs is rare, a malignancy is usually not the first thing that comes into the family physician’s mind when a young person enters the clinic with symptoms. YACs in some studies describe many visits to the primary care before they are seen by a specialist or sent to the hospital. Youth is sometimes mistakenly regarded as a protective factor leading to delay in the diagnostic process. Health care needs and issues related to YACs rehabilitation vary along the continuum of care and are signifi- cant for this group thus challenging all health care professionals in general, and primary health care professionals in particular.

Despite different health care systems and access to specialized cancer treatment and care, primary care features brings it into a unique position to provide follow-up for young adult cancer patients.

Conclusion: In order to support the development of profession- alism among primary health care professionals in this field, national continuing professional development research initiatives needs to be strengthened considerably within this field.
Teaching and training of stoma operated patients at Godthaab Health and Rehabilitation Centre 2007-2009

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Monica Sørensen, Godthaab Health and Rehabilitation Centre, Norway

Background: Based on the fact that many ostomy patients didn’t receive optimal ostomy self-care when leaving hospital, Godthaab Health and Rehabilitation Centre took initiative in 2006, and got financial support from the Department of Health for a rehabilitation project towards this group of patients. The project was closed as planned in 2007. Due to good results and positive experiences from the project, Godthaab has continued to offer rehabilitation to this group of patients through the ordinary quota from HSO.

Methods: The patients are mostly coming from surgical wards within HSO, and are offered a stay of 14 days. Everybody is offered rehabilitation to this group of patients through the ordinary quota from HSO. In 2009 a total of 129 ostomy patients will use our services; whereupon 5-15% will have the need of home nursing after their stay. It has been especially satisfying to get an overall clear message from patients which all state that our help/offer has helped them caring for themselves and master the ostomy care alone from the day they leave us for home. Our co-operation with Norwegian Cancer Society/Norlico is very positive for both the patients and us. Godthaab Health and Rehabilitation Centre’s own goal is to be the best in the country on rehabilitation of ostomy patients.

Conclusion: The financial support given to us by the Department of Health in 2006 have initiated and established a sustainable offer for rehabilitation of patients whom have a new ostomy created within HSO. In 2009 a total of 129 ostomy patients will use our services; whereupon 5-15% will have the need of home nursing after their stay. It has been especially satisfying to get an overall clear message from patients which all state that our help/offer has helped them caring for themselves and master the ostomy care alone from the day they leave us for home. Our co-operation with Norwegian Cancer Society/Norlico is very positive for both the patients and us. Godthaab Health and Rehabilitation Centre’s own goal is to be the best in the country on rehabilitation of ostomy patients.

A new everyday life. Rehabilitation and coping with adverse effects after curative radiotherapy for prostate cancer

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Purpose: Prostate cancer (PCa) is one of the cancer diseases, where treatment may have late adverse effects and may cause reduced life quality. The incidence of PCa in Danish men increased 34 percent from 2005 to 2007. The increase is supposedly due to a change in the age composition of the population, and to earlier diagnosis. PCa is now the most frequent cancer of men in Denmark. When the disease has not metastasized, it is possible to cure the patient with radiotherapy alone or in combination with anti hormones. Late adverse effects related to the treatment may influence the quality of life of the patients. These are: impotence, incontinence, problem with the bowels, anxiety and depression.

This project will, as a part of a PhD study, test and evaluate a rehabilitation program intended to empower the men’s health and give them resources to face a new everyday life.

Methods: Prospective randomized controlled study. Examines whether or not a focused interdisciplinary intervention may influence on the patients general and specific quality of life after curative radiotherapy for prostate cancer. The intervention contains nursing consultations with information about late adverse effects and counseling in toilet habits, smoking cessation, weight control and psychological problems after treatment. Furthermore the patients are having physiotherapy with physical and pelvic floor examinations and a home training program.

Material: 160 patients are included. 80 patients in the intervention group and 80 patients in the control group.

Evaluation: Life of quality questionnaires EPIC, SF12 and MiniMac, and EMG Biofeedback at baseline; at 1 month and 6 month.

Results: The inclusion was initiated at 1 February 2010. To date, a total of 29 patients are included and baseline data collection is started.

Conclusion: We hope that this project will give new knowledge of how to rehabilitate men cured from PCa with radiotherapy.

Implementation of the NCCN Clinical Practice Guidelines on Distress Management at the National University Hospital of Iceland

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Purpose: The purpose of this quality improvement project was to implement clinical practice guidelines on distress management in an outpatient clinic at the National University Hospital of Iceland.

Methods: An interdisciplinary team translated and adapted guidelines developed by the US National Comprehensive Cancer Network (NCCN), and an information booklet for patients and family members. The team also translated, and evaluated the psychometric properties of the Distress Thermometer (DT), a screening tool for distress. Finally the team implemented the guidelines in an outpatient oncology clinic. During the implementation process principles from Rogers Diffusion of Innovation where used. In the first phase of the implementation the work process was pilot tested in three primary oncology teams and necessary changes made. Following the pilot phase the guidelines were implemented in six additional oncology teams. We describe our experience and in addition staff’s opportunities to work in follow-up groups and assessment of documentation of distress and distress management will be carried out this fall.

Results: During the pilot phase we found the staff to have mixed feelings about using the guidelines, but most found it to be useful. Patients on the other side were very supportive. We found that in order to further develop the guidelines we needed to strengthen team work within the oncology teams. The guidelines themselves were quite simple to work with, but the work procedure was somewhat problematic to work out. The staff was actively involved in trying out the guidelines and developing the procedures. The usefulness of the guidelines was apparent to the staff since a number of patients have been identified who experiencing severe distress, and had yet gone unrecognized by the staff. Further evaluation of the implementation is underway.

Conclusion: The use of the NCCN distress management guidelines is promising.
Rehabilitating Nursing Care for Patients Receiving Treatment for Cancer of the Rectum

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• Birgitte Thygude Pedersen, onkologisk afdeling Vejle Sygehus, Sygehus Lillebaelt, Denmark

Purpose: The purpose of this study is to investigate how couples deal with a diagnosis of breast cancer in the woman. It will examine the interdependencies of coping processes and factors contributing to adjustment, with a special focus on the partner’s adjustment.

Methods: Based on the clinical database of the Danish Breast Cancer Cooperative Group a nationwide, population-based cohort of women diagnosed with breast cancer within a year and their partners will be established. A participation rate of 80% is expected, with a total of 2400 patients and 2400 partners. Participants fill out questionnaires on indicators of adjustment, coping and health behavior at time of diagnosis and 4 and 12 months later. Sociodemographic and clinical information will be accessed through nationwide registries. The Developmental-contextual Model (Berg & Upchurch, 2007) provides the theoretical framework for the study.

Results: The study’s design and framework will be presented. Inclusion of participants starts in September 2010. We hypothesize that partners will show better adjustment than patients. Joint supportive coping efforts and relationship quality are likely to predict adjustment. Dyadic coping may be more important for the women than for the men.

Conclusion: The longitudinal design, the large number of couples included and the combination of self-report and register-based information make the study unique in this field of research. The results may help to adapt treatment to both patients’ and partners’ needs and to develop rehabilitation interventions for breast cancer cancer or chronic illnesses in general, which integrate the

Employing qualitative methods, this project focuses on patients’ experience of their life situation during rehabilitation.

Aim: The aim of the project is
• To create knowledge of the challenges experienced by patients receiving treatment for cancer of the rectum
• To develop a tool for identifying these challenges
• To propose the use of such a tool in planning and delivering rehabilitation nursing care

The project takes place at the Oncological Department, Veje, and is scheduled to close in 2011

Theoretical frame: In this project, the concept of rehabilitation involves individual and goal-oriented collaboration with the patient in order to ensure the patient’s reestablishment of a meaningful life

Methods: Phase 1, Gathering of knowledge Inclusion criteria are patients who have cancer of the rectum, who receive treatment and who have not have a colostomy. 10 patients are included in the study along with 10 nurses delivering nursing care to these patients.

Data consist of qualitative research interviews with the included 10 patients as well as narratives from the 10 nurses based on their experience of caring for the patients in order to identify how the nurses experienced and coped with the patients’ challenges and problems.

Analysis: In order to identify themes and phenomena obtained from the patients’ experience of their challenges during rehabilitation, the patient interviews will be analyzed according to the interpretative approach as described by Krølle (2004).

Aiming to identify nurses’ choice of nursing activities for patients with cancer of the rectum, the nurses’ narratives will be analyzed according to the four specific therapeutic role of nurses in the rehabilitation described by Kirkvold (1997).

Phase 2, Development of an identification method for rehabilitating nursing care A method for systematically identifying patients’ challenges will be developed from the above analyses and the International Classification of Function (ICF) (Mørkelsborgcentret, 2005).

Phase 3, Implementation of the identification method in the department. The project is in phase 1 and therefore has no results yet

Differentiated use of help from a nurse navigator among patients with cancer: a qualitative study

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Purpose: This study aims to explore patients’ experiences with help from a nurse extra appointed as Patient Navigator (Nurse Navigator (NN)) in the early part of a cancer trajectory and to investigate reasons for use or not use of the help offered.

Methods: A phenomenological-hermeneutical longitudinal study was performed among Danish gynecological patients. Semi-structured interviews provided data to the analysis. When going open-minded to the text and work in tree analytical levels a comprehensive understanding was achieved.

Results: Experienced trust and distrust in healthcare professionals before meeting NN was of major importance when choosing to use help from NN or not. Distrust was a reason to choose help from NN, but if a distrusting patient had a healthcare professional among her loved ones, this person was used instead of NN. NN offered for some a new trusting relationship, and they felt calmed by her help. They jointly drew on support in all offered categories; coordination, information, logistic services and supporting conversation.

Conclusion: Not all could use the help offered from NN. This is vital knowledge to healthcare practitioners as well as administrators, who want to do the best for the cancer patients and still have an obligation to the economic. Moreover, as earlier built, distrust was a cause to choose extra help, this findings show the importance of healthcare professionals being aware of their signals to patients, not only because of the actual situation, but also seen in a rehabilitation context.

Existential, religious and spiritual orientations among Danish cancer patients in a secular context: a qualitative investigation within cancer rehabilitation

• Elisabeth Asving Hult, Institute for Sundhedsforsøgslaboratorium, HUM, University of Southern Denmark

Purpose: North-American research point to the fact that many patients in cancer rehabilitation experience unmet existential needs during the process of rehabilitating. Furthermore American cancer patient surveys document that existential resources are often used to cope with the stresses involved in recovery after cancer.

Within a Danish cancer rehabilitation setting focus has primarily been on the physical, psychical and social rehabilitation needs whereas the existential aspects of rehabilitation have to date been largely neglected.

Demark is considered a highly secularized country having a religio-cultural identity very different from a North-American identity. Therefore a specific Danish research study is needed to assess the existential, religious and spiritual needs of Danish cancer patients being embedded in a secular culture.

The purpose of this prud.-study is to identify existential, religious and spiritual orientations among Danish cancer patients in rehabilitation in order to assess whether future rehabilitation initiatives in Denmark should incorporate increased attention on existential aspects and if so in what way.

The following three research questions will be addressed:
I. Are existential concerns in evidence among Danish cancer patients in rehabilitation care and if so how can these be characterized?
II. How do existential factors relate to the rehabilitation of the patient (positive vs negative coping)?
III. To what extent do these existential resources support, supplement or challenge theories of religious change in modernity and late modernity?

Method: Data are generated through ethnographic fieldwork comprising 1 participant observation during rehabilitation week courses held at RehabilitationCenter Dallund, a Danish Rehabilitation Center and 2 semi-structured interviews in the homes of 25 rehabilitation patients.

Results: Data collection will be expected to be completed October 2010. Preliminary analysis of data will be presented at the symposium.

Coupled Coping with Breast Cancer – A Longitudinal Study

• Nina Rottmann, National Research Center for Cancer Rehabilitation, Institute of Public Health, University of Southern Denmark

Purpose: To find psychological, work related, family and existential problems where young cancer survivors seem to be different from older cancer survivors at Rehabilitation Centre Dallund (rDallund).

Background: Dallund has provided a 6 days rehabilitation stay for Danish cancer survivors since 2001. Until now, more than 3000 cancer survivors have participated. One to two weeks a year the theme of the stay has been young cancer survivors. We experienced that this group had different problems due to their stage in life and that there could be a difference between men and women. We here present the differences measured in a questionnaire.

Materials: Since 2004 rDallund have answers on a distress scale for Danish cancer survivors since 2001. Until now, more than 5000 cancer survivors have participated. One to two weeks a year the theme of the stay has been young cancer survivors. We experienced that this group had different problems due to their stage in life and that there could be a difference between men and women. We here present the differences measured in a questionnaire.

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The courses will be documented in a clinical database with prospective registration of sociodemographic parameters, characterisation of the disease, complications, level of function. This is done at admission, during the programme and at the end of the programme.

The outcome measures will include state of nutrition, Barthel Index, TUG, 6 min walk, DQPM, AMES, quality of life score (CARES).

Evaluation of patients’ and relative’s satisfaction is planned. The project is still in the starting phase, so no definitive results can be shown.

Conclusion: It seems that women report more stress, anxiety, problems with work tasks and own expectations, family problems and existential problems including guilt, especially young women.

Women's actions, emotions, and reflections regarding work after breast cancer surgery—a focus group study

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- Agenta Wennman-Larmin, Karolinska Institute, Department of Clinical Neuroscience, Division of Insurance Medicine, Sweden
- Lena-Marie Peterson, Karolinska Institute, Department of Clinical Neuroscience, Division of Insurance Medicine, Sweden
- Kristina Alexander, Karolinska Institute, Department of Clinical Neuroscience, Division of Insurance Medicine, Sweden

Background: Breast cancer incidence as well as survival rates have increased, but research on factors of importance for return to work (RTW) after surgery is scarce. Encounters with different stake-holders are found to influence the women's RTW. The aim was to explore what actions women, who had breast cancer surgery, take regarding RTW and their reasoning and emotions behind this.

Methods: Four focus group interviews with 23 women were conducted two to eight months after breast cancer surgery. The groups were strategically composed regarding treatment and age, to increase homogeneity. The transcribed interviews were analysed inductively through qualitative content analysis.

Results: Preliminary results show that women themselves decide actively about sick leave or RTW and about when or to what extent they returned to work. The decisions were based on, e.g., health, economy, a search for normality, or on reappraisal of working. Retrospectively, most women who continued to work during treatment were satisfied with this, even if they initially felt forced to continue working, e.g., by economical reasons. A second type of action taken was whether and how to ask for/make use of adjusted work conditions. Reasoning behind this was availability of a supportive environment or own wishes of different tasks. Thirdly, disclosure of the diagnosis, degree of disclosure, and to whom disclosure was directed was an issue. Reasons for choices were a sense of security in colleagues knowing or fear of being discriminated. The women reflected about advantages/disadvantages when the workplace is updated or about possible ways to signal less work capacity during or after treatment. Most women disclosed their disease at least to some extent and were satisfied with this, while some women were still anxious that disclosure may lessen opportunities at work.

These results are useful for planning future interventions, targeting RTW.

How can health care help female breast cancer patients reduce their stress symptoms? A randomized intervention study with stepped-care

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- Cecilia Arving, Uppsala University, Sweden
- Johan Ahlgren, Hospital of Gausa, Sweden
- Kari Norlin, Uppsala University, Sweden

Background: A diagnosis of breast cancer is a potentially life-threatening disease and is often accompanied by major psychological distress. Anxiety and depression in cancer patients are well documented. The reported rate of depression in cancer patients has been quite variable, but a recent study finds the rate of depression with breast cancer patients to be 10-15%. A Danish study found an elevated risk for hospitalisation with depression for up to ten years after a cancer diagnosis. An efficient screening tool for detecting psychological distress is needed for breast cancer patients.

Aim: Our aims of this study were to describe

- The extend of distress among women with breast cancer at time of diagnosis
- Characteristics of women with breast cancer suffering from severe distress

Material and Methods: 363 patients out of 431 consecutive breast cancer patients filled in a baseline questionnaire at time of diagnosis. Inclusion of patients was completed ultimo October 2009. The questionnaire consisted of the Distress Thermometer and The Hospital Anxiety and Depression Scale (HADS), Impact of Event Scale (IES-R) and EORTC QLQ-C30. Furthermore sociodemographic variables and questions related to lifestyle and available social support was included. Data on treatment and information about tumor size, histopathology and staging will be collected through the Danish Breast Cancer Cooperative Group.

Analysis: The extent of distress is described in terms of the Distress Thermometer; HADS and IES-R.

Characteristics of women experiencing a high level of distress is analyzed in relation to age, available social support and rehabilita-
tion needs. The following covariates will be included in analyses: age, stage of disease, cancer treatment, socioeconomic class, marital status, and available social support in and outside the family.

Results: Preliminary results on the relationship between high level of distress, age and available social support in newly diagnosed women with breast cancer will be presented.
Purpose: To present an ongoing study exploring the prevalence of stress symptoms in female patients diagnosed with breast cancer, and what kinds of stress management interventions are necessary to improve their psychosocial well-being.

Methods: Female patients (n = 300) aged 18 and older and recently diagnosed with breast cancer and eligible for additional adjuvant treatment such as chemotherapy, radiation therapy and/or hormonal therapy in Falun, Gavle and Uppsala Counties, in Sweden, will be included consecutively in the study. This multicenter study is a prospective longitudinal intervention using a stepped care approach. Stepped care in this study involves the inclusion of all patients in Step 1, regardless of whether or not they have initially reported clinically relevant stress symptoms. Step 1 is a two hour information session about stress management. This single occasion is expected to be sufficient to reduce symptoms of stress for many patients. Those who still report clinical levels of stress after Step 1 will be given the opportunity to participate in Step 2, which entails a randomization to individual or group stress management training, based on methods derived from cognitive behaviour therapy (CBT). There is strong evidence that CBT is effective in reducing stress, although at present there is a lack of scientific evidence concerning the most effective way to offer treatment. (individual versus group). Variables of interest in the study will be measured by self-report questionnaires for one year (prevalence and effects of the interventions).

Results: Preliminary results will be presented at the symposium.

Poster number: 127

Health promoting rehabilitation in patients with acute leukemia during intra-hospital treatment

• Mary Jarden, University Hospitals Centre for Nursing and Care Research, Denmark
• Tom Møller, University Hospitals Centre for Nursing and Care Research, Denmark
• Lis Adamsen, University Hospitals Centre for Nursing and Care Research, Denmark
• Henrik Birkens, Herlev Hospital, Denmark
• Line Oldervoll, Department of Cancer Research and Molecular Medicine, Norwegian University of Science and Technology, Norway
• Torbjøm Øveresæ, Department of Cancer Research and Molecular Medicine, Norwegian University of Science and Technology, Trondheim, Norway
• Lars Kjeldsen, Rigshospitalet, Copenhagen, Denmark
• Lis Adamsen, University Hospitals Centre for Nursing and Care Research, Denmark
• Mary Jarden, University Hospitals Centre for Nursing and Care Research, Denmark

Introduction: Patients in especially challenging life situations with uncertain or poor prognoses are often under-received or excluded from rehabilitation studies due to prolonged and toxic treatment protocols that result in a considerable symptom burden. This study is individualized to the acute leukemia patient treatment situation and the purpose of this rehabilitation initiative is to build a bridge between the clinical setting and the community with the aim of preventing, reducing and restoring the physical, emotional, cognitive and social function of cancer patients, decreasing hospitalization, and the subsequent social marginalization with a more rapid return to society. Treatment for acute leukemia is complex, intense and prolonged, and given that high dose chemotherapy is associated with a substantial symptom burden and difficulty returning to the workforce, early-initiated rehabilitation during intra-hospital treatment (out-patient/home) may be a preventive, restorative and supportive strategy for patients with acute leukemia.

Methods: This study takes place in the out-patient context and concurrently combines and builds a bridge between a supervised in-hospital and a non-supervised home rehabilitation program. The interdisciplinary project is designed as a multi-institutional intervention study. Qualitative and quantitative research methods will be applied to measure symptom profiles, psychological and physiological outcomes, physical activity levels, health behavior, hospitalization and return to employment.

Perspective: Appropriate rehabilitation pathway programmes need to be established in order to ease the transition from illness to the resumption of everyday activities, e.g. job/school/home. Reducing the symptom burden during and after treatment may improve the overall functional performance, thereby facilitating community reintegration.

Poster number: 128

Self rated benefit of a 6-days rehabilitation stay on function level immediately and 3 month after the stay

• Tina Brøby Mikkelsen, Rehabilitation Centre Dallund, Danish Cancer Society, Denmark

Purpose: To evaluate to what extent cancer survivors experience improvement in their psychological, social and physical function level immediately and 3 month after a 6-days stay at Rehabilitation Centre Dallund.

Background: Rehabilitation Centre Dallund (RoC) is the first and only centre in Denmark offering rehabilitation to cancer survivors as a residential course. The rehabilitation is a coordinated effort with several specialists. Each week about 20 cancer survivors stay at Dallund manor house in 6 days. From 2001 more than 5000 cancer survivors have participated. In 2009 all participants receive an evaluation form immediately 3 month after the stay.

Materials: In 2009 588 cancer survivors participated in a 6 days rehabilitation stay; there were 512 women (87%) and 176 men (13%). Most participants had had breast cancer (338, 57%). The evaluation form include 8 questions about their benefit of the stay and self rated physical, psychological and social function level on a scale from 0 to 5, where 5 is the best score.

Results: Preliminary data from 260 participants shows that the participants report benefit (a score of 4 or 5) especially on psychological and physical function level immediately after the stay. These decreases after 3 months especially for physical function level, where high benefit were reported by 73% of the participants immediately after and 48% 3 month after the rehabilitation stay. As the symposium further results will be presented.

Conclusion: Preliminary data showed that a 6 days coordinated rehabilitation stay may help to improve self rated function level of cancer survivors; but it decline 3 month after the stay, especially for physical function level. Women, breast cancer survivors and high social status are overrepresented.

Poster number: 129

Shorts- and long-term effects on fatigue, functioning and return to work among cancer patients following an inpatient rehabilitation program – a pilot study

• Line Oldervoll, Department of Cancer Research and Molecular Medicine, Norwegian University of Science and Technology, Norway
• Anne Holstad, Roras Rehabilitation Centre, Roras, Norway
• Gro Bertheussen, Department of Circulation and Medical Imaging, Norwegian University of Science and Technology, Trondheim, Norway
• Jon Ann Sandmark, Roras Rehabilitation Centre, Roras, Norway

Background: Fatigue and reduced functioning are common symptoms among cancer patients and many patients struggle to resume work. This study aims to assess short- and long-term effects of an inpatient rehabilitation program for cancer patients on fatigue, emotional- (EF) and physical functioning (PF) and return to work.

Methods: Cancer patients aged 18-67 years with various diagnoses were eligible for inclusion. A pre-post test design was used in this pilot study. Patients participated in a 3 weeks primary stay, 8 weeks at home and a one week follow-up stay. Rehabilitation took place in groups of 10-15 participants and consisted of physical exercise, education on topics concerning “living with cancer” using a cognitive approach. Fatigue is measured by the Fatigue Questionnaire (FQ). EF and PF is assessed by the European Organization for Research and Treatment Core Quality of Life Questionnaire (EORTC QLQ-C30). Assessment took place at arrival of the primary stay (T1), at arrival of the follow-up stay (T2) and follow-up 7 months after T2, defined as T3. Repeated measure ANOVA is used to analyze the change in fatigue, EF and PF between T1, T2 and T3.

Results: One hundred and fourteen patients were admitted and completed assessments at T1 and T2 (mean age 52 years, 79% female and 53% breast cancer). Fatigue was significantly decreased (p = 0.001), PF and EF increased (p = 0.001) from T1 to T2. Data from T3 will be collected until June 2010 and the results on fatigue, EF, PF and work status will be presented at the conference.

Discussion: An inpatient rehabilitation program shows positive short-term effects on reduced fatigue and improved functioning among cancer patients. The long-term effects (7 months follow-up) will be presented at the symposium. Future randomized trials with appropriate control groups are anyhow needed to confirm the results.
Abstracts

Poster number: | 130
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**Physical exercise programs for palliative cancer patients - benefits and challenges in running them at municipal healthcare centers**

- Birgit Bogen, Department of Physiotherapy, Haraldsplass Diakonal Hospital, Norway
- Marit Kjønig, Department of Physiotherapy, Haraldsplass Diakonal Hospital, Norway
- Elisabeth Wistad, Department of Cancer Research and Molecular Medicine, Norwegian University of Science and Technology, Trondheim, Norway
- Line Oldevoll, National Resource Center for Late Effects, Department of Oncology, Oslo University Hospital and University of Oslo, Norway
- et al.

Background: Preliminary findings from intervention studies on physical exercise programs for palliative cancer patients administered at the hospitals have demonstrated the feasibility of such programs. The results concerning improvement in physical performance are also promising. However, not all patients are able to come to the hospital due to frailty or long travelling distance. The aim of this study was to investigate potential benefits and challenges in decentralization of exercise groups for palliative cancer patients from hospitals to municipal health-care centres.

Method: Semi-structured focus group interviews were conducted - six groups were interviewed: two with physiotherapists with experience in running the exercise groups for palliative cancer patients, two with patients who had participated in the exercise groups and two with community-based physiotherapists and a family physician. The interviews focused on a) benefits and challenges in having exercise groups for palliative patients at the municipal health-care centres, b) possibilities of mixing patients with different diagnosis into the exercise groups and c) qualification requirements of group instructors. The interviews were digitally recorded and transcribed. A content analysis will be conducted.

Results: Preliminary findings show that patients and professionals expressed support for the decentralization of physical exercise groups. Some challenges were identified: small municipalities might not find enough palliative cancer patients for an exercise group. However, both the patients and the professionals found heterogeneous groups an acceptable alternative. Health-care professionals seem more concerned about the qualification of group instructors with different diagnosis into the exercise groups and c) qualification requirements of group instructors. The interviews were digitally recorded and transcribed. A content analysis will be conducted.

Conclusions: Based on the positive feedback from both patients and professionals decentralization of physical exercise programs for palliative cancer patients in their home municipalities can be a feasible approach that should be further explored.

Poster number: | 131
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**Swedish patient associations; their importance to family physician.** The interviews focused on a) benefits and challenges in decentralization of exercise groups for palliative cancer patients - benefits and challenges in running them at municipal healthcare centers

- Christina Carlsson, Institute of Clinical Sciences, Department of Oncology, Lund University, Sweden
- Kerstin Nilsson, Institute of Health and Care Sciences, University of Gothenburg, Sweden

Experiential knowledge refers to knowledge generated when a person who has reached further in a process shares experiences and handling strategies with individuals who have not yet tackled the problems related to a disease or handicap. The individual’s experience of the disease is of basic importance in Swedish patient associations for cancer patients since one of their basic principles is shared experiences and support of members who have come further in the disease process extended to those who have more recently been affected.

In our work that has aimed to increase knowledge about the Swedish patient associations for cancer patients with a specific focus on the users’ perspective, we found ‘needs related to having cancer’ to be the dominant reason for becoming a member. The dominant reason for remaining a member ‘wanted to use the patient associations’ information and activities’. Two thirds of the members reported that membership had benefited their psychological wellbeing. Gender differences were observed: females more often reported that cancer-related needs and males reported that associations’ activities were the dominant reason for membership. The patient associations for breast cancer have developed a specific program inspired by the American Reach to Recovery program - the person contact’s activities. The experience of the contact person activity demonstrated that shared experiences give new perspectives about having cancer that a feeling of isolation is a part of the identity of the disease, and that contact with others’ experiencial knowledge may enable self-help. The member gains a perspective about the disease and a hope for survival. The contact person serves as a counselor and needs to have a good understanding of patients’ needs and expectations. The relationship is emotionally sensitive, however and failure to fulfill the needs and expectations may, contrary to what is intended, strengthen feelings of isolation.

**Rehabilitation of women who have finished treatment for gynaecological cancer**

- Margrethe Vika, University of Bergen, Norway
- Ragnhild Johan, Tved Sekter, Haukeland University Hospital, University of Bergen, Norway
- Frøydis Hausmann, Bergen University College, Norway
- Anne Nicolaisen, National Research Center for Cancer Rehabilitation, Institute of Oncology, Odense University Hospital, Denmark

It is well known that partners of women diagnosed with breast cancer may be a useful resource by supporting and helping the woman coping with the disease. We also know that partners of breast cancer patients are affected by the disease, which increase the risk for depression and anxiety in these partners. Despite this knowledge, no program has been established which involves and support the partner and the couple in the treatment and rehabilitation of breast cancer patients.

Purpose: We found it justifiable to investigate a psychological intervention which aim to increase the coping ability of both the partner and the couple, when the wife is diagnosed with breast cancer.

Methods: A randomized controlled study was carried out with breast cancer patients receiving current hospital practice. Participants are recruited at the Department of Breast Surgery at Herlev University Hospital and Odense University Hospital, Denmark. Women newly diagnosed with breast cancer are randomized to an intervention group and a control group. The intervention consists of four sessions with psycho-education, supportive care and counseling. The intervention is planned to end with a one hour session for the couple.

Results: Recruitment of participants was a major problem in this project, even though the rehabilitation stay was free of charge for the municipalities. Viborg send 7 cancer survivors. The participants had a lower social status than usually and two did not feel that they came to rcDallund voluntarily. The participants evaluated the stay very well at the end of the program. At the symposium the rehabilitation program, data and comments from the participants 3 month after the stay and experience from the social worker in the municipalities will be presented.

Conclusion: rcDallund should repeat this program a better cooperation with the municipalities is mandatory.
Abstracts

Poster number: 135

An evidence-based guideline ‘Cancer rehabilitation’ for professionals in oncology and rehabilitation in the Netherlands

• Miranda Velthuis, Association of Comprehensive Cancer Centres, The Netherlands
• Manjiluk A Van der Pol, Association of Comprehensive Cancer Centres, The Netherlands
• Birgitte Om Gjør, Association of Comprehensive Cancer Centres, The Netherlands
• Harry Fp Hille, Maastricht University, The Netherlands
• Ria Koppesjan-Rensenbrink, Association of Comprehensive Cancer Centres, The Netherlands

Purpose: In the Netherlands cancer rehabilitation is widespread available to patients. However, a systematic overview of the evidence with recommendations for daily practice is missing. Therefore, the Comprehensive Cancer Centres are currently developing an evidence based, professional guideline for the multidisciplinary and multicenter cancer rehabilitation.

Methods: The general method for evidence-based guideline development is following the AGREE instrument. With an online survey among health care professionals key questions regarding cancer rehabilitation were identified. The needs of patients were investigated by an Open Space conference. The guideline covers the broad field of multidisciplinary and multicenter rehabilitation during and after curative and palliative cancer treatment. For this, working groups of health professionals were formed to study which rehabilitation interventions are effective in dealing with the diverse health problems of cancer patients.

Results: Based on ten key rehabilitation questions relevant evidence was selected, analyzed, and recommendations formulated regarding the intake, interventions and evaluation of cancer rehabilitation. Insights about cost-effectiveness are included. The guideline will be available by the end of 2010 at the guidelines website for oncology: www.oncoline.nl. In addition an e-learning tool and decision-making card are developed to support the professionals and a brochure to inform the patients about cancer rehabilitation. In 2011 the guideline will be randomized to one of three interventions. One of the interventions, the educational- and counselling group, is based on Antonovskys own (2005), 1979) salutogenic theory and Rogers client-centered therapy. (Rogers, 1979). The group had one session (a 2-3 hours) per week over a period of seven weeks, consisting of 6-8 women in each group. The sessions consisted of two parts: Education with a professional theme and counselling with a more free conversation related to the cancer illness. The educational themes were selected on the basis of previous research. The themes were e.g. coping and coping strategies, body changes, fatigue and nutrition, social rights, sexuality and getting back to work.

Assessment: A process evaluation form (a self-report) where the women rated the following themes were made and filled out.

1. Value of the various educational themes
2. Evaluation of group participation with the opportunity to engage in dialogue with professionals and other participants, sharing own’s and others’ experiences
3. Open questions regarding satisfaction and improvements could be answered extensively by the patients.

The supervisors’ experiences regarding implementation of the groups were logged.

Results: Experiences from the supervisors regarding implementation, and preliminary findings related to the process evaluation form, will be presented.

Conclusion: Experiences so far will be presented.

Poster number: 136

Educational- and Counselling intervention for women treated for Gynaecological Cancer: Is it helpful in the rehabilitation process?

• Miranda Velthuis, Comprehensive Cancer Centre Middle Netherlands, Utrecht, The Netherlands

Poster number: 137

A description and preliminary evaluation of the intervention

• Ragnhild Johanne Twiet Selset, Haukeland University Hospital, University of Bergen, Norway
• Ingrid Bostad Haukeland University Hospital, Norway
• Bergljot Nædel, Haukeland University Hospital, Norway
• Margrethe Vict, University of Bergen, Norway
• Gunnhild Blau, University of Bergen, Norway

Purpose: One of the purposes of this study was to describe the intervention and to examine whether the women felt it useful to participate in an educational- and counselling group as a part of the rehabilitation process after treatment for gynaecological cancer.

Methods: Subjects: Women (N = 34) who have finished curative treatment for gynaecological cancer at Kvinneklinikken, Haukeland University Hospital from January 2007 until June 2011 were randomized to one of three interventions. One of the interventions, the educational- and counselling group, is based on Antonovskys own (2005), 1979) salutogenic theory and Rogers client-centered therapy. (Rogers, 1979). The group had one session (a 2-3 hours) per week over a period of seven weeks, consisting of 6-8 women in each group. The sessions consisted of two parts: Education with a professional theme and counselling with a more free conversation related to the cancer illness. The educational themes were selected on the basis of previous research. The themes were e.g. coping and coping strategies, body changes, fatigue and nutrition, social rights, sexuality and getting back to work.

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The supervisors’ experiences regarding implementation of the groups were logged.

Results: Experiences from the supervisors regarding implementation, and preliminary findings related to the process evaluation form, will be presented.

Conclusion: Experiences so far will be presented.

Poster number: 138

Exercise during hospitalization

• Irene Dhytrianger Andersen, Department of Oncology, Aarhus University Hospital, Denmark
• Birgitta Tvedtchcher Espersen, Department of Oncology, Aarhus University Hospital, Denmark

Background Research shows a connection between physical activity and a reduction in the risk of a recurrence of cancer and subsequent death. Furthermore, physical activity can reduce side effects during cancer treatment, and patients can increase their physical capacity and thereby achieve improved well being and quality of life. Both the Danish National Board of Health and the Danish Cancer Society have pointed to the fact that physical activity is a key element in the treatment of cancer and should be an area of special focus. Additionally, patients have expressed their wishes to participate in physical activity during hospitalization.

Purpose: To give cancer patients an opportunity for physical activity during hospitalization.

For cancer patients to experience fewer side effects to the cancer treatments and achieve a better quality of life.

For cancer patients to receive knowledge about physical activities and for them to be motivated to be physically active after being discharged.

To increase focus on the importance of physical activity during cancer treatment.

Methods: We established an exercise program for hospitalized cancer patients at the Department of Oncology, The program consisted of two parts:

1. Daily team exercises initiated and supervised by physiotherapists. The exercises were adapted according to the individual daily form and abilities of the respective patients.

2. An individual home training program that the patient can execute during and after hospitalization.

Those patients who were physically active prior to hospitalization thus had an opportunity to uphold this. Patients who, during the treatment period, had become less active, and those who were not physically active to begin with, could exercise under supervision and be motivated. They could receive guidance on how to uphold and increase their level of physical activity between the periods in hospital.

All patients participating in daily team exercises received questionnaires.

Results and conclusions: The patients experienced an improvement in both their physical and mental condition. In particular, they mentioned fatigue, pain, nausea, sleep and mood changes. There was a heightened focus on physical activity among the nursing staff, and both nurses and doctors were instructed and brought up to date on the significance and importance of the programme.

Poster number: 139

Rehabilitation of cancer survivors with mild to moderate depression: a pilot study among 14 cancer survivors

• Karen Mark, Rehabilitation Centre Dalkurd, Danish Cancer Society Denmark
• Tina Brønd Mikkelsen, Rehabilitation Centre Dalkurd, Danish Cancer Society Denmark

Purpose: To develop and evaluate a 6-days rehabilitation program with focus on interventions with effect on depression and to establish a support group after the stay.
Background Rehabilitation Centre Dallund has provided a 6-days rehabilitation stay for Danish cancer survivors since 2001. Until now, more than 5000 cancer survivors have participated.

Materials and methods: Participants were recruited by the Danish Cancer Society in Vordingborg, where experienced advisors invited cancer survivors with mild to moderate depression. The participants should be able to share thoughts and feelings with the other participants and to cope with their situation. Seventeen cancer survivors were enrolled, three became ill. Thus, 14 cancer survivors participated in this project in week 37, 2009, seven had had breast cancer. The participants filled in a distress scale (Dallund scale) before the stay, and an evaluation form at the end of the stay. Three and a half month after the two questionnaires were sent to them by mail.

Results: The participants were satisfied with the rehabilitation stay and they found the program relevant and informative. On the Dallund scale 90% reported one or more psychological problems and they had 2.7 problems in average. At the symposium the rehabilitation program, data and comments from the participants 3 and 6 month after the stay will be presented. Preliminary data from the evaluation form showed that a larger percentage than usual experienced benefit of the week at Dallund. After the stay 12 of the participants met once a month and the women had established another support group. This study will be repeated in 2009.

Conclusion: It seems that cancer survivors with mild to moderate depression can benefit from a one week rehabilitation stay and that the stay can be used to establish support groups. This is a small study and the conclusion should be taken with caution.

Poster number: 140

“Livslyst - når det røyner på!” Creating arenas for patients and relatives to exchange experiences and discover new ways to cope.

• Ann Behør, The Norwegian Cancer Society, Norway
• Anne-Britt Rønning, The Norwegian Cancer Society, Norway
• Helle Ploug Hansen, IST, HMS, University of Southern Denmark
• Camilla Johansen, Vejle Kommune’s Sundhedscenter, Denmark
• Merete Mærsk, Danish Cancer Society, Denmark

Background: The Milieu for Humanistic Psychosocial Cancer Research is an interdisciplinary research network established in 2007 on grants from The Danish Cancer Society, Psychosocial Research Committee.

The milieu is based on the humanistic research tradition with its use of theory based qualitative methods such as qualitative interviews, participant-observation and ethnographic fieldwork. It focuses on cancer patients’ existential concerns, especially in relation to ethics and aesthetics.

Aims and focus: The aim of the milieu is to:

• strengthen and develop the humanistic psychosocial cancer research in Denmark
• inspire and initiate influential and relevant research
• support researchers and the humanistic branch of cancer research
• develop and initiate descriptive as well as implementing projects

Workshops and conferences: The milieu’s members include senior researchers and doctors, post docs as well as PhD students all coming from a broad field of disciplines: anthropology, theology, sociology, psychology, gynecology, lung cancer research, epidemiology as well as public health research. The milieu conduct workshops several times during the year on topics such as patients’ existential concerns, qualitative research strategies, ethics and aesthetics. An ongoing “Working Conference in Humanistic Cancer Research” will take place from the 30th - 31st August 2010 in Denmark.

Visions: The end of 2011: Milieu hopes to have:

• a solid scientific milieu for humanistic cancer research in Denmark, which recruits and maintains researchers in the field
• a solid scientific cooperation with key psychosocial cancer research milieu internationally
• at least one multi-professional and interdisciplinary research project spanning different sciences and institutions to ensure that a patient, from first symptom to either cure, rehabilitation, palliation or death, is met at the highest international standard
• dialogue with IPOS about integrating humanistic cancer research in the organization as a key field similar to epidemiological and psycho- oncological psychosocial cancer research

Poster number: 141

MiloHuK, Milieu for Humanistic Psychosocial Cancer Research, www.milohuk.dk

MiloHuK is a Danish non-profit organization established in 2007 to create arenas for patients, relatives and researches to exchange experiences and discover new ways to cope with cancer. The milieu is based on the humanistic research tradition with its use of theory based qualitative methods such as qualitative interviews, participant-observation and ethnographic fieldwork. It focuses on cancer patients’ existential concerns, especially in relation to ethics and aesthetics.

Aims and focus: The aim of the milieu is to:

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• develop and initiate descriptive as well as implementing projects

Poster number: 142

How does physical and psychological late effects influence the return to work?

• Anette Kring, Veje Kommune’s Sundhedscenter, Denmark
• Vibe Margued, Veje Kommune’s Sundhedscenter, Denmark
• Merete W. Bennedsen, Veje Kommune’s Sundhedscenter, Denmark
• Kja Holff Lambert, Veje Kommune’s Sundhedscenter, Denmark

Purpose: To show how physical and psychological late effects influence the return to work after a cancer disease.

Method: Methods of the study will be a review of 44 patient records with quantitative categorization of the amount of self-reported late effects. All included patients have completed a rehabilitation period with interdisciplinary intervention.

All 44 patients were in the working age at the time of entering the rehabilitation period. 38 of the 44 patients were at the start of the intervention on sick leave from work. Only 10 of those were at the end of the intervention still on sick leave from work.

By the time of this abstract submission the studies are still ongoing. The review will be focused on this change in working status, as well as on type of work at the time of start and end of the intervention.

Results: The results will be presented statistically in figures and by theses representing areas which might inspire to further research.

Conclusion: Conclusions of the studies are expected to be, whether there is a correlation between:

1. The amount of self reported late effects and working status after intervention
2. Self reported late effects and types of work these patients are able to maintain.

Poster number: 143

Achieving better and faster rehabilitation by creating access to smoking prevention programs for cancer patients

• Merete Mand, Danish Cancer Society, Denmark
• Salome Trouman, Danish Cancer Society, Denmark

Background: Recent research shows that smoking cessation after diagnosis of cancer improves prognostic outcomes for cancer types such as cancer in the lung, bladder, and breast. Therefore, smoking cessation has a major influence on the well-being, survival and rehabilitation of cancer patients and should be considered as part of the rehabilitation plan.

Purpose: The purpose of this project is to ensure that cancer patients have access to qualified smoking cessation services through information and education of relevant health professionals.

Method: To develop the best possible smoking cessation service for cancer patients, we have done an extensive literature study concerning methods and effects of smoking cessation. In addition, we have performed a pilot project to achieve clinical experiences in order to create a special program for smoking cessation for cancer patients. The literature study and the pilot project have both been published as reports and have resulted in an ongoing number of activities to obtain the awareness of relevant health professionals.

Results: Specific smoking cessation services for cancer patients are needed to ensure optimal rehabilitation. We found that health professionals seem to avoid discussing smoking with cancer patients. Furthermore, we found that health professionals are unaware of two important facts:

• that cancer patients find smoking cessation meaningful as it gives them a unique opportunity to get influence on their illness and lives in general
• that cancer patients are affected negatively both emotionally and fiscally if their smoking is not addressed by health professionals.

Conclusion: Health professionals must understand the importance of and address the issue of smoking cessation with cancer patients. Furthermore, professionals already working with smoking cessation must be educated so they can undertake the task of helping cancer patients to quit smoking.

Poster number: 144

A Family’s Beliefs About Cancer, Dying, and Death

• Inger James, School of Health and Medical Sciences, Örebro university, Sweden
• Birgitta Andenhem, School of Health and Medical Sciences, Örebro university, Sweden
• Brit-Marie Ternestedt, Department of Palliative Care Research, Ensta Skidåkshögskolan, University College, Sweden

Purpose: The purpose of this project is to ensure that cancer patients have access to qualified smoking cessation services through information and education of relevant health professionals.

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Results: Specific smoking cessation services for cancer patients are needed to ensure optimal rehabilitation. We found that health professionals seem to avoid discussing smoking with cancer patients. Furthermore, we found that health professionals are unaware of two important facts:

• that cancer patients find smoking cessation meaningful as it gives them a unique opportunity to get influence on their illness and lives in general
• that cancer patients are affected negatively both emotionally and fiscally if their smoking is not addressed by health professionals.

Conclusion: Health professionals must understand the importance of and address the issue of smoking cessation with cancer patients. Furthermore, professionals already working with smoking cessation must be educated so they can undertake the task of helping cancer patients to quit smoking.
Purpose: The purpose of this paper was to describe the beliefs over time of a family and of individual family members concerning cancer, dying and death, and how the beliefs affected their daily lives.

Method: The study is a prospective, qualitative study. A 70-year-old woman with advanced cancer and five family members were followed during the woman’s final stages of life. Data were collected using repeated interviews, informal conversations and diary notations. The data were analyzed inductively in different steps in which the beliefs could be aggregated into eight main beliefs and finally into four themes.

Results: 1. Cancer is a lethal threat — Death is a liberator; 2. Death can be held at bay — It is possible to live close to death; 3. Dying is done alone — No one should have to die alone; 4. Life has an end — Life is endless. Characteristic of the main beliefs was that they were oscillating between seemingly contrasting poles. As an example, cancer was described as a lethal threat, and the family members endeavored to hold it at bay at the same time as they believed that death was a liberator. Family members shared the belief that the woman’s sister’s care, were food was important, and the woman’s will to live could keep death at bay. This at the same time as some of them also held the belief that euthanasia saving them from the threat, the waiting and agonizing over death. Some beliefs were shared by all family members, while others were described by only one or several of them.

Conclusion: Oscillating between the partially contrasting beliefs may have been a way for the family to manage daily life. The complexity of daily life underlines the importance of individualized care with openness and flexibility as guiding principles.

Impact of symptom burden on quality of life of cancer survivors in a Danish cancer rehabilitation program: a longitudinal study

Background: Although cancer-related symptoms contribute to quality of life, they do not determine it, and results obtained with instruments for measuring generic quality of life might be more influenced by factors that are not directly related to the disease or its treatment than measures of symptom burden. Little research has been conducted on the effect of self-reported rating of symptom severity on quality of life.

Material and methods: To examine the prevalence of symptoms and the relationship between self-reported symptom severity and advanced stage of cancer and quality of life (QoL), in cancer survivors, a questionnaire including the EORTC QLQ-C30 was completed by 2486 survivors participating in a rehabilitation program at baseline and at 12 months’ follow-up. We used multivariate linear regression models to evaluate the association between the dichotomous variables for perceived severity (high vs low) and cancer stage (high vs low), with adjustment for age, gender, education and time since diagnosis.

Results: Participants with cancers at all sites reported high frequencies of symptoms. Significantly poorer QoL including physical, emotional, cognitive, and social functioning were observed for participants who reported more symptoms and rated the symptoms as severe when compared with those who considered their symptoms to be supportable. This perception persisted for 12 months for participants with cancers of the breast, cervix, ovary or lungs or with lymphomas, although not all reached significance. No clear pattern emerged with regard to stage of cancer.

Discussion and conclusions: Cancer survivors, irrespective of cancer site, experience a high burden of symptoms. For all sites, self-reported severity of symptoms negatively affected the long-term QoL, including physical, emotional, cognitive, and social functioning.

Key words: Cancer; symptom burden, quality of life
Background. During the last decades it has been possible to detect some kinds of cancer at a very early stage and treatment for most kinds of cancer has improved dramatically resulting in less traumatic side effects and better survival. In DK, since the 1990es increasing effort has been put into regulations and public initiatives helping chronically ill persons to remain in or to return to regular employment.

Consequently, beside a higher survival rate, it is expected that at the same time an increasing number of cancer patients are able to remain at the labour market. However, whether this is the case, has not been investigated properly. Moreover, it is unclear if social groups differently gained from this development. Several investigations show that in lower social classes, cancer is detected, diagnosed and treated at a later stage, and compared to higher social groups treatment outcome is worse as well. This might also result in worse employment prospects.

Aim. The aim of the study is to describe the secular trend of labour market attachment among patients with cancer at the following sites: mamma, colon, rectum and skin. We will look at the following labor market positions: employment, unemployment and early retirement. We will describe the trend over time among cancer patients stratified by social group using the total population as reference group.

Material and methods. We will use information from the Danish cancer register and from the 100 pct register at Statistics Denmark. The Danish cancer register goes back to 1943 and the 100pct register only to 1980. However, we have register information on employment for the five-year period 1970-1975 and 1975-1980 and will therefore be able to look at the trend in employment rates during the years 1970-2008. Cancer patients aged 25 to 59 years will be included as incident cases, if they are employed at the time of diagnosis, and followed until 5 years after diagnosis. To analyze social differences, we further compare employment rates between manual and non-manual occupations at the time/year of diagnosis. All rates are presented gender stratified and age-standardized. We also use regression models to calculate social differences in employment rates, measured as interaction between social class and cancer; controlled for the covariates gender, age, education, cohabitation and the severity of cancer at the time of diagnosis.

Results. We hypothesize that our results will show that employment among cancer patients has significantly increased over time. On the one hand, we expect this to be true for all social groups in DK. On the other hand, we assume that the degree of improvement has been different with respect to the different social groups, which at the same time might have resulted in increased social inequality of employment prospects.

Swedish and Icelandic parent short – and long-term psychosocial consequences after their child's cancer diagnosis.

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Objective: To determine the incidence and compare disease-related distress symptoms in Swedish and Icelandic parents of children diagnosed with cancer. Based on comparisons of the national samples we also wanted to identify nation-, site-, organizational determinants of parental reactions.

Method: 328 parents of 215 childhood cancer (CC) patients who were either in treatment or had finished treatment at one of two sites in Sweden or Iceland participated. Cancer-specific distress were assessed with the 11-dimensional Parental Psychosocial Distress in Cancer Questionnaire (PPD-C). PPD-C subscales cover: uncertainty (heightened informational needs), loss of control, self-esteem, anxiety, disease-related fear; loneliness, sleep disturbances, depression, and psychological and physical distress. General distress was assessed by the General Health Questionnaire (GHQ-12).

Results: Systematic differences were found between cancer parents of the two national sites regarding all studied dimensions of distress (PPD-C) where Icelandic parents scored significantly higher on 5 of the 11 subscales: uncertainty (p=0.000); loss of control regarding parenting the patient (p=0.007); disease-related fear (p=0.000); sleep disturbances (p=0.001); and psychological and physical distress (p=0.003). For remaining subscales of PPD-C and for GHQ outcomes were similar for the two national groups. Distress generally exceeded the level of available comparison data from non-clinical norm group.

Conclusion: Preventive measures are of significant importance for the prevention of lymphoedema among breast cancer treated patients.

The use of patient information to prevent late and long-term impairments after breast cancer treatment

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Background: Up to 74% of women treated for breast cancer suffer from late and long-term impairments occurring in the operated area or arm/shoulder. These impairments include lymphoedema, pain, sensory problems, restricted movements, muscle weakness, and phantom sensations. Preventive patient information is often insufficient.