

Copenhagen 2016

ECRS

*14th Acta Oncologica Symposium
European Cancer Rehabilitation & Survivorship Symposium 2016
19 – 20 September*

*Programme
&
Abstract Book*

Dear Symposium participant

It is with the greatest pleasure that I welcome you to the 14th Acta Oncologica Symposium, for the fourth time focused on cancer rehabilitation and survivorship research. As always taking place in Copenhagen, this time from 19 to 20 September at the Tivoli Hotel & Congress Center – our usual venue.

Due to the growing cancer survivor population, the paradigm for cancer treatment and late effect management is changing. Cancer survivors of tomorrow will face a new approach to cancer treatment, late effect surveillance and management. One may even wonder when prevention of late effects become a part of the clinic, wonder when the clinical work-out will aim at both detection of the cancer disease, setting up the specific, personalised treatment and concurrently enable the patient to withstand the global challenge, which may characterize any treatment for a cancer disease. The focus of this year's ECRS symposium is in the foot prints of our prior three symposia, that enables us to communicate, discuss and reflect on the daily practices, no matter where in the trajectory of cancer survivorship each of us work. At the ECRS symposium, we invite you to discuss physical late effects, psychosocial issues, health behaviour interventions, and to gain new ideas and insights on how to best organise care before and after treatment for patients - to improve everyday life for cancer survivors and their families.

This Symposium brings together more than 200 participants from a wealth of professional and cultural backgrounds. We are delighted to be able to offer a programme mixing world-leading plenary speakers, researchers and clinical experts, and hundred forefront presentations and posters. For those of you who were accepted for an abstract, we thank you for your work involved in preparing and presenting the abstract.

We hope that this Symposium will help all those participating to further advance the field and their own practice or field of study.

We are looking forward to meeting you during the Symposium!



Christoffer Johansen
Chair of Organising Committee

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ACTA
ONCOLOGICA

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WIFI

NAME:
Tivoli Hotel & Congress Center

PASSWORD:
tivolihotel

PROGRAMME

Monday 19 September

08.00 - 09.45	REGISTRATION AND BREAKFAST
09.45 - 10.10	WELCOME AND OPENING REMARKS - Room: Tivoli Congress Hall Christoffer Johansen , Rigshospitalet & Head of Unit, Survivorship, Danish Cancer Society Research Center, Copenhagen, Denmark Marianne Nord Hansen , President of the Danish Cancer Survivor and Late Effects Group, Copenhagen, Denmark Francesco De Lorenzo , President of the European Cancer Patient Coalition (ECPC), Brussels, Belgium
10.10 - 10.35	PLENARY SESSION 1 - Room: Tivoli Congress Hall <i>Early drug development and emerging new treatments</i> Ulrik Lassen , Rigshospitalet, Copenhagen, Denmark
10.35 - 11.00	<i>Rehabilitation of head and neck cancer survivors: needs and barriers</i> Kenneth Jensen , Aarhus University, Aarhus, Denmark
11.00 - 11.15	COFFEE / TEA
11.15 - 11.45	PLENARY SESSION 2 - Room: Tivoli Congress Hall <i>The long-term impact of cancer survivorship care plans on patient-reported outcomes and health care use</i> Lonneke van de Poll-Franse , Netherlands Comprehensive Cancer Organisation & Netherlands Cancer Institute, Amsterdam, Netherlands
11.45 - 12.15	<i>Prostate cancer patient-reported outcomes: what do we know and what is still unknown?</i> Ronald C. Chen , University of North Carolina, Chapel Hill, United States
12.15 - 13.15	LUNCH
13.15 - 14.15	PARALLEL SESSION 1 (parallel session 1A, 1B and 1C – see page 8)
14.15 - 16.00	POSTER SESSION - Room: Ground Floor Lobby
16.00 - 16.30	PLENARY SESSION 3 - Room: Tivoli Congress Hall <i>Depression and its consequences in cancer care</i> Luigi Grassi , University of Ferrara, Ferrara, Italy
16.30 - 17.00	<i>Promoting a culture of prehabilitation for the surgical cancer patient</i> Francesco Carli , McGill University, Montreal, Canada
19.00 -	Symposium dinner (optional) and poster award. Room: Tivoli Brasserie, second floor

Support



PROGRAMME

Parallel Session

Monday 19 September

13.15 - 14.15	Parallel Session 1A Room: Pjerrot Rehabilitation I <i>Chair: Isabelle Mercaert</i>	Parallel Session 1B Room: Columbine Late effects I <i>Chair: Ronald C. Chen</i>	Parallel Session 1C Room: Harlekin Follow-up programmes I <i>Chair: Marjan van den Akker</i>
13.15 - 13.30	<i>Perioperative rehabilitation in operations for lung cancer – a feasibility study (PROLUCA)</i> Jette Vibe-Petersen, Denmark	<i>The cost of survival: colorectal cancer survivors' experiences of pain</i> Amanda Drury, Ireland	<i>Priority setting in patients with cancer and comorbidities</i> Anne Beiter Arreskov, Denmark
13.30 - 13.45	<i>Rehabilitation during or after treatment for head and neck cancer patients? A randomised pilot trial</i> Jon Arne Sandmæl, Norway	<i>Urinary incontinence one year after prostatectomy among American, Norwegian and Spanish patients</i> Anne Holck Storås, Denmark	<i>Barriers and facilitators for long-term follow-up care of cancer survivors: a focus group study among Norwegian general practitioners and oncologists</i> Kari Sand, Norway
13.45 - 14.00	<i>Male coping before, during and after radiotherapy - a randomised study with follow-up among prostate cancer patients</i> Karin Dieperink, Denmark	<i>Endocrine late effects in survivors of adolescent and young adult cancer: a Danish population-based cohort study.</i> Mette Vestergaard Jensen, Denmark	<i>Health related quality of life in survivors of lymphoma treated with autologous stem cell transplantation – a national follow-up study</i> Marianne Linnsund, Norway
14.00 - 14.15	<i>What content do chronic fatigued and not chronic fatigued cancer survivors prefer in rehabilitation services?</i> Gunhild Maria Gjerset, Norway	<i>Quality of life and physical activity of rectal cancer patients who have undergone low anterior resection or abdominoperineal resection</i> Cynthia Bonhof, Netherlands	<i>Who should decide the severity of symptoms in the follow up of cancer patients? The physicians or the patients?</i> Randi Reidunsdatter, Norway

PROGRAMME

Tuesday 20 September

08.30 - 09.00	PLENARY SESSION 4 - Room: Tivoli Congress Hall <i>The poor cancer patient – how socioeconomic factors influence cancer outcomes</i> Susanne Oksbjerg Dalton , Danish Cancer Society Research Center, Copenhagen, Denmark
09.00 - 09.30	<i>Implementing patient navigation into cancer care</i> Karen Freund , Tufts University School of Medicine, Boston, United States
09.45 - 10.15	PLENARY SESSION 5 - Room: Tivoli Congress Hall <i>Sustained employability in cancer survivors: a behavioural approach</i> Saskia Duijts , VU University Medical Center & Netherlands Cancer Institute, Amsterdam, Netherlands
10.15 - 10.45	<i>Comorbidity patterns in cancer survivors in the 21st century</i> Marjan van den Akker , Maastricht University, Maastricht, Netherlands & Belgium Catholic University Leuven, Leuven, Belgium
10.45 - 11.15	COFFEE / TEA
11.15 - 12.15	PARALLEL SESSION 2 (parallel session 2A, 2B and 2C – see page 10)
12.15 - 13.15	LUNCH
13.15 - 14.15	PARALLEL SESSION 3 (parallel session 3A, 3B and 3C – see page 11)
14.15 - 14.45	COFFEE / TEA
14.45 - 15.15	PLENARY SESSION 6 - Room: Tivoli Congress Hotel <i>Including patients' relatives in communication around care: what we know and what we need to learn</i> Isabelle Merckaert , Université Libre de Bruxelles, Brussels, Belgium
15.15 - 15.45	<i>New frontiers in couple-based interventions in cancer care: refining the prescription for spousal communication</i> Hoda Badr , Mount Sinai, New York City, United States
15.45 - 16.00	<i>Perspectives</i> Christoffer Johansen , Rigshospitalet & Head of Unit, Survivorship, Danish Cancer Society Research Center, Copenhagen, Denmark

PROGRAMME

Parallel Session

Tuesday 20 September

11.15 - 12.15	Parallel Session 2A Room: Pjerrot Prehabilitation Chair: Francesco Carli	Parallel Session 2B Room: Columbine Rehabilitation II Chair: Saskia Duijts	Parallel Session 2C Room: Harlekin Relatives Chair: Hoda Badr
11.15 - 11.30	<i>Multimodal prehabilitation improves functional capacity before and after colorectal surgery for cancer: a 5-year research experience</i> Enrico Minnella, Canada	<i>Personality-related factors as moderators of the effect of Mindfulness-Based Cognitive Therapy (MBCT) on Pain in Women Treated for Breast Cancer</i> Maja Johannsen, Denmark	<i>Psychological intervention for breast cancer patients and partners in the early treatment phase. Does "one size" fits all?</i> Anne Nicolaisen, Denmark
11.30 - 11.45	<i>Multimodal prehabilitation in surgical cancer patients: the effect of weekly exercise supervision</i> Guillaume Bousquet-Dion, Canada	<i>Self-employed cancer survivors struggle with returning to work</i> Steffen Torp, Norway	<i>Sex differences in the benefits of a one-week educational program for caregivers of cancer patients in Norway</i> Mari Nilssen, Norway
11.45 - 12.00	<i>Perioperative study of exercise training (PRESET) – rationale and design of an exercise study in patients with gastro-esophageal cancer</i> Jesper Frank Christensen, Denmark	<i>Work ability in prostate cancer survivors after radical prostatectomy</i> Sigrun Dahl, Norway	<i>Risk for prescription of psychotropic drugs among partners of glioma patients: A population-based registry study</i> Maria Renée Nybro Jansson, Denmark
12.00 - 12.15	<i>SYNK: Swallowing exercises and resistance training for head and neck cancer patients during radiotherapy. A status</i> Sara Fredslund, Denmark	<i>Quality of life in long-term and very long-term cancer survivors versus population controls in Germany</i> Volker Arndt, Germany	<i>Satisfaction with sex life in sexually active couples dealing with breast cancer – a longitudinal study</i> Nina Rottmann, Denmark

PROGRAMME

Parallel Session

Tuesday 20 September

13.15 - 14.15	Parallel Session 3A Room: Pjerrot Late effects II Chair: Christoffer Johansen	Parallel Session 3B Room: Columbine Follow-up programmes II Chair: Karen Freund	Parallel Session 3C Room: Harlekin Patient-reported outcomes Chair: Susanne Oksbjerg Dalton
13.15 - 13.30	<i>Hospitalizations for somatic disease in survivors of neuroblastoma</i> Filippa Norsker, Denmark	<i>Endometrial cancer: Is the current follow-up routine essential?</i> Dorte Gilså Hansen, Denmark	<i>Unilateral breast reconstruction after mastectomy - patient satisfaction, aesthetic outcome and quality of life</i> Tine Engberg Damsgaard, Denmark
13.30 - 13.45	<i>Inflammation, metabolic parameters, fatigue and QoL in a randomized clinical trial of one-year exercise programme for prostate cancer men</i> Katarzyna Hojan, Poland	<i>Cancer survivors' preferences for follow-up care by the oncologist, general practitioner or oncology nurse: a cross-sectional PROFILES registry study</i> Nicole Ezendam, Netherlands	<i>Predictors for functional outcome and quality of life following limb sparing surgery for soft-tissue sarcomas – a national multicenter study</i> Casper Sæbye, Denmark
13.45 - 14.00	<i>Prevalence of falls and frailty in prostate cancer survivors: comparisons among current, past and non-users of androgen deprivation therapy</i> Kerri Winters-Stone, United States	<i>Follow-up after rectal cancer (FURCA) – the methodology of developing and testing a novel patient-led follow-up programme after rectal cancer</i> Ida Hovdenak Jakobsen, Denmark	<i>How will cancer survivors use survivorship care plans (SCPs)?</i> Michael Jefford, Australia
14.00 - 14.15	<i>Late effects of stereotactic body radiotherapy in frail patients with early stage non-small cell lung cancer</i> Steen Mortensen, Denmark	<i>Cancer survivors unmet needs and fear of cancer recurrence in breast cancer women at follow-up in an oncological department in Denmark</i> Mai-Britt Bjørklund Ellegaard, Denmark	<i>Long-term health-related quality of life of young adult lymphoma survivors is more impaired than in older survivors</i> Olga Husson, Netherlands

Keynote speakers

CHRISTOFFER JOHANSEN

Rigshospitalet & Danish Cancer Society Research Center, Copenhagen, Denmark
MD, PhD, DMSc

Dr Christoffer Johansen is Professor of Cancer Late Effect Research at Rigshospitalet and the Danish Cancer Society Research Center in Denmark. Dr Johansen has established a unit of researchers engaged in three dimensions of cancer research: 1) to what extent is the mind a risk factor for cancer? 2) what are the psychosocial and physiological effects of cancer treatment?, and 3) is it possible to establish new treatments of these effects? The Unit of Survivorship currently (as per February 2016) counts a total of 46 employees, including Dr Johansen as Head of the Unit, 3 program leaders, 6 senior researchers, 12 PhD students, 14 external researchers affiliated with the Unit, 6 Master students and 6 persons working with programming, project coordination and administration. Dr Johansen has published 358 papers in peer-reviewed journals (PubMed Indexed), edited 4 books, and published 12 book chapters and 63 other publications including letters for peer-reviewed journals. The H+ factor of Dr Johansen is 62 and he has a total of more than 13,000 citations (Google Scholar February 2016). Christoffer Johansen is Chairman of the ECRS 2016 in Copenhagen.

FRANCESCO CARLI

McGill University, Montreal, Canada
MD, MPhil, FRCA, FRCPC

Dr Francesco Carli is Professor of Anaesthesia at the McGill University and Associate Professor in the School of Dietetics and Human Nutrition at McGill University in Canada. Dr Carli is also senior staff anaesthesiologist at the McGill University Health Centre and Elected Member of the American Academy of anaesthesia. His research focuses on interventions to attenuate surgical stress and maintain protein balance, on prehabilitation, enhanced recovery after surgery, and on metabolic measurements to assess protein and glucose metabolism. Dr Carli has published over 200 peer-review scientific articles and 11 chapters, and has received over 50 peer and non peer-review grants.

FRANCESCO DE LORENZO

European Cancer Patient Coalition, Brussels, Belgium
MD

Dr Francesco De Lorenzo is a colon cancer survivor and Professor of Biochemistry at University Federico II Naples in Italy. He has a rich experience in cancer advocacy being the co-founder, former Vice-President and Board member of ECPC. He is also the founder and President of the Italian Association of Cancer Patients (AIMaC), Italy's first Cancer Information Service (CIS), and of the Italian Federation of Cancer Patients Organisations (FAVO). Francesco is also active in Italy's governmental network of cancer Institutes (ACC), Italy's National Cancer Plan Committee and National Volunteer Observatory of the Italian Welfare Ministry. Francesco was also engaged in Italian politics as a Member of Parliament, holding several ministerial mandates (Ministry of Health, 1989-1993).

At EU and international level, Francesco is:

- Member of the European Commission Expert Group on Cancer Control
- Permanent Member of the European Society for Medical Oncology (ESMO) Cancer Patient Working Group
- ECPC representative within CANCON, in several Work Packages
- Founding Member of the Elite Oncology Roundtable, created under the auspices of the Society for Translational Oncology - STO, from which the European Cancer Patients' Bill of Rights originated
- ECPC Board member responsible for the projects EurocanPlatform and RARECAREnet funded by the 7th Framework Programme
- Co-chair of ECPC Expert Group on Immuno-Oncology.

HODA BADR

Mount Sinai, New York City, United States
MD, PhD

Dr Hoda Badr is a Health Psychologist and Associate Professor in the Department of Oncological Sciences at the Icahn School of Medicine at Mount Sinai in the United States. Her research focuses on developing and implementing psychosocial interventions that leverage family support to improve patient and caregiver health behaviours and well-being across the cancer control continuum. Towards that end, Dr Badr has developed novel methodologies to assess and analyse patient-caregiver dynamics, and used eHealth platforms to facilitate patient/caregiver engagement with health promotion materials and dissemination. Dr Badr has been continuously extramurally funded since she earned her doctorate in 2002 from the University of Houston, and her work has been supported by the National Cancer Institute, American Cancer Society, National Institute of Dental and Craniofacial Research, and by the US Department of Defense.

ISABELLE MERCKAERT

Université Libre de Bruxelles, Brussels, Belgium
MA, PhD

Dr Isabelle Merckaert is Professor at the Université Libre de Bruxelles in Belgium, where she teaches clinical psycho-oncology. On a part-time basis, she is also engaged as a Clinical Psychologist at the Belgian cancer centre, Institut Jules Bordet in Brussels. Her two main lines of research focus on how to improve health care professional-patient communication in oncology and on how to help patients deal with their fears. She has actively participated in several research efforts dealing with the assessment of communication skills training programmes. Those programmes have centred on breaking bad news, communicating with a patient and his or her relative(s) and on how to teach entire health care teams. Dr Merckaert has also developed a group intervention on anxiety regulation for women who have been treated for breast cancer, an intervention that is currently being evaluated.

KAREN FREUND

Tufts University School of Medicine, Boston, United States
MD, MPH, AB

Dr Karen Freund is Vice Chair of Faculty Affairs and Quality Improvement in the Department of Medicine at the Tufts Medical Center and Professor of Medicine at the Tufts University School of Medicine in the United States. Her research focus is on pragmatic trials of intervention to improve cancer care and eliminate gaps in care for low income and minority patients. She is one of the leaders of the Patient Navigation Research Program funded by the U.S. National Cancer Institute, a program funded to investigate the benefit of patient navigation for patients with abnormal cancer screening tests and newly diagnosed cancer. Her work with this team has demonstrated the benefit of patient navigation to ensure timely diagnostic evaluation after abnormal cancer screening, and high quality and timely care after a cancer diagnosis. She has also conducted research to demonstrate the critical importance of stable health insurance to prevent delays during cancer care. Dr Freund currently oversees a number of training programs to support the next generation of cancer disparities researchers.

KENNETH JENSEN

Aarhus University, Aarhus, Denmark
MD, PhD

Dr Kenneth Jensen is a Consultant at the Department of Oncology at the Aarhus University in Denmark. His PhD thesis from 2006 was based on studies of side effects after radiotherapy for pharyngeal cancer. He has continuously been working with head and neck cancer patients. The themes of his continued research are the effects and consequences of radio- and chemotherapy and supportive care. Dr Jensen is presently national investigator on projects regarding the clinical benefit of intensified chemo radiotherapy, and a project regarding a new chemotherapy regime for advanced disease. He is taking part in research project regarding onco-geriatric interventions, the use of image guiding to spare critical normal structures, the development of questionnaires in relation to patient-reported outcomes, the effect of follow-up from the patients perspective and the clinical evaluation of a new analgesic substance for mucositis. He is a member of the Danish Head and Neck Cancer group DAHANCA, and Chairman of the DAHANCA Committee on treatment of recurrences. Dr Jensen has published several scientific papers on technical, observational and interventional studies on radiotherapy for head and neck cancer patients.

LONNEKE VAN DE POLL-FRANSE

Netherlands Comprehensive Cancer Organisation & Netherlands Cancer Institute, Amsterdam, Netherlands
MSc Epidemiology, PhD

Lonneke van de Poll-Franse is Professor of Cancer Epidemiology and Survivorship at the Netherlands Comprehensive Cancer Organisation and the Netherlands Cancer Institute. Her research focuses on the impact of cancer and its treatment on patient reported outcomes (symptoms, health related quality of life) during cancer survivorship. Other interests include quality of care and pharmaco-epidemiology. In 2009, she started the PROFILES (Patient Reported Outcomes Following Initial treatment and Long-term Evaluation of Survivorship) registry that combines population-based cancer registry data with patient reported outcomes. Dr van de Poll-Franse is the Principal Investigator of a cluster randomized trial that investigates the impact of a cancer Survivorship Care Plan on patient-reported outcomes. She is actively involved in several international research groups and is Chair of the EORTC QoL Group.

LUIGI GRASSI

University of Ferrara, Ferrara, Italy
MD

Dr Luigi Grassi is Professor and Chair of Psychiatry at the University of Ferrara in Italy, where he is also Dean of the Department of Bio-Medical and Specialty Surgical Sciences. In 2002, he was appointed to Chief of the University Unit of Hospital Psychiatry, Integrated Department of Mental Health and Drug Abuse, S. Anna Hospital and Health Authorities. His clinical and research interests are in the area of psycho-oncology, consultation-liaison psychiatry and psychosomatic medicine, with particular reference to the cultural aspects of cancer in Southern European countries, and in the area of psychosocial rehabilitation in psychiatry. He has been the President of the International Psycho-Oncology Society (IPOS) (2006-2008) and the Italian Society of Psycho-Oncology (SIPO) (2003-2011) and he is currently Chair of the IPOS Federation of Psycho-Oncology Societies and of the World Psychiatric Association Section on Psycho-Oncology & Palliative Care. Dr Grassi has published 150 scientific papers published on psycho-oncology and psychiatric aspects of medical illness.

MARIANNE NORD HANSEN

Danish Cancer Survivor and Late Effects Group, Copenhagen, Denmark
Registered nurse, MSc Sociology

Marianne Nord Hansen has been President of the Danish Cancer Survivor and Late Effects Group in Denmark since 2008. Her research focuses on quality development and documentation in health care systems. The purpose of her Group is: 1) to provide help and information about late effects to cancer patient and their relatives (e.g. by seminars, networking, publications, hotline telephone and website) and 2) to promote a political, health professional and public understanding of the importance of making priority of further research in late effects, and to establish centres for the treatment of late effects. Marianne Nord Hansen is a member of the Steering Committee of the Danish Cancer Society, and she is seated in councils advising the Danish Health Authority.

MARJAN VAN DEN AKKER

Maastricht University, Maastricht, Netherlands & Belgium Catholic University Leuven, Leuven, Belgium
MSc Epidemiology, PhD

Marjan van den Akker is Associate Professor, appointed at the Department of Family Medicine of Maastricht University in the Netherlands and the Academic Center of General Practice of The Catholic University Leuven in Belgium. Her research focuses on the conceptualization, methodological innovation and analysis of comorbidity, multimorbidity and polypharmacy, psychosocial profiles in longitudinal perspective as well as on the well-being of older cancer patients. Furthermore, Dr van den Akker is the coordinator of the Registration Network Family Practices of Maastricht University, a primary care based registration containing health information of more than 120,000 patients.

RONALD C. CHEN

University of North Carolina, Chapel Hill, United States
MD, MPH

Dr Chen is Associate Professor at the University of North Carolina at Chapel Hill in the United States. He is a radiation oncologist who specializes in the care of genitourinary cancer patients (including prostate and bladder cancers), and a health services researcher with expertise in patient-reported outcomes and survivorship. He has headed a publication with the US National Cancer Institute to standardize patient-reported outcomes measurement in prostate cancer clinical trials. He also serves

as an investigator leading patient-reported outcomes endpoints in several developing and ongoing U.S. and international clinical trials in genitourinary cancers. Dr Chen serves on the editorial boards of the Journal of Clinical Oncology; Urologic Oncology: Seminars and Original Investigations; and Practical Radiation Oncology.

SASKIA DUIJTS

VU University Medical Center & Netherlands Cancer Institute, Amsterdam, Netherlands
MSc Epidemiology PhD

Saskia Duijts is a Senior Researcher at the VU University Medical Center and the Netherlands Cancer Institute, both in the Netherlands. Her main research interest concerns “cancer and work”, for which she also received a fellowship from the Dutch Cancer Society in 2014. Her interest is not only related to the return to work process of cancer patients, but also to the period beyond their return to work. A high percentage of patients is able to return to work, but experiences show that people receive inadequate support at work. Therefore, her current research involves a look at new ways to help patients return to work and continue working, exploring for example the role of behavioural determinants, the communication between patients and medical specialists, occupational/insurance physicians and employers/colleagues. Her aim is to personalize work-related support, since it is expected that only a tailored approach will meet the needs of both patients and the labour market. Dr Duijts is the editor-in-chief of the Dutch Journal of Psychosocial Oncology and Associate Editor of the European Journal of Cancer Care. She is a board member of the Dutch Association for Psychosocial Oncology and a member of several working committees within this Association.

SUSANNE OKSBJERG DALTON

Danish Cancer Society Research Center, Copenhagen, Denmark
MD, PhD

Dr Susanne Dalton applies population-based epidemiological research methods to the study of social inequality in cancer outcomes. Since 2012, she has been head of the Research Group ‘Social Inequality in Survivorship’ at the Danish Cancer Society Research Center in Denmark. Researchers in her Group combine medical, public health and molecular biology methodology and utilize data from health registries, surveys and biological samples for their epidemiological research. She coordinated the first Danish study on socioeconomic factors and the 21 most common cancers and has since then been focused on identifying factors that can explain social inequalities, not only in terms of mortality but also with regard to access to treatment and possibilities to return to work. Another important research area include the study of somatic, psychiatric and social consequences of cancer. In particular, she has brought attention to the large proportion of cancer patients who develop depression. This is done by using objective measures of both exposure and outcome, and by enabling the investigation of vulnerable groups of cancer patients in order to inform development of targeted interventions. Susanne Dalton has been involved in the conduction and reporting of several psychosocial interventions studies and a number of ongoing RCTs targeted to vulnerable groups of cancer patients, these constitute the third focus area of her research. Dr Dalton graduated as a MD in 1998 and received her PhD in 2002. She has published 138 peer-reviewed papers in international scientific journals.

Plenary Sessions

Plenary Sessions

Plenary session 1

-
EARLY DRUG DEVELOPMENT AND EMERGING NEW TREATMENTS
REHABILITATION OF HEAD AND NECK CANCER SURVIVORS: NEEDS AND BARRIERS

Plenary session 2

-
THE LONG-TERM IMPACT OF CANCER SURVIVORSHIP CARE PLANS ON PATIENT-REPORTED OUTCOMES AND HEALTH CARE USE
PROSTATE CANCER PATIENT-REPORTED OUTCOMES: WHAT DO WE KNOW AND WHAT IS STILL UNKNOWN?

Plenary session 3

-
DEPRESSIVE DISORDERS SPECTRUM IN CANCER: SCREENING, DIAGNOSIS AND INTERVENTION
PROMOTING A CULTURE OF PREHABILITATION FOR THE SURGICAL CANCER PATIENT

Plenary session 4

-
THE POOR CANCER PATIENT – HOW SOCIOECONOMIC FACTORS INFLUENCE CANCER OUTCOMES
IMPLEMENTING PATIENT NAVIGATION INTO CANCER CARE

Plenary session 5

-
SUSTAINED EMPLOYABILITY IN CANCER SURVIVORS: A BEHAVIOURAL
APPROACH COMORBIDITY PATTERNS IN CANCER SURVIVORS IN THE 21ST CENTURY

Plenary session 6

-
INCLUDING PATIENTS' RELATIVES IN COMMUNICATION AROUND CARE: WHAT WE KNOW AND THAT WE NEED TO LEARN
NEW FRONTIERS IN COUPLE-BASED INTERVENTIONS IN CANCER CARE: REFINING THE PRESCRIPTION FOR SPOUSAL COMMUNICATION

Plenary session 1

EARLY DRUG DEVELOPMENT AND EMERGING NEW TREATMENTS

Ulrik Lassen

Rigshospitalet, Copenhagen, Denmark

Patients referred for phase 1 oncology trials have exhausted all conventional treatment options, as this is a strict inclusion criteria. The majority of patients have advanced disease and carry a variety of complex symptoms and perhaps some sequelae after prior therapy. The patients are also required to have a favourable performance status of PS 0 or 1. Therefore, most patients are within a narrow window before deterioration, driven by hope, and perhaps not motivated for palliative treatment.

Dealing with these patients is difficult. The evaluation of side effect and safety is the primary endpoint of phase 1 trials, and the patients must spend more time in the clinic for investigations, compared to prior standard therapy. In addition, the patients undergo many examinations and blood sampling for pharmacokinetic, - dynamic and –genomic analyses. So participating in phase 1 trials is time consuming and may be cumbersome. The identification of the right patients for this is delicate: who should be included and who should be referred for palliation.

The Phase 1 Units are the resort for the patient, and it is necessary to be devoted to giving the best supportive care on one side and the active treatment on the other side. It is often a matter of precision to choose the right moment to introduce more specialized palliative initiatives, when it becomes apparent that the study drug is not active, and at the same time be able to discriminate between progressive disease related symptoms and study drug related adverse events.

More than 300 patients are referred to the Phase 1 Unit at Rigshospitalet, Copenhagen, every year. As part of our CoPPO program patients with PS 0-1 and lesions accessible for biopsy are offered DNA- and RNA sequencing, SNP-array and RNA expression array after informed consent. This is used to allocate patients to appropriate early phase cancer trials based on specific molecular features within the scope of precision medicine.

REHABILITATION OF HEAD AND NECK CANCER SURVIVORS: NEEDS AND BARRIERS

Kenneth Jensen

Aarhus University, Aarhus, Denmark

Head and neck cancer is a life threatening disease and the intense loco-regional treatment often leads to severe side effects: Eating, breathing, appearance, and senses are all at risk and the consequences of specific side effects include fatigue, social isolation, depression and loss of income. Head and neck cancer is induced either by HPV infection or occupational exposures; risk factors fairly equally distributed in society, or induced by smoking and drinking; risk factors among patients that also often has socio-economic problems, poor work market affiliation and short education before treatment. The need for rehabilitation is obvious, but consistent, high quality evidence is sparse in both science and clinical practice: Non-participation, poor compliance, the degree and complexity of the problems and the relevant endpoints are all barriers for an evidence based approach and will be exemplified and discussed.

Plenary session 2

THE LONG-TERM IMPACT OF CANCER SURVIVORSHIP CARE PLANS ON PATIENT-REPORTED OUTCOMES AND HEALTH CARE USE

Lonneke van de Poll-Franse^{1,2}

¹ Netherlands Comprehensive Care Organisation, Amsterdam, Netherlands

² Netherlands Cancer Institute, Amsterdam, Netherlands

BACKGROUND: To help the growing number of cancer survivors deal with the challenges of cancer survivorship, Survivorship Care Plans (SCPs) were recommended by the Institute of Medicine (IOM) in 2006. The SCP is a formal document that contains both a tailored treatment summary and a follow-up care plan. Since the IOM recommendation 10 years ago, the implementation in daily clinical practice is minimal. Several studies have investigated the effects of SCPs on patient reported outcomes and oncology and primary care providers (PCPs), but the quantity and quality of these studies are limited.

RESULTS: The first 4 randomized trials comparing SCP delivery with usual care failed to show a positive effect on satisfaction

with information provision, satisfaction with care, distress, or quality of life. SCPs did improve the amount of information provided and communication of PCPs with medical specialists and patients. A recent small trial that changed the focus from SCP as primarily an information delivery intervention to a behavioral intervention did observe positive effects on self-reported health, lower social role limitations, and a trend towards greater self-efficacy. Gaps in knowledge about SCPs include uncertainty about content and length of the SCP; whether it should be delivered online or on paper; the timing and frequency of delivery; which health care providers should deliver SCP care. Finally, cost-effectiveness of SCP interventions has received limited attention.

CONCLUSION: Currently, there is not enough evidence to warrant large-scale implementation of SCPs, or to abandon SCPs altogether. Emphasis on the SCP process and survivor engagement, supporting self-management may be an important way forward in SCP delivery. Whether this is beneficial and cost-effective on the long-term and among different groups of cancer survivors needs further investigation.

PROSTATE CANCER PATIENT-REPORTED OUTCOMES: WHAT DO WE KNOW AND WHAT IS STILL UNKNOWN?

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Patient-reported outcomes (PROs) play a central role in helping early prostate cancer patients decide among the treatment options available to them. Recognition of the importance of PROs has led to the development of validated instruments, and an accumulating body of literature describing the impact of surgical and radiation treatments on patient-reported sexual, urinary and bowel symptoms in prostate cancer survivors.

This presentation will review select published studies to demonstrate the current state of knowledge on patient-reported outcomes in prostate cancer, and discuss additional research directions, which can further help inform prostate cancer patients and survivors today and in the future.

Plenary session 3

DEPRESSIVE DISORDERS SPECTRUM IN CANCER: SCREENING, DIAGNOSIS AND INTERVENTION

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BACKGROUND: Depressive and mood-related disorders are common in people with cancer. Yet, the presence of depression in this population is often not easy to detect in clinical practice due to several causes (e.g. overlap between diagnostic symptoms of depression and those caused by the medical condition, different tools used in research and clinical practice, inconsistency of some diagnosis, such as adjustment disorders). Negative consequences of depressive disorder spectrum have been reported (e.g. suicide ideation, increase of subjective experience of physical symptoms, possible influence on prognosis) indicating the need for routine screening, assessment and intervention.

METHODS: A search of the major databases (MEDLINE, Embase, PsycLIT, PsycINFO, and the Cochrane Library) was conducted in order to summarize relevant data concerning depressive disorders spectrum (including demoralization) among cancer patients across the trajectory of the disease.

RESULTS: The data of this review indicates a prevalence of depression and depressive disorders between 5 % to 60 % according to the different diagnostic characterization (e.g. major depression, minor depression, adjustment disorders with depressed mood, demoralization) and the tools used in the studies (e.g. semi-structured psychiatric interview, psychometric questionnaires). Furthermore, despite the significant health care resources devoted to cancer care and the importance of addressing depressive symptoms, treatment of mood-related disorders in cancer patients remains often suboptimal.

CONCLUSIONS: Routine screening, adequate assessment and treatment of depression and mood-related disorders is necessary in cancer patients in order to achieve an integrated and effective approach to depression and its multifaceted and complex consequences on cancer care.

PROMOTING A CULTURE OF PREHABILITATION FOR THE SURGICAL CANCER PATIENT

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Surgical resection of cancer remains the most common therapeutic intervention to treat cancer. However, the outcome for many surgical cancer patients remains suboptimal either as a result of preoperative risk factors such as poor nutritional status, frailty and comorbidities or perioperative complications which delay the recovery process.

Traditional approach to perioperative care has focused on the postoperative period as the time for intervention to facilitate the return to presurgical baseline conditions. However there is some realization that the preoperative period can be a very effective time for intervention as the patients are more amenable to intervene to optimize their physiological conditions and be prepared to overcome the metabolic cost of the stress of surgery.

Thus, surgical prehabilitation becomes an opportune time for clinical and pharmacological preparation, together with physical, nutritional and psychological interventions. The role of procedure-specific, evidence based, personalized, structured programs, which include physical exercise, nutritional counselling and supplements, and psychological strategies to allay anxiety, together with medical optimization, are addressed in the context of a multidisciplinary approach whereby all the stakeholders involved in surgical and medical oncological care come forward. Preliminary published evidence suggests that multimodal prehabilitation enhances functional capacity and facilitates earlier return to daily activities. The ultimate goal is to provide the cancer patients with the necessary elements to overcome the burden of cancer treatment and improve their quality of life. This review provides the groundwork for further research on how to optimize patients with cancer who are scheduled for surgical resection, facilitate the recovery process and prepare them to overcome the impairments of further cancer treatment.

Plenary session 4

THE POOR CANCER PATIENT – HOW SOCIOECONOMIC FACTORS INFLUENCE CANCER OUTCOMES

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Socioeconomic position is a multidimensional construct encompassing economic resources, knowledge and skills and social standing. Through the last decade or so, evidence has documented how socioeconomic differences occur both in terms of cancer incidence as well as in cancer survival and other outcomes. Through this talk, I will summarize what we know about who are at risk of what cancers and what might lie behind these incidence patterns by socioeconomic position and discuss if some cancers in the future increasingly might be seen as a ‘social disease’. Further, I will discuss the socioeconomic gradient in survival after most cancers and the possible explanations for these disparities, i.e. systematic differences in stage, access to optimal and appropriate treatment as well as time to receipt of treatment. Not only in survival do we see disparities favoring the socioeconomic stronger patients, similar associations are observed in terms of return to work and access to rehabilitation services – and even if research remains sparse, we might expect that inequality also exists in symptoms and quality of life among cancer survivors. Patients who have less education, lower income and who live alone systematically fare worse than socioeconomic more advantaged patients do. How can these social differences best be addressed by the health care system? We need to understand these differences and the reasons for them in order to develop feasible and realistic interventions to support cancer patients through an often complex and confusing cancer treatment and survivorship. In the busy clinical health care system, where resources are sparse and where time is usually short – how do we ensure that we organize and deliver health care both through primary cancer treatment, rehabilitation and survivorship?

IMPLEMENTING PATIENT NAVIGATION INTO CANCER CARE

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Patient navigation refers to a new direct patient care role that link clinical providers with the patient and their support system and provides individualized support during cancer care, ensuring that patients have access to the knowledge and resources to complete recommended treatment. While most reports have studied the role of patient navigators during the cancer screening or diagnostic process, emerging evidence indicates the benefits of patient navigation during active cancer treatment.

The Patient Navigation Research Program has reported on 2105 patients from the time of cancer diagnosis through initiation of their first cancer treatment. The trial demonstrated that a reduction in delays in care after 90 days for patient navigation compared with usual care, with an adjusted hazards ratio of 1.43 (95 % CI 1.10, 1.86). When looking specifically at women with breast cancer, there was evidence of improvements in use of hormone therapy for hormone receptor positive tumors (aOR 1.73, 95 % CI 1.19, 2.53).

Other reports in the literature are conflicting on the impact of patient navigation during cancer care, and unable to demonstrate the benefits to timely or quality care in all populations. Recent sub-analyses of the Patient Navigation Research Program Data demonstrated specifically the benefits when targeting patient navigation to the most vulnerable populations, including those with low educational attainment, low income and unstable housing, less social support, multiple comorbidities and minority race/ethnicity. Metaregression of the overall trial findings indicated that patient navigation demonstrated its benefit in populations with documented delays and gaps in care.

The implications of the Patient Navigation Research Program is that this resource is best utilized when directed to support the care of patients at locations with known challenges to timely care, and for specific patients with risk factors for delays in care, including comorbidities, low educational attainment and low income.

Plenary session 5

SUSTAINED EMPLOYABILITY IN CANCER SURVIVORS: A BEHAVIOURAL APPROACH

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In Europe, 50 % of the 3.5 million new cancer cases per year are of working age at time of diagnosis. Approximately two third of them are able to return to work (RTW) within the first year. In the last decades, numerous cohort studies have been conducted, in which socio-demographic, disease- and work-related factors have been identified to influence RTW in cancer survivors. Based on these factors, various intervention programs have been developed to support cancer survivors in their vocational rehabilitation. However, the proportions experiencing long-term sick leave, receiving work disability benefits or becoming unemployed, are still much higher in cancer survivors than in the general population of the same age. In non-cancer populations, behavioural factors, such as a positive attitude towards work, high social support and self-efficacy, have been found to positively affect RTW. However, when exploring studies on RTW and sustained employability in cancer survivors, there is a lack of information regarding such behavioural determinants for RTW. In this plenary presentation, results from a number of current studies on cancer, work and behaviour will be discussed. For example, in a recent explorative review, a plea was made in favour of using behavioural models in the development of work-related interventions for cancer survivors. In a qualitative interview study, the impact of applying an active coping strategy on the ability to deal with work-related difficulties was revealed. In a longitudinal cohort study, the role of the expectation of being at work on future employment status in survivors was highlighted. Finally, in another longitudinal study, the influence of self-perceived work ability on work continuation in occupationally active cancer survivors was discovered. In future studies, it is essential to take behavioural factors into account when developing interventions to support survivors’ return to the labour market and their continuation at work.

COMORBIDITY PATTERNS IN CANCER SURVIVORS IN THE 21ST CENTURY

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The number of cancer survivors is taking a steep rise, due to improved diagnostic and treatment. At the same time the prevalence of many other chronic diseases is rising, especially in the older population. Also among (older) patients with cancer the number of co-occurring diseases – both at the time of diagnosis and afterwards – is increasing. This has serious consequences for the patient, informal caregivers, the health care system and society at large.

The diversity of clinical and epidemiological studies in this area is hampering a clear overview. Study populations are diverse, with regard to age groups and type(s) of cancer. Tools used to measure comorbidity can be patient-reported, physician-reported, registration-based, or can use administrative databases. The number of diseases studied varies from about 8 to over 50. Finally, a relevant difference between studies is the time perspective, with some studies distinguishing between diseases known before the diagnosis and those diagnosed subsequent to the cancer diagnosis, some reporting point prevalence (e.g. on average 10 years after diagnosis) and others not exactly specifying time related issues.

On an aggregated level comorbidity can be presented using the Charlson Comorbidity Index (CCI). Looking at breast cancer survivors a CCI of 3+ is reported in 9 % to over 30 % of patients. In patients diagnosed with lung cancer or colorectal cancer, we find indications of higher CCI scores. Looking at comorbidity around the time of cancer diagnosis, the most frequent diagnoses are diabetes, cardiovascular diseases, COPD and osteoarthritis; a very similar pattern is found in age-matched controls without a diagnosis of cancer. Comparing disease patterns subsequent to cancer diagnosis, patients with cancer seem to be at increased risk for venous thrombosis and diabetes, but may be at lower risk for myocardial infarction, hypertension, lipid disorders and benign prostate hypertrophy.

Plenary session 6

INCLUDING PATIENTS' RELATIVES IN COMMUNICATION AROUND CARE: WHAT WE KNOW AND THAT WE NEED TO LEARN

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Relatives are omnipresent throughout the cancer trajectory starting with the cancer diagnosis consultation. Relatives commonly accompany cancer patients to physician consultations, increasing the complexity of the resultant communication. Relatives can provide important collaborative history, support and advocate for their loved one, as well as have their own needs addressed. Relatives may also desire to protect their loved ones, and challenges arise if they invite the clinician to collude in keeping secrets. Optimally including relatives in an interview is a complex task. Specific skills – for instance, asking permission, using circular questions and offering summaries – can enrich triadic communication. When breaking bad news, strategies for three-person consultations that have been used in communication skills training deliver benefits to both patients and their relatives.

The aim of this talk is to underline the difficulties encountered by relatives when they accompany patients during the illness trajectory and the role that they often play as a complementary source of information as regards patients' psychological and physical wellbeing. It will then discuss relatives' place in the interview in general and in breaking bad news consultations in particular, and the consequences of this presence on health care professionals' communication. A three-phase model of breaking bad news while integrating the relatives in the exchanges will be described. Finally, this talk will discuss what we know now about training health care professionals to better include patient's relatives in communication around care. The successful accomplishment of three-person interviews is one hallmark of the mature clinician. It requires skills and time but can certainly promote optimal patient care.

NEW FRONTIERS IN COUPLE-BASED INTERVENTIONS IN CANCER CARE: REFINING THE PRESCRIPTION FOR SPOUSAL COMMUNICATION

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The diagnosis and treatment of cancer is a life-altering experience that signals profound changes in a person's life. However, most people do not experience cancer in isolation or cope alone. Despite the fact that partners (i.e., spouses, significant others) provide emotional support and play a critical role in caregiving, cancer exacts a heavy toll on them and challenges their relationship with the patient by altering established communication patterns and roles. In recognition of this, a burgeoning literature involving couple-based interventions to improve patient and partner quality of life and adaptation has emerged. However, questions remain regarding how we can improve these interventions to exact greater impact on patient and caregiver outcomes. Most interventions include a communication skills training component because communication is an important process through which couples make sense of cancer, engage in social support, negotiate role changes, and coordinate coping responses. However, scholars still know very little about what they should instruct couples to talk about, how often they should talk, and when talking (or not talking) is beneficial (and for whom – the patient, partner, or both). Thus, one way to bolster the impact of couple-based interventions in cancer may be to refine the prescription for communication. Toward that end, this narrative review seeks to advance our understanding of couples' communication processes in cancer by describing the current state of the literature, identifying key knowledge gaps, and positing new directions for future research.

Parallel Sessions

Parallel session 1A

PREHABILITATION I

Parallel session 1B

LATE EFFECTS I

Parallel session 1C

FOLLOW-UP PROGRAMMES

Parallel Sessions

Parallel session 1A

REHABILITATION I

PERIOPERATIVE REHABILITATION IN OPERATIONS FOR LUNG CANCER – A FEASIBILITY STUDY (PROLUCA)

REHABILITATION DURING OR AFTER TREATMENT FOR HEAD AND NECK CANCER PATIENTS? A RANDOMISED PILOT TRIAL

MALE COPING BEFORE, DURING AND AFTER RADIOTHERAPY - A RANDOMISED STUDY WITH FOLLOW-UP AMONG PROSTATE CANCER PATIENTS

WHAT CONTENT DO CHRONIC FATIGUED AND NOT CHRONIC FATIGUED CANCER SURVIVORS PREFER IN REHABILITATION SERVICES?

Parallel session 1B

LATE EFFECTS I

THE COST OF SURVIVAL: COLORECTAL CANCER SURVIVORS' EXPERIENCES OF PAIN

URINARY INCONTINENCE ONE YEAR AFTER PROSTATECTOMY AMONG AMERICAN, NORWEGIAN AND SPANISH PATIENTS

ENDOCRINE LATE EFFECTS IN SURVIVORS OF ADOLESCENT AND YOUNG ADULT CANCER: A DANISH POPULATION-BASED COHORT STUDY

QUALITY OF LIFE AND PHYSICAL ACTIVITY OF RECTAL CANCER PATIENTS WHO HAVE UNDERGONE LOW ANTERIOR RESECTION OR ABDOMINOPERINEAL RESECTION

Parallel session 1C

FOLLOW-UP PROGRAMMES

PRIORITY SETTING IN PATIENTS WITH CANCER AND COMORBIDITIES

BARRIERS AND FACILITATORS FOR LONG-TERM FOLLOW-UP CARE OF CANCER SURVIVORS: A FOCUS GROUP STUDY AMONG NORWEGIAN GENERAL PRACTITIONERS AND ONCOLOGISTS

HEALTH RELATED QUALITY OF LIFE IN SURVIVORS OF LYMPHOMA TREATED WITH AUTOLOGOUS STEM CELL TRANSPLANTATION – A NATIONAL FOLLOW-UP STUDY

WHO SHOULD DECIDE THE SEVERITY OF SYMPTOMS IN THE FOLLOW-UP OF CANCER PATIENTS? THE PHYSICIANS OR THE PATIENTS?

Rehabilitation I

ABSTRACT NUMBER: PS1A.1
ABSTRACT TYPE: PARALLEL SESSION

PERIOPERATIVE REHABILITATION IN OPERATIONS FOR LUNG CANCER – A FEASIBILITY STUDY (PROLUCA)

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BACKGROUND: Surgical resection in patients with non-small cell lung cancer (NSCLC) may be associated with significant morbidity, functional limitations and decreased Quality Of Life (QOL).

AIMS: The safety and the feasibility of a preoperative and early postoperative rehabilitation program in patients operated for NSCLC is determined in a non-hospital setting, with focus on high intensive exercise.

METHODS: 40 patients with histologically or cytologically confirmed NSCLC in disease stage I-IIIa, referred for surgical resection at Department of Cardiothoracic Surgery RT, Rigshospitalet, were randomly assigned to one of four groups (three intervention groups and one control group). The preoperative intervention consisted of a home-based exercise program. The postoperative rehabilitation program comprised a supervised group exercise program involving resistance and high intensity interval cardiorespiratory training 2 hours weekly for 12 weeks combined with individual counselling. The study endpoints were inclusion rate, number of adverse events and exercise intensity.

RESULTS: 40 patients of 124 screened were included and randomized into the four groups. The postoperative exercise was completed by 73 %. No adverse events were observed, indicating that the early postoperative exercise program is safe. The mean intensity of the strength exercise was 67 % (SD 20, chest press) and 69 % (SD 22, leg press) of 1RM during the intervention. The intensity of the cardiorespiratory exercise was for the first four weeks 74 % (SD 8) of maximum heart rate and for the last eight weeks 77 % (SD 4) of maximum heart rate. The preoperative home-based exercise was not feasible due to interfering diagnostic procedures and fast-track surgery leaving only 1-2 weeks between diagnosis and surgery.

CONCLUSION: Early postoperative rehabilitation for patients with NSCLC is safe and feasible, and the patients completed the cardiovascular training with the average intensity planned. In a fast-track set up, preoperative home-based exercise programs are not feasible in this population.

ABSTRACT NUMBER: PS1A.2
ABSTRACT TYPE: PARALLEL SESSION

REHABILITATION DURING OR AFTER TREATMENT FOR HEAD AND NECK CANCER PATIENTS? A RANDOMISED PILOT TRIAL

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BACKGROUND: The aim was to explore whether patients with head and neck cancer (HNC) are willing and able to participate in rehabilitation during and after treatment.

METHODS: A two-armed randomised controlled trial. Patients diagnosed with HNC receiving curative radiotherapy (RT) (+/- chemotherapy) were eligible for inclusion over a one year period. The patients were allocated to early rehabilitation during RT or delayed rehabilitation after RT. The early rehabilitation was conducted in a training facility at the hospital for 6 weeks. The delayed rehabilitation was initiated 4 weeks after ended RT at a rehabilitation centre. The interventions consisted of progressive resistance training, nutritional counselling and 2 decilitre daily of oral nutritional supplements (ONS). Recruitment rates, attendance, compliance and dropout were registered and compared. The study is still ongoing.

RESULTS: 50 patients were eligible for inclusion and 41 patients agreed to participate (82 % recruitment rate). 20 patients were allocated to early rehabilitation and 21 patients to delayed rehabilitation. All patients allocated for early rehabilitation (n = 20) met for the initial session: 16 patients (80 %) completed at least 8 of 12 exercise sessions and 5 patients (25 %) complied with daily ONS. For delayed rehabilitation, preliminary data based on 17 patients showed that 41 % (n = 7) met at scheduled time, 41 % (n = 7) did not meet and 18 % (n = 3) had to postpone the start. The 7 patients that met at scheduled time completed 9 of 9 exercise sessions and 71 % (n = 5) complied with daily ONS.

CONCLUSION: Patients treated for HNC are willing to participate in rehabilitation, but the initiation after treatment needs to be individualised. Physical exercise seems to be a feasible intervention both during and after treatment. The use of ONS during treatment need to be closely monitored for optimal intake.

ABSTRACT NUMBER: PS1A.3
ABSTRACT TYPE: PARALLEL SESSION

MALE COPING BEFORE, DURING AND AFTER RADIOTHERAPY - A RANDOMISED STUDY WITH FOLLOW-UP AMONG PROSTATE CANCER PATIENTS

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BACKGROUND: The objective of this study was to examine self-reported male coping strategies during and after oncology treatment with radiotherapy for prostate cancer.

METHODS: In a single-centre oncology unit in Odense, Denmark, 161 prostate cancer patients treated with radiotherapy and androgen deprivation therapy were in 2010-2012 included in a randomized controlled trial. The trial examined the effect of a multidisciplinary rehabilitation program within six months of treatment consisting of two nursing counselling sessions and two sessions with a physical therapist (n = 79), or standard care (n = 82). Coping was measured before, one month and six months post-intervention and three years (follow-up) after radiotherapy by the Mini-mental adjustment to cancer scale (MiniMac). The male coping strategies towards the illness are expressed in five mental adjustment styles: Fighting Spirit, Helplessness-Hopelessness, Anxious Preoccupation, Fatalism and Cognitive Avoidance. Descriptive analysis and linear regression analysis adjusting for baseline scores were conducted.

RESULTS: Most of the mental adjustment styles remained remarkably stable during the patient trajectory except Anxious Preoccupation, which declined from before radiotherapy to follow-up in both intervention and control groups. After six months, the intervention group retained Fighting Spirit significantly (p = 0.025) compared to controls, but after three years, the differences were evened out, though with a tendency of the intervention group to have lower Cognitive Avoidance (p = 0.060). The rehabilitation program seemed to support the patients' positive adjustment style and to play down the negative adjustment styles in short term. To keep up the long-term effect, future rehabilitation programs may consider regular follow-up and involving family or municipal caregivers in the psychosocial support.

CONCLUSION: Multidisciplinary rehabilitation in irradiated PCa patients retained Fighting Spirit stable after six month of radiotherapy, but this positive coping mechanism was not present after three years.

ABSTRACT NUMBER: PS1A.4
ABSTRACT TYPE: PARALLEL SESSION

WHAT CONTENT DO CHRONIC FATIGUED AND NOT CHRONIC FATIGUED CANCER SURVIVORS PREFER IN REHABILITATION SERVICES?

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BACKGROUND: To develop targeted rehabilitation programs, knowledge on needs for content in rehabilitation services is important. The aim of the present study was to examine such needs among chronic fatigued (CF) survivors attending an inpatient educational program (IEP) as compared to not chronic fatigued (NCF) survivors.

METHODS: Cancer survivors > 18 years, diagnosed with different types of cancer within the last 10 years, and about to attend a 1-week IEP were invited to this cross-sectional study. Fatigue and needs were self-reported by the Fatigue Questionnaire and questions covering their needs for content in rehabilitation services.

RESULTS: Among 564 participants (response rate 66 %), 63 % were women, median age was 59.5 years (range 28-83), 52 % had higher education, 35 % had breast cancer, 21 % had prostate cancer, 11 % had gastrointestinal cancer and 33 % were mixed cancer diagnoses, median time since diagnosis was 12.1 months (range 2-119) and 77 % had received systemic cancer treatment. 45 % had chronic fatigue at the time of survey. Need for physical training was the most frequently reported content in rehabilitation services, followed by physiotherapy and nutrition counselling, in both CF and NCF survivors. Significantly differences were found between CF and NCF survivors regarding reported need for physical training (86 % vs. 65 %, p < 0.001), physiotherapy (71 % vs. 55 %, p < 0.001), nutrition counselling (68 % vs. 53 %, p = 0.001), consultation with; doctor (42 % vs. 34 %, p = 0.046), psychologist/psychiatrist (39 % vs. 24 %, p < 0.001) and social worker (24 % vs. 13 %, p = 0.001).

CONCLUSION: Almost half of the cancer survivors attending the IEP had CF. Most frequently preferred contents in rehabilitation services were physical training, physiotherapy and nutrition counselling, significantly more often observed in CF than NCF survivors. Educational programs for cancer survivors experiencing chronic fatigue should reflect this.

Late effects I

ABSTRACT NUMBER: PS1B.1
ABSTRACT TYPE: PARALLEL SESSION

THE COST OF SURVIVAL: COLORECTAL CANCER SURVIVORS' EXPERIENCES OF PAIN

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BACKGROUND: Following treatment for colorectal cancer (CRC), survivors' are expected to regain a reasonably good quality of life (QOL) in the long-term. However, QOL may be marred by chronic treatment side effects including pain, fatigue and depression. This mixed methods sequential explanatory design study explores CRC survivors' QOL and experiences of long-term physical and psychosocial effects in the five years following treatment.

METHODS: A purposive sample of CRC survivors (N = 304) attending hospitals and cancer support centres in the Republic of Ireland were recruited from September 2014 to January 2016. All participants returned a postal questionnaire, which included The Functional Assessment of Therapy-Colorectal (FACT-C) questionnaire, the EUROQOL Self-Rated Health Visual Analogue Scale, and symptom experience items. The study received ethical approval from appropriate bodies.

RESULTS: A total of 98 participants (32.2 %) indicated they had experienced pain or discomfort on the day of participation in the survey. Of these, more than half experienced cramps or swelling (53.1 %, n = 52), peripheral neuropathy (61.2 %, n = 60), fatigue (89.8 %, n = 88), anxiety or depression (53.1 %, n = 52) in the past week. Non-parametric tests revealed participants who reported any pain or discomfort experienced significantly poorer self-rated health, physical well-being, social/family well-being, emotional well-being, functional well-being, CRC-specific well-being, and overall QOL on the FACT-C scale compared to those who did not indicate pain. Qualitative analysis revealed that experience of pain gave rise to anxiety and fears of recurrence.

CONCLUSION: Pain was experienced by almost one-third of CRC survivors up to five years after treatment, and was associated with poorer health and QOL. Assessment and management of chronic pain must be a priority in care of CRC survivors, as it may alleviate psychosocial effects of cancer treatment. This study is funded by the Health Research Board of Ireland, grant number HPE.2014.715.

URINARY INCONTINENCE ONE YEAR AFTER PROSTATECTOMY AMONG AMERICAN, NORWEGIAN AND SPANISH PATIENTS

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BACKGROUND: Urinary incontinence (UI) is common after radical prostatectomy. However, the published incidences of UI vary considerably. We have compared the frequency of UI in patients treated in the USA, Spain, and Norway and have explored factors associated with “total control” one year after prostatectomy.

METHODS: American, Norwegian and Spanish patients answered the EPIC (26/50) questionnaire at baseline and one year after radical prostatectomy. For each patient, information about risk group, nerve-sparing procedure and socio-demographic data was available. In the descriptive analysis, dichotomization of the four urinary incontinence questions (leakage, urinary control, pad use and problem) was done according to Sanda et al. (NEJM 2008). In the multivariate analysis, the odds to achieve “total control” versus all degrees of leakage was assessed (OR (95 % CI)) among patients reporting “total control” pre-treatment.

RESULTS: In total, 1148 patients were eligible for the study (537 American, 520 Norwegian and 111 Spanish). Pre-treatment the prevalence of leakage, poor urinary control, any pad use and leaking problem was < 5 % for all three groups. One year after treatment significant inter-country differences emerged as to outcomes assessed by the four questions. In particular, more patients from Europe used pads than those from the USA. After adjusting for age, risk group and nerve-sparing procedure, multivariate analysis revealed that the ORs (95 % CI) of not recovering “total control” post treatment were 2.9 (2.2-4.0) for the Norwegian and 2.4 (1.4-4.2) for the Spanish patients compared to the American patients.

CONCLUSION: Pre-treatment most patients in all three countries reported favourable urinary function and the inter-country differences were small. However, after adjusting for factors known to affect the frequency of UI, patients with “total control” pre-treatment treated in Norway or Spain had significantly higher odds of not recovering to the same level of urinary function one year post treatment compared to the American patients.

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BACKGROUND: Survivors of adolescent and young adult cancer (AYA cancer) are at risk for a broad range of therapy-related late effects. However, late effects in this specific group of cancer survivors are understudied. In a nation-wide population-based cohort study, we aimed to investigate the lifetime risk for endocrine late effects in survivors of AYA cancer.

METHODS: In the Danish Cancer Registry, we identified 43,062 1-year survivors of cancer diagnosed at ages 15-39 years. From the Danish Civil Registration system we randomly chose 259 350 cancer free comparison subjects matched on year of birth and sex. By linkage to the National Patient Register we identified all hospital contacts for endocrine diseases (ICD-8-codes: 240-258, ICD-10-codes E01-E35 and E89). We compared observed and expected numbers of hospital contacts and calculated standardized hospitalization rate ratios (RR's) and absolute excess risks (AER's).

RESULTS: Of the AYA-cancer survivors, 3,605 (8.4 %) had at least one hospital contact for an endocrine disease, while 2406 would have been expected (RR 1.50, 95 % CI 1.45 - 0.155). RR's were highest for diagnoses of testicular hypofunction (RR 64.6), ovarian hypofunction (RR 11.8) and pituitary hypofunction (RR 9.7). Yet, the leading causes for hospital contacts were diseases of the thyroid gland, diabetes mellitus and testicular dysfunction, which constituted 39.1 %, 18.2 % and 13.3 % of total AER respectively. Survivors of leukemia were at highest risk of any endocrine disease (RR 3.7, 95% CI 2.9-4.7), while survivors of Hodgkin Lymphoma had the highest disease-specific excess risk for hypothyroidism (AER, 328).

CONCLUSION: Survivors of AYA cancer are at increased risk for endocrine diseases later in life. With these findings, we contribute with knowledge to improve the basis for patient counseling and follow-up and allow better planning of future preventive intervention and surveillance strategies.

QUALITY OF LIFE AND PHYSICAL ACTIVITY OF RECTAL CANCER PATIENTS WHO HAVE UNDERGONE LOW ANTERIOR RESECTION OR ABDOMINOPERINEAL RESECTION

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BACKGROUND: This study aimed to compare quality of life (QoL) and physical activity in patients having undergone low anterior resection (LAR) or abdominoperineal resection (APR) for rectal cancer.

METHODS AND MATERIALS: Individuals diagnosed with rectal cancer between 2000-2009 as registered by the population-based Eindhoven Cancer Registry were included. Survivors completed questionnaires on QoL (EORTC QLQ-C30), disease-specific health status (EORTC QLQ-CR38), and physical activity in 2010, 2011 and 2012.

RESULTS: Cross-sectional analyses (T1) showed that patients who had undergone an APR (n=273) reported worse physical and role functioning, a worse body image, and a higher financial impact compared to patients who had undergone a LAR (n=635). They also reported more insomnia, male sexual and stoma-related problems, but less constipation and gastrointestinal problems. Longitudinal analyses (T1-T3) were done on those who had completed at least two questionnaires. Linear mixed models showed that APR patients (n=204) reported worse physical, role, and social functioning, worse body image and sexual enjoyment, more dyspnea and male sexual problems, and less constipation, diarrhea, gastrointestinal and stoma-related problems compared to LAR patients (n=429). Also, compared to LAR patients with a permanent ostomy (n=56), APR patients reported better emotional and social functioning, better global health status/QoL and future perspective, and less stoma-related problems and nausea and vomiting. Finally, compared to LAR patients without a permanent ostomy (n=320), APR patients reported worse physical and role functioning, worse body image and sexual enjoyment, more fatigue, financial impact, and male sexual problems, but less constipation, diarrhea, and gastrointestinal problems.

CONCLUSION: 2-11 years after diagnosis, differences in quality of life between rectal cancer survivors who have undergone an APR versus LAR are still present and relatively stable across time. It seems that (acceptance of) a permanent ostomy and the LAR syndrome play an important role in the quality of life of these patients.

Follow-up programmes

PRIORITY SETTING IN PATIENTS WITH CANCER AND COMORBIDITIES

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BACKGROUND: As both the cancer incidence and the number of patients diagnosed with chronic diseases are increasing, a growing population of cancer survivors will also deal with comorbid chronic diseases. The period after completed cancer treatment, where patients are transitioning to survivorship, might be a vulnerable time. Uncertainty about health status, physical- and emotional symptoms from cancer disease and treatment, and perhaps uncertainty about which doctor to consult, might influence patients' priorities and attention to comorbidities. Some studies show that participation in regular follow-up consultations concerning comorbid chronic diseases and lifestyle are lower among cancer survivors than non-cancer patients. This could be explained by changes in the patient's priority setting or in the doctor's priority and attempt to spare the patient for further treatment burden, perhaps resulting in comorbidities falling down the agenda. The overall purpose is to explore patients' and doctors' priority settings of comorbidities in patients who have recently finished primary cancer treatment.

METHODS: The study will consist of three datasets: 1) video recordings of consultations in general practice, 2) semi-structured interviews with patients who have a chronic disease and who have recently finished primary treatment for a non-metastatic cancer, 3) semi-structured interviews with general practitioners. Video recordings will be analysed with a focus on implicit and explicit priority setting in the interaction between physician and patient. The interviews will focus on priority settings of diseases and on perspectives and focus on chronic disease after a cancer treatment.

RESULTS: The data-collection has started and results will be coming up during the next months. Conclusion: The project will contribute with suggestions on how to improve overall health and quality of life for patients who have survived primary cancer treatment for a non-metastatic cancer and who have comorbid chronic diseases.

ABSTRACT NUMBER: PS1C.2
ABSTRACT TYPE: PARALLEL SESSION

BARRIERS AND FACILITATORS FOR LONG-TERM FOLLOW-UP CARE OF CANCER SURVIVORS: A FOCUS GROUP STUDY AMONG NORWEGIAN GENERAL PRACTITIONERS AND ONCOLOGISTS

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BACKGROUND: Cancer therapy can cause persisting or late-onset health problems, late effects. At present, there is no consensus regarding the appropriate organization and content of follow-up care of cancer survivors with, or at risk for, late effects. The aim of the study is to examine oncologists' and general practitioners' views and preferences for models of long-term follow-up care of cancer survivors regarding late effects.

METHODS: We conducted qualitative, focus groups interviews with GPs and oncologists across Norway. So far, 22 oncologists and 24 GPs have participated in 10 focus groups. 6 further focus-group interviews are planned. The interviews were audio-recorded, transcribed and analysed using principles of content analysis.

RESULTS: Preliminary analysis of barriers for long-term follow-up care showed that oncologists seldom meet cancer survivors with late effects in their daily clinical practice, while GPs seldom meet the patient during his/her cancer treatment. Both groups expressed limited knowledge of late effects, available treatment for late effects and rehabilitation options. In order to facilitate better long-term follow-up care, both oncologists and GPs expressed a need for better communication between primary and specialist care. Dedicated survivorship clinics/coordinators would allow for better coordination of care between health care professionals, serve as a place to contact for information and to accumulate important knowledge regarding late effects and rehabilitation services. GPs regard themselves as the main responsible for the follow-up care, as long the oncologists provide specific procedures for follow-up care for each survivor (e.g. survivorship care passport), and the survivors themselves take responsibility for contacting health care providers when necessary.

CONCLUSION: Preliminary analysis indicates that oncologists and GPs supports a shared care model for long term follow-up of cancer survivors in Norway, a model in which the specialist and the primary care physicians have defined responsibilities in survivorship care pathways.

ABSTRACT NUMBER: PS1C.3
ABSTRACT TYPE: PARALLEL SESSION

HEALTH RELATED QUALITY OF LIFE IN SURVIVORS OF LYMPHOMA TREATED WITH AUTOLOGOUS STEM CELL TRANSPLANTATION – A NATIONAL FOLLOW-UP STUDY

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PURPOSE: The purpose was to examine health related quality of life (HRQoL) in lymphoma survivors (LSs) treated with high dose therapy with autologous stem cell transplantation (HDT-ASCT) compared to the general population, and to assess factors associated with reduced HRQoL.

METHODS: All LSs aged ≥ 18 years at HDT-ASCT in Norway from 1987-2008, and alive at the end of 2011 were eligible for this cross-sectional study performed in 2012/2013. Participants completed a questionnaire including the Short-Form36 (SF-36).

Poor HRQoL was defined as physical summary scores or mental summary scores < 40 , and good HRQoL by scores ≥ 40 . The LSs' were compared to the results of an age- and sex-matched Norwegian general population sample. Logistic regression analyses were performed to test the strength of association between independent variables and poor HRQoL among the LSs. p-values < 0.05 were considered statistically significant.

RESULTS: The sample (N = 297, response rate 74 %) contained 60 % men. Mean age at HDT-ASCT was 44 years, mean age at survey 54 years, mean follow-up time from diagnosis was 12.7 years and 41 % of the LSs had poor HRQoL. LSs with poor HRQoL had significantly longer follow-up time, lower annual family income, and included more females and smokers than the good HRQoL group. Chronic fatigue, anxiety/depression, IES-score, neuroticism and cardiovascular comorbidity were significantly higher in the poor HRQoL group. Longer follow-up time, lower family annual income, and cardiovascular comorbidity, anxiety/depression and chronic fatigue remained significantly related to poor HRQoL in the multivariable analysis. The LSs had significant poorer HRQoL compared to the general population on all SF-36 dimensions except the Role Emotional.

CONCLUSION: 41 % of the LSs had poor HRQoL, which was significantly associated with having more comorbidity, chronic fatigue and higher levels of anxiety/depression. When controlling such patients these factors should be checked and eventually treated in order to improve HRQoL.

ABSTRACT NUMBER: PS1C.4
ABSTRACT TYPE: PARALLEL SESSION

WHO SHOULD DECIDE THE SEVERITY OF SYMPTOMS IN THE FOLLOW-UP OF CANCER PATIENTS? THE PHYSICIANS OR THE PATIENTS?

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BACKGROUND: Discrepancies in perception of adverse events between patients and physicians may influence the follow-up services of cancer patients. With patient ratings as the gold standard, physicians more often underrate the symptom severities. Low interrater reliability is documented in various study designs and cancer populations. In breast cancer (BC) populations, studies of interrater agreement is deficient. In a clinical follow-up study of late effects at St. Olavs University Hospital in Norway, we evaluated the agreement between BC patients and oncologists.

METHODS: At five clinical controls during the first year after primary treatment 250 BC patients and oncologist reported symptoms by completing the EORTC QLQ-C30/QLQ-BR23 and CTCAE questionnaires, respectively. Fatigue, hot flushes, breast pain, arm pain, arm edema, breast symptoms, mood alteration and physical function were comparable and scored on a 4 point Likert scale: not at all, mild, moderate and severe. The degree of agreement was evaluated by the Kappa(κ) coefficient. McNemars test was used to test for difference in ratings between patients and oncologists.

RESULTS: Poor agreement was identified on all symptoms at all the five clinical controls; κ (SE) ranged from 0.09 (0.04) to 0.3 (0.05). The agreement decreased with increasing symptom severity. In general, the patients rated symptoms as more severe than oncologists (p < 0.01).

CONCLUSION: Discrepancies in reporting symptom severity between patients and oncologists might be due to high subjectiveness of symptoms and different understanding of the construct being measured. Personal characteristics of both raters, the context of the clinical controls and the nature of the relationship between patients and physicians may also contribute to discrepancies. Our results emphasize the importance of collecting patient reported data during follow-up after BC treatment as it may improve diagnosis and treatment of adverse effects.

Parallel Sessions

Parallel session 2A

PREHABILITATION

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Parallel Sessions

Parallel session 2A

PREHABILITATION

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MULTIMODAL PREHABILITATION IN SURGICAL CANCER PATIENTS: THE EFFECT OF WEEKLY EXERCISE SUPERVISION

PERIOPERATIVE STUDY OF EXERCISE TRAINING (PRESET) – RATIONALE AND DESIGN OF AN EXERCISE STUDY IN PATIENTS WITH GASTRO-ESOPHAGEAL CANCER

SYNK: SWALLOWING EXERCISES AND RESISTANCE TRAINING FOR HEAD AND NECK CANCER PATIENTS DURING RADIOTHERAPY. A STATUS

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REHABILITATION II

PERSONALITY-RELATED FACTORS AS MODERATORS OF THE EFFECT OF MINDFULNESS-BASED COGNITIVE THERAPY (MBCT) ON PAIN IN WOMEN TREATED FOR BREAST CANCER

SELF-EMPLOYED CANCER SURVIVORS STRUGGLE WITH RETURNING TO WORK

WORK ABILITY IN PROSTATE CANCER SURVIVORS AFTER RADICAL PROSTATECTOMY

QUALITY OF LIFE IN LONG-TERM AND VERY LONG-TERM CANCER SURVIVORS VERSUS POPULATION CONTROLS IN GERMANY

Parallel session 2C

RELATIVES

PSYCHOLOGICAL INTERVENTION FOR BREAST CANCER PATIENTS AND PARTNERS IN THE EARLY TREATMENT PHASE. DOES “ONE SIZE” FITS ALL?

SEX DIFFERENCES IN THE BENEFITS OF A ONE-WEEK EDUCATIONAL PROGRAM FOR CAREGIVERS OF CANCER PATIENTS IN NORWAY

RISK FOR PRESCRIPTION OF PSYCHOTROPIC DRUGS AMONG PARTNERS OF GLIOMA PATIENTS: A POPULATION-BASED REGISTRY STUDY

SATISFACTION WITH SEX LIFE IN SEXUALLY ACTIVE COUPLES DEALING WITH BREAST CANCER – A LONGITUDINAL STUDY

Prehabilitation

ABSTRACT NUMBER: PS2A.1
ABSTRACT TYPE: PARALLEL SESSION

MULTIMODAL PREHABILITATION IMPROVES FUNCTIONAL CAPACITY BEFORE AND AFTER COLORECTAL SURGERY FOR CANCER: A 5-YEAR RESEARCH EXPERIENCE

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BACKGROUND: Multimodal prehabilitation is a preoperative conditioning intervention in form of exercise, nutritional assessment and whey protein supplementation, and anxiety-coping technique. Despite recent evidence suggests that prehabilitation could improve functional capacity in patients undergoing colorectal surgery for cancer, all studies were characterized by relatively small sample size. The aim of this study is determine the effectiveness of prehabilitation in a larger population.

METHODS: Data of 185 participants enrolled in 3 trials conducted at the McGill University Health Centre (Montreal, Quebec, Canada) from 2010 and 2015 were reanalysed. Subjects performed prehabilitation were compared to the ones underwent the conditioning intervention only after surgery (rehabilitation group). Functional capacity was assessed with the six-minute walk test, which measures the distance walked in 6 minutes (6MWD). A significant functional improvement has been defined as an increase in 6MWD from baseline by at least 19 metres. Changes in 6MWD before surgery, at 4 weeks and at 8 weeks were compared between groups.

RESULTS: Of the total study population, 114 subjects (61 %) underwent prehabilitation, and 72 (39 %) were in the rehabilitation group. Changes in 6MWD in prehabilitation group were higher compared to the rehabilitation group during the preoperative period (30.0 (SD 46.7) metres vs. -5.8 (SD 40.1) metres, $p < 0.001$), at 4 weeks (-11.2 (SD 72) metres vs. -72.5 (SD 129) metres, $p < 0.01$), and at 8 weeks (17.0 (SD 84.0) metres vs. -8.8 (SD 74.0) metres, $p = 0.047$). The proportion of subjects experiencing a significant preoperative improvement in physical fitness was higher in the group underwent prehabilitation (68 (60 %) vs. 15 (21 %), $p < 0.001$).

CONCLUSION: In this large secondary analysis, multimodal prehabilitation has been confirmed to result in higher changes in walking capacity through all the perioperative period when compared to conditioning intervention began postoperatively.

ABSTRACT NUMBER: PS2A.2
ABSTRACT TYPE: PARALLEL SESSION

MULTIMODAL PREHABILITATION IN SURGICAL CANCER PATIENTS: THE EFFECT OF WEEKLY EXERCISE SUPERVISION

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BACKGROUND: The added effect of weekly supervision of exercise sessions in a multimodal prehabilitation program on functional exercise capacity was studied in patients undergoing colorectal resection for cancer.

METHODS: A parallel-arm single-blind randomized controlled trial was conducted in which 80 patients were randomized to receive either prehabilitation (prehab, $n = 41$) or rehabilitation (rehab, $n = 39$). Both groups received a program consisting of moderate intensity aerobic and resistance exercises, nutrition counselling with whey protein supplementation and anxiety-reduction strategies. The program was initiated either 4 weeks before surgery (prehab) or immediately after surgery (rehab) and continued postoperatively for 8 weeks. Patients allocated to the prehab intervention also came to the hospital exercise laboratory to train under the supervision of a kinesiologist weekly before surgery. Perioperative care of study participants was based on an enhanced recovery pathway (ERAS[®]). Functional exercise capacity measured with the 6-minute-walk test was the primary outcome, and physical activity energy expenditure was also recorded in kilocalories/kg/weeks using the Community Healthy Activities Model Program for Seniors (CHAMPS).

RESULTS: The prehab and the rehab groups were comparable for demographic characteristics and baseline walking capacity (respectively 485 m [IQR 375-525] vs. 481 m [419-556], $p = 0.775$). However, the prehab group tended to be older (74 years [IQR 67.5-78] vs. 71 years [54.5-74.5], $p = 0.05$). Unexpectedly, similar proportion of patients in both groups experienced a clinically meaningful walking capacity improvement (> 20 m) during the preoperative period (54 % in prehab vs. 38 % in rehab, $p = 0.222$). A significant relationship was observed between physical activity energy expenditure and effectiveness of the intervention. Sedentary patients were more likely to improve significantly their functional exercise capacity if they received prehabilitation (OR 7.07 [95 % CI 1.10-45.51]).

CONCLUSION: Functional exercise capacity did not improve to a greater extent with weekly supervision in the prehab group. Prehabilitation was especially effective in the more sedentary patients.

ABSTRACT NUMBER: PS2A.3
ABSTRACT TYPE: PARALLEL SESSION

PERIOPERATIVE STUDY OF EXERCISE TRAINING (PRESET) – RATIONALE AND DESIGN OF AN EXERCISE STUDY IN PATIENTS WITH GASTRO-ESOPHAGEAL CANCER

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BACKGROUND: Patients diagnosed with operable cancer of the gastro-esophageal junction (GEJ) undergo debilitating therapeutic procedures including major surgery combined with systemic therapies. Novel studies have found poor pre-surgical muscle function, defined as low muscle mass or strength, is a strong predictor of post-surgical complications and mortality. Thus, a strong rationale exists to explore interventions aimed at maintaining/improving muscle function across the perioperative trajectory. Against this background, the primary objective of this study is to explore the safety, feasibility, and efficacy of structured exercise in the pre- and post-operative phases among patients undergoing treatment for operable GEJ cancer.

METHODS: 40 patients will be included in this case-control pilot study and allocated by geographical region to training intervention or observational control. All patients will undergo a total of 5 assessments; twice prior to surgery (baseline and pre-surgery tests), 3 assessments post-surgery (2 week post- and 15 weeks post-surgery tests, and a 1-year follow-up test). Assessments include measures of body composition, inflammatory markers; quality of life; and physical function. In addition, biological tissues (tumour, muscle, fat, and plasma) will be sampled at diagnosis and surgery. Chemotherapy dose reduction, post-surgical complications and time to disease-progression will also be registered. The intervention-group will perform twice weekly combined aerobic and resistance training for 12 weeks before, and 12 weeks after, surgery. The control-group will follow usual care.

DISCUSSION: As the first ever exercise-study in this specific patient population, the study will provide crucial pilot data, from which a larger scaled randomized trial may be designed. The study will also present comprehensive pathophysiological and patient-reported data in order to determine prognostic value of these assessments as measures of “surgical fitness”. Furthermore, the study presents the opportunity to collect biological tissues, including tumour samples, from human subjects before and after an exercise-intervention providing important translational data linking novel discoveries in animal models to the clinical setting.

ABSTRACT NUMBER: PS2A.4
ABSTRACT TYPE: PARALLEL SESSION

SYNK: SWALLOWING EXERCISES AND RESISTANCE TRAINING FOR HEAD AND NECK CANCER PATIENTS DURING RADIOTHERAPY. A STATUS

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BACKGROUND: Traditionally, rehabilitation is initiated when loss of function is already established. Emerging evidence suggests, however, that it can be of benefit to patients to initiate an early rehabilitation process (prehabilitation) before and during treatment. Head and neck cancer (HNC) patients have a unique set of challenges to the functional level such as pre- and post-

treatment dysphagia, pain, weight loss and often high baseline levels of alcohol and tobacco consumption. The aim of SYNK is to explore the effects of swallowing exercises and progressive resistance training (PRT) during radiotherapy (RT) in patients with laryngeal-, oropharyngeal, hypopharyngeal and oral cavity cancer.

METHODS: SYNK is a randomized controlled trial with a control group that receives standard care and an intervention group that receives twice-weekly PRT and three times weekly swallowing exercises by qualified physio- and occupational therapist as well as daily home exercises throughout RT. Outcomes are measured at end-of-treatment and 2, 5 and 12 months after. Results: In 11 months, 200 HNC-patients were screened for eligibility. 60 % (n = 121) were found ineligible according to inclusion criteria, mainly due to previously treated HNC (25 %) and tumour in other sub-sites (30 %). Of 79 eligible patients, 67 (85 %) were approached of which 60 % (n = 40) were enrolled. All patients who refused did so because they found the intervention too much to overcome at the time. 37 % (n = 10) of those refusing filled out a baseline questionnaire. 15 % (n = 6) participants dropped out because training was too much to overcome (83 %) or disappointed to be in the control group (17 %). SYNK has recently expanded to another centre in a different region of Denmark. Patients who complete intervention express great appreciation towards the physical, psychological and social benefits of the exercise programme.

CONCLUSION: Preliminary results show that SYNK is feasible with the majority of eligible patients enrolling and only few dropouts. According to participant statements, it is a beneficial and highly rewarding exercise programme.

Rehabilitation II

ABSTRACT NUMBER: PS2B.1
ABSTRACT TYPE: PARALLEL SESSION

PERSONALITY-RELATED FACTORS AS MODERATORS OF THE EFFECT OF MINDFULNESS-BASED COGNITIVE THERAPY (MBCT) ON PAIN IN WOMEN TREATED FOR BREAST CANCER

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BACKGROUND: Mindfulness-Based Therapies (MBT) are efficacious in reducing psychological, such as anxiety and depression, and physical symptoms, such as pain, in cancer patients. However, little is known about moderators of the effects of MBT. Correlations have been found between factors such as adult attachment and alexithymia and mindfulness and self-compassion, both hypothesized mediators of MBT. We therefore explored adult attachment and alexithymia as possible moderators in a randomized controlled trial of Mindfulness-Based Cognitive Therapy (MBCT) for persistent pain in women treated for breast cancer (BC).

METHODS: A total of 129 women treated for primary BC at the Department of Oncology, Aarhus University Hospital, were randomly assigned to MBCT or waitlist control. Participants completed questionnaires at baseline, post-intervention, and 3 and 6 months post-intervention, including measures of pain (Short Form McGill Pain Questionnaire 2 (SF-MPQ-2), Present Pain Intensity, 11-point NRSs of pain intensity and -burden, alexithymia (Toronto Alexithymia Scale (TAS-20)), and adult attachment (Short Form Experiences in Close Relationships-Revised (SF-ECR-R)). Multilevel Models were used for main analyses, with moderation analyses conducted for statistically significant results after correction for multiple comparisons.

RESULTS: Statistically significant time×group interactions were found for pain intensity (d = 0.61, p = 0.002), the PPI (d = 0.26, p = 0.026), the SF-MPQ-2 neuropathic pain subscale (d = 0.24, p = 0.036), and SF-MPQ-2 total scores (d = 0.23, p = 0.036). When adjusting for multiple comparisons, only pain intensity remained statistically significant. Attachment avoidance, but not attachment anxiety, significantly moderated the effect of pain intensity (p = 0.03) with higher levels of avoidance predicting a larger effect of MBCT. The moderating effect of alexithymia did not reach statistical significance (p = 0.76).

CONCLUSION: Attachment avoidance may be a moderator of MBCT on pain in women treated for BC, with higher levels of avoidance predicting greater treatment gains. This may have clinical implications in terms of predicting for which patients treatment benefits are most likely to occur.

ABSTRACT NUMBER: PS2B.2
ABSTRACT TYPE: PARALLEL SESSION

SELF-EMPLOYED CANCER SURVIVORS STRUGGLE WITH RETURNING TO WORK

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BACKGROUND: Studies on cancer survivors' (CS) return to work (RTW) after cancer have mostly been performed among wage earners. RTW among self-employed CS has almost not been focused although there are big differences in these two groups' working conditions and social security benefits. It has been claimed that self-employed workers are particularly vulnerable to experiencing difficulties as a result of a cancer diagnosis. The aim of this study was therefore to investigate whether there are differences in RTW and other factors relevant for RTW among self-employed workers and wage earners after being diagnosed with cancer.

METHODS: A total of 1,343 working age CS of the ten most common invasive types of cancer for men and women in Norway completed a mailed questionnaire 15–39 months after being diagnosed with cancer. Included in the analyses were all participants who worked at time of diagnosis (N = 1,115). A total of 88 CS (8 %) reported that they were self-employed when diagnosed with cancer. We compared self-employed workers and wage earners by use of chi2 tests. Level of significance was set at 0.05. Results: A total of 22 % of the self-employed CS reported that they had not returned to work at time of survey while 15% of the wage earners had not (p = 0.09). While 9 % of the self-employed CS had received disability or early retirement pension, only 5 % had received such pension among the wage earners (p = 0.076). Compared with the wage earners, the self-employed reported significantly lower satisfaction with their overall health, lower quality of life, and lower work ability. The self-employed had also significantly more often reduced work hours and made changes in their overall work situation due to cancer. The differences between the two groups did not change in any significant when controlling for the effects of age, sex, education and work environment factors.

CONCLUSION: Compared to wage earners, self-employed workers in Norway struggle with returning to work after cancer. It seems plausible that this may be because the two groups have different work tasks, and because self-employed have lower social support at work and less legal support from the Work Environment Act and Public Health Insurance.

ABSTRACT NUMBER: PS2B.3
ABSTRACT TYPE: PARALLEL SESSION

WORK ABILITY IN PROSTATE CANCER SURVIVORS AFTER RADICAL PROSTATECTOMY

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BACKGROUND: Work related issues have rarely been an endpoint in studies among cancer patients emerging from the oncological community. We evaluated work ability in Norwegian prostate cancer patients after radical prostatectomy (RP), with particular focus on the association with post-RP urinary leakage, adjuvant or salvage pelvic radiation and/or Hormone therapy.

METHODS: The patients were 563 prostatectomized men with available medical data and all participating in the workforce. Work ability was self-reported by the Work Ability Score (WAS: Item 1 of the Work Ability Index) and categorized into: "excellent", "good" or "moderate/poor" based on the scores. Urinary leakage was defined as use of > = 1 pad (EPIC-50/26). Multinomial logistic regression analyses were applied for assessment of associations between WAS categories and selected medical variables. P-values < 0.05 were considered statistically significant

RESULTS: Urinary leakage was reported by 30 % of the patients and 18 % had received post-RP radiation therapy and/or hormone therapy. Having had such oncologic treatment was significantly associated with belonging to a poorer WAS category than "excellent" in the multivariate analysis. Patients with urinary leakage were twice as likely to belong to the "moderate/poor" WAS category than those without urinary leakage. Undergoing RP < 3 years before survey, age > 65 years and comorbidity were additional factors associated with a poorer than "excellent" WAS. Patients younger than 65 years with RP performed less than 3 years previously, with urinary leakage and post-RP oncologic treatment, had only a 21 % (95 % CI, 15-26) probability of reporting "excellent" WAS versus "moderate/poor" WAS.

QUALITY OF LIFE IN LONG-TERM AND VERY LONG-TERM CANCER SURVIVORS VERSUS POPULATION CONTROLS IN GERMANY

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BACKGROUND: With the increasing number and diversity of cancer survivors, studies of survivors' physical, emotional, and social health are of growing importance. While there is a growing body of literature on the quality of life (QOL) of cancer patients during the early years past diagnosis, less is known regarding QOL in long-term survivors (5+ years past diagnosis) and particularly in very long-term survivors (10+ years past diagnosis).

The objective of our study is (a) to compare QOL of long-term cancer survivors and population norms and (b) to assess whether any deficits in QOL of survivors observed 5-10 years past diagnosis persist beyond the 10th year past diagnosis.

METHODS: 7,012 long-term cancer survivors (5 to 16 years past diagnosis of breast, colorectal, or prostate cancer) from Germany were recruited in the context of the population-based CAESAR study and compared with 1480 population-based controls without a history of cancer. QOL was assessed with the EORTC QLQ-C30. Differences in QOL between survivors and controls were assessed via multiple regression while controlling for age, gender, education, and case mix for survivors 5-9 years past diagnosis and 10+ years separately.

RESULTS: Overall quality of life in long-term cancer survivors is comparable to population norms but specific deficits in role, emotional, cognitive, and social functioning and symptoms such as insomnia, fatigue, dyspnoea, pain and financial difficulties are more prevalent in long-term survivors 5 to 16 years past diagnosis. Detriments in quality of life persisted or even aggravated with longer time since diagnosis particularly in cancer survivors at younger ages (< 50 years).

CONCLUSION: Detriments in health-related quality of life persist over a decade and affect predominantly younger patients.

PSYCHOLOGICAL INTERVENTION FOR BREAST CANCER PATIENTS AND PARTNERS IN THE EARLY TREATMENT PHASE. DOES "ONE SIZE" FITS ALL?

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BACKGROUND: Needs of breast cancer patients and their partners varies widely in the treatment phase. We designed a psychological attachment-oriented couple intervention that should accommodate both dyadic and individual needs of both breast cancer patients and their partners in the early treatment phase. A flexible number of sessions should meet the various needs. Here we present data on needs addressed in the sessions, and how the flexible number of couple sessions functioned in the early treatment phase.

METHODS: 198 women recently diagnosed with breast cancer and their partners were randomized to the "Hand in Hand" intervention with up to eight sessions in addition to usual care (n = 102) or to usual care (n = 98). In line with the study protocol, the intervention was regarded as 'completed', if at least four sessions were conducted within five months following surgery. Reasons for cancellation of sessions and study withdrawal were registered as well as the individual and dyadic needs addressed during each session.

RESULTS: In total, 356 couple sessions were conducted. 53 of 102 couples participated in 4-8 session, 41 in 1-3 and 8 couples had no sessions. Main reasons not to reach 4-8 sessions were side effects, lack of time, not being able to cope with relationship issues or not experiencing a need for this type of intervention. Individual patient needs were addressed in 335 (94 %) sessions, individual partner needs in 310 (87 %) sessions, and dyadic needs in 328 (92 %) sessions.

CONCLUSION: As expected, the intervention addressed both individual and dyadic needs. However, only about half of the couples reached 4-8 couple sessions. The timeframe of five months gave no room for sessions later than 5 months after primary surgery and the structure of the intervention thus ended up being an example of a "one size fits all" instead of an adjustable individualized intervention.

SEX DIFFERENCES IN THE BENEFITS OF A ONE-WEEK EDUCATIONAL PROGRAM FOR CAREGIVERS OF CANCER PATIENTS IN NORWAY

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Background: There is a lack of knowledge concerning health, supportive needs and experienced benefits of educational programs (EPs) regarding partners as caregivers (CG) of cancer patients. This study was performed at the Montebello-Center, and the aims were to investigate differences between female and male CG on health at the start of a one-week EP (baseline, BL), reported needs for support at BL, and changes in health from BL to three months follow-up (F-U).

Methods: CG defined as partners of cancer patients aged > 18 years participated in a one-week EP. Questionnaires were completed at BL and three months after FU. Data on health-related quality of life (HRQoL) (SF-36 and Global QoL scale from EORTC QLQ-C30), fatigue (Fatigue Questionnaire) and needs for support were obtained.

Results: 115 CG completed questionnaires at both time points. Among them, 41 % were males and 59 % females, with mean age 60.3 years (range 31-79). At BL, female CG reported significantly poorer HRQoL on 9 of 11 subscales compared to male CG. In addition, female CG had significantly higher prevalence of chronic fatigue than male CG (31 % vs. 9 %). Female CG also more frequently reported need for support, such as group conversations with other CG, recreation stay, nutrition counselling and psychological counselling. Significant beneficial changes in HRQoL and fatigue from BL to F-U were observed among female CG regarding their role physical, general health, vitality, social functioning, mental fatigue and total fatigue. No significant changes were observed for male CG.

Conclusion: At BL female CG reported poorer HRQoL, more fatigue and higher needs for support than male CG. Based on our results at three months FU, the EP seems to be more useful for female CG than male CG.

RISK FOR PRESCRIPTION OF PSYCHOTROPIC DRUGS AMONG PARTNERS OF GLIOMA PATIENTS: A POPULATION-BASED REGISTRY STUDY

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BACKGROUND: In Denmark, 600 persons are annually diagnosed with glioma. Due to the severity of symptoms and the poor prognosis, the disease may cause severe psychological distress in the partners. We examine the risk for prescription of psychotropic drugs including antidepressant, anxiolytics and hypnotics among partners of glioma patients compared with a matched comparison cohort. Furthermore, we examine risk factors for prescription of psychotropic drugs in a sub-population of partners of glioma patients.

METHODS: In a population-based registry study, we include all partners of adults diagnosed with glioma between 1998 and 2013. For each of the glioma patients, we identify 10 partners of glioma-free persons matched on birth year and gender and partners with previous prescriptions of psychotropic medication are excluded. In Cox proportional hazard models, we estimate hazard ratios and 95 % confidence intervals for first prescription of psychotropic drugs according to the partner's glioma diagnosis. Age of the partner is included as the underlying timescale and the analyses are adjusted for comorbidity and sociodemographic factors (education, children, income, and labour market affiliation). In a sub-study among only partners of patients registered in the Danish Neurooncology Registry between 2009 and 2013, we examine associations between disease characteristics (symptomatology, epilepsy, performance status, and type of treatment), sociodemographic factors, and risk for prescription of psychotropic drugs

RESULTS: We have identified 4,373 partners of glioma patients diagnosed in 1998-2013 who are compared with 43,808 partners of glioma-free persons in ongoing analyses. Preliminary results will be presented

CONCLUSION: If partners of glioma patients are at increased risk of prescription of psychotropic drugs, this will be important knowledge for health care personnel to take into account in the care and support trajectory.

ABSTRACT NUMBER: PS2C.4
ABSTRACT TYPE: PARALLEL SESSION

SATISFACTION WITH SEX LIFE IN SEXUALLY ACTIVE COUPLES DEALING WITH BREAST CANCER – A LONGITUDINAL STUDY

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BACKGROUND: Sexuality is an important part of quality of life. Following a diagnosis of breast cancer, a couple's sexuality may be altered, and both the patient and her partner may find it difficult to have a satisfying sex life. The purpose of this study is to investigate whether patients' and partners' sexual function, intimate behaviour and emotional closeness, as well as sociodemographic, breast cancer-related and other health-related factors are associated with change in both patients' and partners' satisfaction with sex life throughout the first year after surgery for breast cancer.

METHODS: A nationwide cohort of women diagnosed with breast cancer and their cohabiting male partners was established in Denmark. The couples received questionnaires at baseline (≤ 4 months following surgery) and 5 and 12 months later including validated items from the NIH PROMIS Sexual Function and Satisfaction Measures and a single item measuring emotional closeness. Sociodemographic, breast cancer- and other health-related factors were retrieved through registers. Analyses will include all sexually active patients and partners. Appropriate statistical techniques will be used that take into account the interdependency of patients' and partners' scores.

RESULTS: Of 2,254 eligible couples, 792 (35 %) participated. Of 739 patients and 747 partners with information on sexual activity status at baseline, 485 patients (66 %) and 498 partners (67 %) reported sexual activity within the past 30 days. The analyses are ongoing and will be presented at the ECRS symposium

CONCLUSION: The study will provide important knowledge on both patients' and partners' sexuality following breast cancer and on the interplay of factors that affect satisfaction with sex life in sexually active couples. This knowledge can help clinicians to integrate often-neglected aspects of sexuality in treatment and rehabilitation of women with breast cancer and their partners.

Parallel Sessions

Parallel session 3A

LATE EFFECTS I I

Parallel session 3B

FOLLOW-UP PROGRAMMES

Parallel session 3C

PATIENT REPORTED OUTCOMES

Parallel Sessions

Parallel session 3A LATE EFFECTS II

HOSPITALIZATIONS FOR SOMATIC DISEASE IN SURVIVORS OF
NEUROBLASTOMA

INFLAMMATION, METABOLIC PARAMETERS, FATIGUE AND QOL IN A RANDOMIZED
CLINICAL TRIAL OF ONE-YEAR EXERCISE PROGRAMME FOR PROSTATE CANCER
MEN

PREVALENCE OF FALLS AND FRAILTY IN PROSTATE CANCER SURVIVORS:
COMPARISONS AMONG CURRENT, PAST AND NON-USERS OF ANDROGEN
DEPRIVATION THERAPY

LATE EFFECTS OF STEREOTACTIC BODY RADIOTHERAPY IN FRAIL PATIENTS WITH
EARLY STAGE NON-SMALL CELL LUNG CANCER

Parallel session 3B FOLLOW-UP PROGRAMMES

ENDOMETRIAL CANCER: IS THE CURRENT FOLLOW-UP ROUTINE ESSENTIAL?

CANCER SURVIVORS' PREFERENCES FOR FOLLOW-UP CARE BY THE ONCOLOGIST,
GENERAL PRACTITIONER OR ONCOLOGY NURSE: A CROSS-SECTIONAL PROFILES
REGISTRY STUDY

FOLLOW-UP AFTER RECTAL CANCER (FURCA) – THE METHODOLOGY OF
DEVELOPING AND TESTING A NOVEL PATIENT-LED FOLLOW-UP PROGRAMME
AFTER RECTAL CANCER.

CANCER SURVIVORS UNMET NEEDS AND FEAR OF CANCER RECURRENCE IN
BREAST CANCER WOMEN AT FOLLOW-UP IN AN ONCOLOGICAL DEPARTMENT IN
DENMARK

Parallel session 3C PATIENT-REPORTED OUTCOMES

UNILATERAL BREAST RECONSTRUCTION AFTER MASTECTOMY - PATIENT
SATISFACTION, AESTHETIC OUTCOME AND QUALITY OF LIFE

PREDICTORS FOR FUNCTIONAL OUTCOME AND QUALITY OF LIFE FOLLOWING
LIMB SPARING SURGERY FOR SOFT-TISSUE SARCOMAS – A NATIONAL
MULTICENTER STUDY

HOW WILL CANCER SURVIVORS USE SURVIVORSHIP CARE PLANS (SCPS)?
LONG-TERM HEALTH-RELATED QUALITY OF LIFE OF YOUNG ADULT LYMPHOMA
SURVIVORS IS MORE IMPAIRED THAN IN OLDER SURVIVORS

LONG-TERM HEALTH-RELATED QUALITY OF LIFE OF YOUNG ADULT LYMPHOMA
SURVIVORS IS MORE IMPAIRED THAN IN OLDER SURVIVORS

Late effects II

ABSTRACT NUMBER: PS3A.1
ABSTRACT TYPE: PARALLEL SESSION

HOSPITALIZATIONS FOR SOMATIC DISEASE IN SURVIVORS OF NEUROBLASTOMA

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BACKGROUND: Neuroblastoma is the most common extracranial solid cancer in childhood accounting for 8-10 % of all childhood cancers. The survival of neuroblastoma has advanced over the last decades due to improved diagnostic and treatment modalities highlighting the need for knowledge about the risk of late effects. Unique Nordic population-based registries will be used to give an overview of health-related late effects in long-term neuroblastoma survivors by measuring first-time hospitalizations for somatic disease in all organ and body systems. Treatment information from clinical registries will provide an opportunity to evaluate the impact of specific treatment regimens on the risk of late effects.

METHODS: The Nordic cohort comprises 721 5-year neuroblastoma survivors diagnosed with cancer below age 20 between start of the cancer registries in the 1940s and 1950s through 2008. The survivors will be followed-up in national hospital registries classifying diseases into 10 main diagnostic groups and 102 sub-categories according to the International Classification of Diseases. The risks for a variety of diagnostic outcomes in survivors will be compared with a large sample of population comparisons. Treatment information from clinical registries will be retrieved for a sub-cohort.

RESULTS: Preliminary results show that 5-year neuroblastoma survivors had 776 hospitalizations for a somatic disease yielding an overall relative risk (SHRR) of 2.6 (95 % CI, 2.4-2.8) and an overall absolute excess risk (AER) of 42.2 per 1,000 person-years. Significant 3-fold increased risks were observed within the following organ systems: cardiovascular, endocrine, nervous, urinary and genital, skin and bone. Risk estimates for a clinical sub-cohort of those survivors most heavily treated will be presented.

CONCLUSION: Findings of this first comprehensive population-based study of late effects among neuroblastoma survivors will allow better planning of treatment protocols for these patients and contribute with knowledge to improve the basis for patient counselling and follow-up.

ABSTRACT NUMBER: PS3A.2
ABSTRACT TYPE: PARALLEL SESSION

INFLAMMATION, METABOLIC PARAMETERS, FATIGUE AND QOL IN A RANDOMIZED
CLINICAL TRIAL OF ONE-YEAR EXERCISE PROGRAMME FOR PROSTATE CANCER
MEN

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BACKGROUND: Even though previous studies showed beneficial effect of physical exercise in cancer patients during radiotherapy (RT) and antiandrogen therapy (ADT) on improvement of cardiac fitness, fatigue, quality of life (QoL), it is still not known how it affects inflammation or metabolic factors and what its consequences are in prostate cancer (PCa) patients during RT and ADT. The purpose of trial was to examine the effect of 12-month supervised physical exercise programme on inflammatory blood markers, and metabolic factors as well as functional capacity, fatigue, and QoL in high-risk PCa patients undergoing RT and ADT.

MATERIALS: 54 high-risk PCa men were allocated to two groups before RT. This was a single-centre, prospective, two-arm randomized controlled clinical trial in outpatients.

METHODS: 27 patients performed supervised physical exercise (EG) and the other 27 formed a control group (CG) that carried out normal daily physical activity according to recommendations. Measurements for primary and secondary endpoints took place at baseline, 8 weeks and 10 months after RT. The following parameters were assessed: functional capacity, changes in blood count, pro-inflammatory cytokines (IL-1 β , IL-6, TNF- α), creatinine, urea, cholesterol factors, fatigue and QoL (using FACT-F and EORTC questionnaires).

RESULTS: There was a significant improvement in functional capacity ($p < 0.05$), decrease in the level of pro-inflammatory cytokines ($p > 0.05$) and fatigue ($p < 0.05$) in EG compared to CG after 12 months. The fatigue level was significantly higher in CG ($p < 0.05$) after RT. Physical exercise had an effect on the relationship between blood inflammation markers and functional capacity and fatigue scores provided by study participants.

CONCLUSION: Regular moderate-intensity physical exercise improves functional capacity, decreases the production of inflammation cytokines, and prevents fatigue in high-risk PCa patients during RT and ADT. Trial Registration: ISRCTN80765858

ABSTRACT NUMBER: PS₃A.3
ABSTRACT TYPE: PARALLEL SESSION

PREVALENCE OF FALLS AND FRAILITY IN PROSTATE CANCER SURVIVORS: COMPARISONS AMONG CURRENT, PAST AND NON-USERS OF ANDROGEN DEPRIVATION THERAPY

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BACKGROUND: Androgen deprivation therapy (ADT) for prostate cancer can cause muscle loss, weakness, and fatigue, which may not reverse with cessation of treatment, and that could increase the risk of falls and frailty. The purpose of this descriptive study was to compare the prevalence of falls and frailty among prostate cancer survivors who were never, currently or previously exposed to ADT and to determine whether frailty was associated with falls.

METHODS: Men with a prostate cancer diagnosis (N = 281; mean age: 72+8 years) completed questionnaires about their health, cancer history, falls in the past year and frailty status (robust, pre-frail or frail). Cancer history and ADT usage were confirmed by electronic medical record review. In addition to traditionally defined frailty, we also calculated the prevalence of obese frailty, substituting excess BMI for weight loss.

RESULTS: A significantly higher proportion of men currently (37 %) or previously (34 %) on ADT experienced a fall in the past year compared to men never on treatment (15 %) ($p = 0.002$). The proportion of fallers was not significantly different between current and past users of ADT ($p = 0.6$). Men exposed to ADT were significantly more likely to report a fall-related injury than unexposed men ($p = 0.04$). A significantly higher proportion of men currently (43 %) or previously (40 %) on ADT were classified as pre-frail compared to men never on treatment (15 %) ($p < 0.001$). Using BMI, the prevalence of obese pre-frailty and frailty was significantly greater among current (59 %) or previous (62 %) ADT users compared non-users (25 %) ($p < 0.001$). Frailty significantly increased the likelihood of being a faller in the past year (odds ratio: 4.2; 95 % CI 1.5, 12.4).

CONCLUSION: Prostate cancer survivors treated with ADT are more likely to report being frail and to have fallen than men not treated with ADT; the risk of falls and frailty does not appear to decrease when men stop ADT. Healthcare providers need to be aware that ADT exposure could increase the risk of falls and frailty and appropriately counsel prostate cancer patients on fall prevention strategies and consider approaches to reduce frailty, such as exercise.

ABSTRACT NUMBER: PS₃A.4
ABSTRACT TYPE: PARALLEL SESSION

LATE EFFECTS OF STEREOTACTIC BODY RADIOTHERAPY IN FRAIL PATIENTS WITH EARLY STAGE NON-SMALL CELL LUNG CANCER

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BACKGROUND: Stereotactic body radiotherapy (SBRT) is offered as an alternative to surgery in patients with stage I-II lung

cancer who are inoperable due to poor lung function or co-morbidity. The treatment is given with curative intent, and 2-year local control rates have been comparable with surgery in retrospective studies. Late effects from the radiotherapy primarily relates to chest wall and lung toxicity (pain and dyspnoea). The aim of this study is to report the effect, and early- and late toxicity, including potential cardio-toxicity, in patients treated with SBRT at Rigshospitalet, Copenhagen between 2011 and 2014.

METHODS: 150 patients are planned for inclusion in the analysis. Baseline data, treatment data, including dose to the tumour and surrounding normal tissue (lung and heart), and follow up data will be collected. Treatment effects (local control rate, progression free- and overall survival) and late toxicity (patient reported pain and dyspnoea, results of lung function tests and follow up CT scans) will be analysed and correlated with baseline patient data and treatment data. The results will be reported and compared with results from previous (international) studies.

RESULTS: 94 patients (treated 2011-2013) have been included so far. Mean age of patients was 74.6 years (52-91 years). Median follow up time was 18 months (0-40 months). Local control rate was 87 % in the follow up period (1-year local control rate: 88 %). 28 patients (29.8 %) reported pain related to the irradiated area at some point during the follow up period. 6 patients (6.4 %) were diagnosed with rib fractures on CT images. 11 patients (11.7 %) reported worsening of dyspnoea and 12 patients (12.7 %) were diagnosed with new cardiac disease during the follow up period. Data on approximately 50 patients treated in 2014 will be added to the analysis, final results will be available at the ECRS 2016 symposium.

Follow-up programmes

ABSTRACT NUMBER: PS₃B.I
ABSTRACT TYPE: PARALLEL SESSION

ENDOMETRIAL CANCER: IS THE CURRENT FOLLOW-UP ROUTINE ESSENTIAL?

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BACKGROUND: Considerable controversy remains as to the optimal organization of endometrial cancer follow-up. Objectives: In a nation-wide cohort to: i) identify predictive factors of disease recurrence in early stage endometrial cancer, ii) analyse the role of symptoms in the detection of disease recurrence.

METHODS: All Danish women diagnosed with stage I and II endometrial cancer from 2005-2009 were included in a large national population-based historical cohort. The population was created using the Danish Gynecologic Cancer Database. Disease recurrences up to three years after the primary treatment were identified using a combination of national registries and chart reviews.

RESULTS: The resulting cohort consisted of 2612 women. Of these, 183 (7.0 %) women developed disease recurrence within three years after the primary treatment. Factors predictive of recurrence included FIGO stage (odds ratio, OR: Ib = 1.91, stage II = 3.91), Charlson comorbidity index of 3 (OR 1.86), non-endometrioid histology (OR 1.81) and being outside of the workforce (OR 1.81). Recurrence localization significantly impacted on overall survival with 5-year survival rates of 85.1 % in vaginal and 19.2 % in distant recurrence, respectively. Among the 183 women with disease recurrence, 116 (63.4 %) had a symptomatic recurrence. One third of these were vaginal symptoms as a sign of vaginal recurrence. Examination was postponed until the next follow-up visit in 37.1 % of the women. Asymptomatic recurrence was found in less than 2.5 % of the 2,612 women, and the asymptomatic recurrence was situated in the vaginal vault in 1.6 %.

CONCLUSION: Understanding the nature of endometrial cancer relapse is the first step in evaluating the need of follow-up examinations. The majority of disease recurrences were symptomatic suggesting a superior role of symptoms compared to traditional follow-up visits in the detection of recurrence.

CANCER SURVIVORS' PREFERENCES FOR FOLLOW-UP CARE BY THE ONCOLOGIST, GENERAL PRACTITIONER OR ONCOLOGY NURSE: A CROSS-SECTIONAL PROFILES REGISTRY STUDY

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BACKGROUND: In the debate about the best organization of follow-up care, evidence on survivors' preferences is scarce. Study aims are 1) to describe survivors' evaluation of the ability of oncologist, general practitioners and oncology nurses to perform follow-up care, 2) to define clusters of patients with similar evaluations of care providers' abilities, allowing to determine preference profiles, 3) to assess patient characteristics associated with these preferences, and 4) to describe survivors' preferences to discuss specific topics with either the oncologist, general practitioner or oncology nurse.

METHODS: In a population-based cross-sectional study including 767 survivors of prostate cancer and melanoma in the Netherlands, we assessed whether survivors considered the oncologist, general practitioner and oncology nurse to be able to provide cancer follow-up care using questionnaires.

RESULTS: Almost all cancer survivors (95 %) positively evaluated the ability of the oncologist to provide follow-up care, while this was 33 % for the general practitioner and 48 % for the oncology nurse. However, if we asked with whom survivors wanted to discuss diet, fatigue, relationship difficulties, relationship with children, sexuality, weight, return to work, and physical fitness, 18-46 % preferred the oncologist and 46-60 % preferred the general practitioner, depending on the topic. The majority preferred to discuss hereditary of cancer (64 %) and recurrence (76 %) with the oncologist, but some responders preferred discussing these topics with the general practitioner (33-23 %, respectively). Only a small minority (< 5 %), favoured to discuss specific topics with the oncology nurse. Results on the cluster analyses and correlates will be presented during the ECRS symposium.

CONCLUSION: Only a minority of the respondents positively evaluated the ability of the oncology nurse and the general practitioner to provide follow-up care. Specific topics relevant to cancer survivorship are preferably discussed with the general practitioner or the oncologist, but surprisingly not with the oncology nurse. Possibly survivors are unaware of the competences of the oncology nurse or prefer a doctor.

FOLLOW-UP AFTER RECTAL CANCER (FURCA) – THE METHODOLOGY OF DEVELOPING AND TESTING A NOVEL PATIENT-LED FOLLOW-UP PROGRAMME AFTER RECTAL CANCER.

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BACKGROUND: The main treatment for non-metastatic rectal cancer (RC) is surgical resection, often combined with (chemo-)irradiation. Highly prevalent late effects are bowel-, urological and sexual dysfunctions, psychological distress and fear of recurrence, all associated with negative impact on the patients' quality of life. The current follow-up (FU) is primarily focusing on detecting cancer recurrence, and is characterised by routine investigations, a limited degree of patient involvement and a low level of evidence. The objectives of this study are to develop a patient-initiated FU-programme after treatment for RC and examine its effect on symptom burden and quality of life. Secondly, the effect on specific physical late effects, psychological outcomes, cost-effectiveness and event-free survival is estimated.

METHODS: Adult patients, operated with curative intent for primary adenocarcinoma in the rectum are included at four Danish centres covering a population of 1.9 million. Patients are randomized to an intervention group, receiving standardised education and access to self-referral to an assigned project nurse, or a control group, following the current FU-programme with routine investigations and rectoscopies at 6, 12, 18, 24 and 36 months postoperatively. The education has been developed on the basis of qualitative data from focus group interviews with rectal cancer patients, as well as professional feed-back from clinicians and experts in patient didactics. Primary outcome is symptom burden and quality of life, measured by the FACT-C

questionnaire. Other demographic- and outcome data are collected as patient-reported measures and register based data. The results from the focus group interviews are processed and the development phase of the intervention is completed, whilst the randomised trial is ongoing, and estimated to finish by the end of 2020.

PERSPECTIVES: The results will strengthen the evidence base for RC follow-up, and qualify the ongoing paradigm shift in cancer care, going from a uniform, standardised FU to a tailored FU, with a higher degree of patient involvement.

CANCER SURVIVORS UNMET NEEDS AND FEAR OF CANCER RECURRENCE IN BREAST CANCER WOMEN AT FOLLOW-UP IN AN ONCOLOGICAL DEPARTMENT IN DENMARK

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BACKGROUND: Due to improvement in diagnosis and treatment, ten-year survival of breast cancer exceeds 70 % in most European regions. This presents various post-treatment issues pertaining to cancer and its related treatments including fear of cancer recurrence. In 2015, new Danish guidelines was published recommending individualized, patient-related needs visits but there are lack of evidence-based knowledge. To understand the needs in follow-up visits the purpose of this study was to investigate a standard follow-up visit program.

METHODS: The cross-sectional study was conducted at department of oncology, Aarhus University hospital between November 2014 and January 2015. A total of 194 breast cancer patients, booked in the hospital-based electronic system for a follow-up visit were prospectively asked to participate and fill in questionnaires about Cancer Survivors Unmet Needs (CaSUN) and fear of cancer recurrence (CAR-Q4). The CaSUN is a measure of cancer related needs experienced within the last preceding month and includes 35 need items, which the women were asked to indicate as not applicable, met or unmet. Unmet needs are rated as weak, moderate or strong. The need item were divided into five domains. The CaSUN was translated into Danish using a forward-backward translation method and reliability testing was performed. The CAR-Q4 consisted of four items. Three assessed the frequency, intrusiveness and degree of distress caused by fear of cancer recurrence, and one assessed perceived risk of recurrence. The first three items were rated on an 11 point scale and the last item were rated as a number ranging from 0-100 %.

RESULTS: Using the CaSUN questionnaire, 128 (82.6 %) women reported at least one unmet need. The mean number of met needs was 5.3 and the mean number of unmet needs (any strength) was 9.3. The four most reported unmet needs were in the domain of comprehensive cancer care. A total of 85 (54.8 %) women reported fear of cancer recurrence and the mean sum score was 15.2 (SD 9.9).

CONCLUSION: Unmet needs and fear of cancer recurrence were present in follow-up. The role of a specialised breast nurse throughout follow-up and patient education is a possibility to improve needs and fear of cancer recurrence.

Patient-reported outcomes

UNILATERAL BREAST RECONSTRUCTION AFTER MASTECTOMY - PATIENT SATISFACTION, AESTHETIC OUTCOME AND QUALITY OF LIFE

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BACKGROUND: An increasing number of women undergo a breast reconstruction after breast cancer treatment. The aim

of the present study was to evaluate patient-reported satisfaction, Quality of Life (QoL), and the association between these, following different types of breast reconstruction.

METHODS: A total of 166 women who underwent a unilateral breast reconstruction in Central Denmark Region between January 2005 and July 2011 were included. Participants received a questionnaire package, which included the Body Image Scale, The Beck Depression Inventory, the Impact of Event Scale, the SF-36 Physical Functioning Scale, and a novel measure of patient reported aesthetic satisfaction, the Breast Reconstruction Aesthetic Satisfaction scale. Additionally, patients were asked if they experienced a change in quality of life owing to the breast reconstruction. Based on reconstructive method, participants were divided into four groups, three delayed: an abdominal flap group, a latissimus dorsi flap group, an implant +/- thoracodorsal flap group; and one immediate breast reconstruction group. Results: A total of 144 women (87 %) completed the questionnaire. The mean follow-up was 3.8 years. Aesthetic satisfaction differed significantly between groups ($F(3,139) = 8.55; p < 0.001$), with abdominal flap recipients reporting the highest levels of satisfaction. No between-group differences were observed for the remaining psychosocial measures. Satisfaction with aesthetic outcome was associated with experiencing higher QoL (OR 1.10, $p < 0.001$; 95 % CI: 1.06-1.15).

CONCLUSION: Abdominal flap recipients expressed higher satisfaction with aesthetic outcome, compared to the remaining breast reconstructive types. Higher aesthetic satisfaction was strongly associated with reporting an experience of higher QoL.

ABSTRACT NUMBER: PS3C.2
ABSTRACT TYPE: PARALLEL SESSION

PREDICTORS FOR FUNCTIONAL OUTCOME AND QUALITY OF LIFE FOLLOWING LIMB SPARING SURGERY FOR SOFT-TISSUE SARCOMAS – A NATIONAL MULTICENTER STUDY

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BACKGROUND: The purpose of this study was to identify tumour and patient related predictors for functional outcome and quality of life after limb sparing surgery in sarcoma patients.

METHODS: The study included 131 patients (mean age = 58, F/M = 57/74), that were treated with limb-sparing surgery without bone-resection for soft tissue sarcomas in 3 Danish sarcoma centres during the period 1/1-2009 to 31/12-2011. Patients were asked to participate at least 1 year after surgery, and patients that had experienced local recurrence or metastatic disease were excluded. Functional disability was measured by the Toronto Extremity Salvage Score (TESS), and functional impairment by the Musculoskeletal Tumour Society Score (MSTS), and Quality of Life by EORTC QLQ-C30. Tumour- and patient related factors (age, gender, depth, size, malignancy, comorbidity, location and radiotherapy) were extracted from the Danish National Sarcoma Database. Multivariate logistic regression analysis with calculation of odds ratio (OR).

RESULTS: We found that women had an OR of 3.76 for a lower TESS score ($p < 0.005$), while lower extremity tumours and radiotherapy had an OR of 9.49 and 4.50, respectively, for a lower TESS score ($p < 0.005$ and $p = 0.02$, respectively). There was a strong correlation between functional outcome and quality of life ($p < 0.005$). Patients who had physiotherapy had a lower functional outcome compared to patients who did not receive physiotherapy ($p < 0.005$), there was no difference found in quality of life.

CONCLUSION: Female sex, lower extremity tumours, and radiotherapy was related to a low TESS score and there was a strong relation between functional outcome and quality of life. The study suggest that the initial functional outcome postoperatively seems to be the best indicator for the final functional outcome.

ABSTRACT NUMBER: PS3C.3
ABSTRACT TYPE: PARALLEL SESSION

HOW WILL CANCER SURVIVORS USE SURVIVORSHIP CARE PLANS (SCPS)?

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BACKGROUND: SCPS are internationally endorsed as an important tool to support enhanced post-treatment survivorship care.

The literature highlights a number of challenges to widespread implementation. To support broad implementation of SCPS, we investigated how survivors might use SCPS.

METHODS: The study was conducted at a single site (Peter Mac). Eligible patients from 10 clinical services up to 12 months post end of treatment (EOT) or receiving ongoing treatment were approached in clinics or via telephone. A survey assessed survivors' intended use of a SCP and preferences regarding format and content. Proposed minimum sample size of 200.

RESULTS: 230 surveys were returned (RR 68 %). Over half (56 %) had completed treatment within 6 months, with 10 % receiving ongoing treatments. Most (65 %) had not previously received a SCP and more than one third (42 %) reported receiving no information resources at the end of treatment. Almost all (98 %) desired further information. Most common information requested in a SCP: 'list of symptoms to watch out for and report' (76 %), 'summary of treatment received' (70 %), 'plan for when I should have follow-up appointments' (70 %), 'a list of tests I am going to have and when' (69 %) and 'things I can do to look after myself' (67 %). Most common suggested use was as: 'a record of cancer treatment' (63 %), 'a reminder of things to do to look after myself' (57 %) and 'to help me understand my cancer experience' (56 %). Over half (52 %) would share the information with their general practitioner. Most indicated a preference for paper-based resources (91 %). There was support for both brief (36 %) and more detailed versions (42 %). Over half (55 %) requested information be delivered during a face-to-face discussion with a health professional. Regular telephone support from the treating health care team was most commonly suggested as an additional service to support survivors after EOT.

CONCLUSION: While similar to international findings, results suggest alternate ways of providing the information that survivors desire. A flexible approach to SCP interventions is justified. Most desired SCPS elements have been defined. We have developed brief fact sheets and an automated summary to support delivery of SCPS.

ABSTRACT NUMBER: PS3C.4
ABSTRACT TYPE: PARALLEL SESSION

LONG-TERM HEALTH-RELATED QUALITY OF LIFE OF YOUNG ADULT LYMPHOMA SURVIVORS IS MORE IMPAIRED THAN IN OLDER SURVIVORS

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BACKGROUND: Studies suggest that young adult cancer survivors have a statistically significant better health-related quality of life (HRQoL) compared to older survivors. However it could be hypothesized that, compared with a normative population, the largest clinically relevant impact of cancer and its treatment will be observed in younger adult and not in the older adult survivor group. The objective of this study is to compare HRQOL between lymphoma survivors of different age categories (18-39/40-65/>65 years) and to compare their HRQOL with a normative population.

METHODS: This study is part of a longitudinal, population-based survey among lymphoma survivors diagnosed between 1999-2012. Patients (N = 2,195) were invited to complete the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-Core 30 (EORTC QLQ-C30). Response rate was 69 % (n = 1,523). Data from an age- and sex matched normative population (n = 1,933) were used.

RESULTS: Compared to the normative population, statistically significant poorer HRQoL was observed for 198 AYA lymphoma survivors on all functioning scales, fatigue and financial difficulties (all $p < 0.05$), but not on global quality of life. These differences were of clinical importance. Compared to older patients, AYAs lymphoma patients had higher scores on global quality of life, physical and role functioning (all $p < 0.05$). The negative impact of cancer, as reflected in the differences between lymphoma patients and a normative population, was higher for AYAs on cognitive and social functioning compared to older patients.

CONCLUSION: AYA lymphoma patients report a clinically relevant reduction in HRQoL compared with the normative population. Although younger survivors have better HRQOL than older survivors, the differences found between younger survivors and normative population were the largest for cognitive and social functioning. This suggests that having lymphoma has a greater impact on younger than older survivors and that the worse HRQOL observed in older lymphoma survivors in comparison with younger survivors is caused mostly by age itself and not by the disease. Future research should explore the best ways to timely address poor HRQoL among young adult lymphoma survivors.

Poster Sessions

Poster sessions

ABSTRACT NUMBER: P-01
ABSTRACT TYPE: POSTER SESSION

FOOTBALL FITNESS TRAINING IN WOMEN WITH BREAST CANCER – RATIONALE AND PROTOCOL FOR THE FOOTBALL CLUB (FC) MAMMAE STUDY

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BACKGROUND: Improved treatment modalities for breast cancer have led to higher survival rates over the last decades. This is encouraging, but it also means that more women are prone to late effects of chemotherapy and endocrine treatment such as loss of bone mass, gain in fat mass and deterioration of physical fitness. Consequently, breast cancer survivors may be predisposed to osteoporosis and cardiovascular disease. Exercise may ameliorate some of these late effects and in order to increase compliance, novel types of exercise interventions including organised sport are warranted. Football Fitness training has shown promising effects on bone mass, body composition, and physical functioning in other populations including men with prostate cancer undergoing androgen deprivation therapy. On this background we hypothesize that Football Fitness training may also improve important health parameters including bone mass and body composition in women with breast cancer after antineoplastic treatment.

METHODS: The Football Club (FC) Mammae study will be a randomised, controlled trial recruiting 150 women with breast cancer after completion of chemo- and radiotherapy from The Department of Oncology at the University Hospital of Copenhagen, Rigshospitalet. After baseline assessment, participants will be randomised to a Football Fitness training group performing supervised training twice weekly for 60 minutes or a usual care control group for 12 months. The Football Fitness training will combine warm-up, fitness-, and ball-skill exercises with small-sided games. The primary endpoint will be changes in bone mineral density of the hip from baseline to 12 months. Secondary endpoints will include body composition, peak oxygen uptake, patient reported outcomes, and rates of adverse events. All assessments will be performed at baseline and after 6 and 12 months.

ETHICS: Approval of the protocol will be obtained from The Danish National Committee on Biomedical Research Ethics for the Capital Region and written informed consent will be obtained from all participants before study procedures are undertaken. Both positive and negative results will be presented in peer-reviewed journals and at scientific conferences.

ABSTRACT NUMBER: P-02
ABSTRACT TYPE: POSTER SESSION

IMPACT OF EXERCISE TRAINING ON VENTRICULAR REMODELING, SERUM CARDIAC PARAMETERS AND FUNCTIONAL CAPACITY DURING TRASTUZUMAB THERAPY IN BREAST CANCERS

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BACKGROUND: Almost 30 % of breast cancer (BC) women present an aggressive form characterized by increased expression of human epidermal growth receptor 2 (HER2) proteins. Targeted treatment using monoclonal antibodies against HER2 expression such as trastuzumab has been shown to improve survival. On the other hand, initiation of adjuvant trastuzumab therapy is associated with cardiotoxicity leading to reduced ejection fraction (EF) and physical fitness, which was well documented in many studies. We hypothesized that regular physical training would prevent trastuzumab-mediated left ventricular remodelling and heart failure. Therefore, we examined the effect of supervised exercise (aerobic and strength) training during trastuzumab treatment on mediated left ventricular remodelling, serum outcomes, and physical capacity in women with HER2-positive BC.

METHODS: 18 women (mean age 51.2) with HER2-positive BC performed regular physical exercise training (5/week) after the first 3 months of trastuzumab. Patients underwent examination at baseline (T0), after 3 months (before starting physical training) (T1) and after 6 weeks of training (T2), and after 6 months (T3). Outcomes measures: heart function (echocardiography), 6MW test, serum cardiac markers: N-terminal pro-brain natriuretic peptide [NT-proBNP], galactin-3, leptin, as well as blood count, CRP, urea and creatinine.

RESULTS: Peak EF was lower ($p > 0.05$) and functional capacity declined to a lesser extent ($p > 0.05$) after 3 months of study. Exercise training resulted resting end-diastolic and end-systolic volumes ($p > 0.05$), whereas ejection fraction did not change from baseline to post-intervention ($p > 0.05$). Elevations in NT-proBNP, galactin-3, and leptin levels, parallel to the weight increase were observed in individual cases, but not on a group level.

CONCLUSION: A regular exercise training is well tolerated and may prevent cardiotoxicity in women with BC undergoing trastuzumab therapy. This study needs to be continued in large patient groups.

ABSTRACT NUMBER: P-03
ABSTRACT TYPE: POSTER SESSION

FEASIBILITY AND ACCEPTABILITY OF ACTIVE BOOK CLUBS IN THE PROMOTION OF MENTAL HEALTH AND PHYSICAL ACTIVITY IN CANCER SURVIVORS

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BACKGROUND: In the light of the substantial impact of cancer on psychosocial and physical functioning, and the beneficial effects of social support and physical activity on these parameters, there is an urgent need for development of new interventions that will help survivors to not only initiate but also maintain social capital building and physical activity behaviour. We investigated the feasibility and acceptability of a 24-week intervention called 'Active Book Club' (ABC) comprising audio book listening, pedometer walking and supervised book club meetings.

METHODS: An exploratory, one-group mixed methods design was applied. Qualitative data included individual post-intervention interviews as well as baseline and post-intervention focus group interviews. Quantitative data included baseline, mid- and post-intervention measures of cognitive function, anxiety and depression, health-related quality of life, fatigue, sleep, physical activity behaviour and walking steps.

RESULTS: 17 self-referred cancer survivors with various oncological and socio-demographic backgrounds were included, 8 of whom completed the intervention and all measures. Qualitative findings revealed that while audio books may bring new meaning to physical activity and serve as a relief from own concerns, certain stories may affect some individuals negatively. Quantitative findings indicated a trend toward an increase in weekly steps.

CONCLUSION: This study is the first to introduce audio books in combination with pedometers and participation in books club meetings exclusively for cancer survivors. The substantial dropout rate (53 %), however, suggested that modification is necessary and that patient involvement in choice of literature may be critical to enhance acceptability. Though interesting, the findings of this study must be interpreted with caution as the participants were self-referred, and hereby the transferability of the findings may be limited to other cancer survivors with equally strong resources and high motivation. Thus, additional research within the area is highly warranted.

ABSTRACT NUMBER: P-04
ABSTRACT TYPE: POSTER SESSION

EXERCISE IN PATIENTS WITH MULTIPLE MYELOMA; EFFECTS ON PHYSICAL FUNCTION, PHYSICAL ACTIVITY, QUALITY OF LIFE, PAIN, AND BONE DISEASE

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BACKGROUND: In hematological cancer, exercise is feasible, safe and beneficial in numerous aspects. Still, the evidence is sparse. Patients with multiple myeloma (MM) may differ from patients with other hematological diseases, by poorer functional status due to myeloma induced skeletal destructions, bone pain and more affected Quality of Life (QOL). Only four studies on the effect of exercise in patients with MM have been identified. These studies did not include older or newly diagnosed patients. We hypothesize that early initiated, individualized exercise training in newly diagnosed patients with MM is beneficial for physical function, level of physical activity, QOL, pain and bone disease.

METHODS: A two-center randomized controlled trial with inclusion of 88 patients. The control group receives usual care (information about physical activity, exercise and transfer techniques). The intervention group will, in addition to usual care, receive 8 supervised training sessions over a 10-week period, combined with home-based training and physical activity. The training is planned with respect to specific bone involvement.

OUTCOMES: Knee extensor strength, grip strength, sit-to-stand test and 6-minute-walk test, level of physical activity (by accelerometer), pain and QOL (by questionnaires), bone disease (by serum bone markers and DEXA scans). Examinations are performed at baseline, after 11 weeks, 6 months and 12 months. The level of physical activity is also examined after 4 and 7 weeks.

RESULTS: The study is ongoing; no results yet.

CONCLUSION: Importantly, this study will give insights into the physical function and level of physical activity in newly diagnosed MM patients. The results of the intervention study will contribute to future evidence based exercise recommendations.

ABSTRACT NUMBER: P-05
ABSTRACT TYPE: POSTER SESSION

EFFECTIVENESS, SAFETY AND MOTIVATION OF INTERACTIVE VIDEO GAMING FOR PROSTATE CANCER PATIENTS UNDERGOING ANDROGEN DEPRIVATION THERAPY

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BACKGROUND: Metabolic syndrome, fatigue, decreased physical function and quality of life are treatable adverse events to androgen deprivation therapy (ADT). Thus, the aim of this study is to investigate the effectiveness of a 12-week home-based exercise program using interactive video gaming. We hypothesize that the intervention group will benefit from this exercise program as to these adverse events and furthermore find the exercise program amusing and motivating.

METHODS: 46 prostate cancer patients undergoing ADT in Central Denmark Region are randomized into either an intervention group ($n = 23$) or control group ($n = 23$). Inclusion runs from February 2015 until September 2016. The effectiveness of the intervention is measured by physical tests: 6 min walk test, leg extensor power and, bioelectrical impedance analysis. Furthermore, the questionnaires EORTC QLQ-C 30, Functional Assessment of Cancer Therapy-Prostate (FACT-P), and Functional assessment of chronic illness therapy - Fatigue (FACIT-F) are used. Finally, cholesterol, glucose, insulin sensitivity, adiponectin, Insulin-like Growth Factor-1 (IGF-1) and Insulin-like Growth Factor Binding Proteins (IGF-BP) are measured. In addition, participants in the intervention group are interviewed individually post-intervention in order to investigate the satisfaction and motivation with this technological exercise intervention.

RESULTS: The baseline observations have shown a high incidence of metabolic syndrome and non-adherence to exercise recommendations, thereby stressing the relevance of our study. So far, this home-based exercise program using an interactive video game has been well tolerated and participants report better health status.

CONCLUSION: Due to new and effective treatment modalities, the amount of prostate cancer survivors is growing. This will increase demands for an effective interdisciplinary teamwork in order to promote lifestyle changes, which can decrease comorbidity incidences. To our knowledge, this is the first study to investigate the effectiveness, safety and motivational capacity of interactive video gaming in prostate cancer patients undergoing ADT.

“FROM ME TO YOU”

Jytte Skov-Pedersen¹, Steen Peter Nielsen²

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”This life narrative is from me to you. I think you should know that to do this Life Narrative, has meant so much to me during this last year that I have been ill. It was a small project, which filled in my time in a meaningful way, much more than I thought it would. And the time it took was nothing compared to how mentally positive the outcome was” – 50 year-old father of three sons.

The patients, who have been helped to make their Life Narrative as a written work, tell us that they really wished they had done this work earlier. They most often have had the thought that they wanted to do it by themselves but without knowing how to get started and let the idea become reality. They tell us that it serves as a counterbalance to their chaos because it helps them to structure their thoughts about life. The patients mention how they are strengthened in their memory, integrity and identity. The Life Narrative helps the patients pay attention to their positive, life-affirming memories and life-experiences, which otherwise would be lost in the all-consuming influence of thoughts about illness/changes. The evidence-based intervention, Dignity Therapy, by Harvey Max Chochinov, is called “Life Narrative” in Denmark. We believe that this psychosocial approach can be very helpful to many patients in the rehabilitating time of life, through conversations with professionals on the five themes of Dignity Therapy: Continuity of self, Role preservation, Generativity or legacy, Maintenance of pride and Hopefulness. www.livsfortaelling.dk

MOTIVATIONAL EFFECT OF CARDIOPULMONARY FIELD-TESTING IN CANCER SURVIVORS ATTENDING REHABILITATION

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BACKGROUND: The aim was to investigate possible motivational effects of a physical exercise test in cancer patients attending rehabilitation. The research hypothesis was that the exercise test would lead to increased motivation for future physical activity (PA) participation, and that the effects were related to affective responses and previous level of PA.

METHODS: Cancer patients with various diagnoses referred for rehabilitation between December 2015 and May 2016 were included. The patients completed the Modified Shuttle Walk Test (MSWT) at start of rehabilitation. The MSWT is a field exercise test of functional capacity that is performed by walking or running in increasing speeds back and forth on a 10 meter course. The registered results were total distance in meters, level completed, heart rate and perceived breathlessness, subjective experience of exertion and estimated oxygen uptake. Affective responses [affect version of the Physical Activity Affect Scale (PAAS)], intention to future PA [intention scale from 0 % to 100 %] and perceived motivational effect [7 levels motivation scale] were measured before and immediately after the test. At start of rehabilitation and 3 months after, the patients also reported current PA levels [Leisure- time exercise questionnaire], intention for future PA [intention scale from 0 % to 100 %], fatigue [Fatigue Questionnaire (FQ)] and mood [mood version of the PAAS].

RESULTS: The results are currently being analysed and will be presented at the symposium. We expect a sample size of 45 participants.

CONCLUSION: The findings are expected to provide new knowledge about the extent to which cardiopulmonary testing can motivate cancer survivors to recommence and maintain regular PA routines.

MULTIMODAL PREHABILITATION IN COLORECTAL CANCER SURGERY: CAN WE IMPROVE FUNCTIONAL CAPACITY AND REDUCE COMPLICATIONS?

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BACKGROUND: Colorectal cancer (CRC) is the second most prevalent type of cancer in the world, and surgery is the most common therapeutic intervention. Major surgery is associated with a 20 % to 40 % reduction in physiological and functional capacity and postoperative complications occur in up to 50 % of patients giving higher mortality rates, increased cancer progression, and greater hospital costs. The number and severity of complications is closely related to patients’ performance preoperatively. We performed a literature search to identify risk factors for postoperative complications and we present the results of a pilot study on prehabilitation.

METHODS: A literature search was conducted using MEDLINE, Embase and Cochrane databases. Patients were enrolled in a multimodal prehabilitation program, including structured customized endurance exercise, strength training and nutritional supplement (proteins 1.5 g/kg/day). Functional capacity was assessed at the start of training, 2 days before surgery and 4 weeks after surgery. Vo2max, 6-minute-walk test (6MWT) and 1-repetition maximum test (1-RM) were measured.

RESULTS: Endurance capacity, muscle strength, nutritional state, smoking behavior prove all to be independent risk factors for complications in colorectal surgery. The preoperative time frame necessary for prehabilitation is approximately 4 weeks. In the prehabilitation pilot study a 15 % increase in VO2 max, 20-40 % increase in 1-RM, and + 20 meters increase in 6MWT was reached in four weeks. 70 % of the patients returned to baseline functional capacity at 4 weeks and 80 % at 8 weeks postoperatively. Compliance to the protocol was 70 %.

CONCLUSION: Literature shows that a multimodal prehabilitation program is expected to increase functional capacity and therefore might lead to reduction of complications. The preliminary results support our aim to prove the value of multimodal prehabilitation. With an international consortium (Copenhagen, Eindhoven, Montréal, Paris) we initiated a randomized controlled trial. 4 weeks of multimodal prehabilitation will be compared to standard care and aims at a reduction of complications of 40%.

PREOPERATIVE NUTRITIONAL DIETARY THERAPY BEFORE SURGERY, CAN WE REACH THE NUTRITIONAL GOAL?

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BACKGROUND: Head and neck cancer (HNC) patients are often malnourished at the time of the diagnosis. These patients have a substantial loss of weight due to pain, poor dietary habits, swallowing difficulties, excessive alcohol consumption, tumour stenosis or anorexia. Whether a strict dietary intervention preoperative is feasible and can improve the postoperative course is not known.

METHODS: 23 patients diagnosed with HNC were randomized to either preoperative standard nutritional care or intervention with oral nutritional supplements and nutritional counselling with the main focus on protein intake. The nutritional advice consists of daily contact with the patients either by phone, mail or sms/mms to document daily intake and patient reported weight. The nutritional intervention lasts from diagnosis to the surgery.

RESULTS: The intervention resulted in a sufficient coverage of individual nutritional requirement in the intervention group (110 % of estimated needs) (n = 12) versus insufficient coverage of nutritional intake in the control group (73 %) (n = 11). The postoperative outcomes after 7 days are yet to be established.

CONCLUSION: Systematic intensive nutritional intervention with nutritional advice and the use of oral nutritional supplement in HNC patients prior to treatment is feasible, and effective concerning the nutritional intake. The effects on postoperative outcome are under evaluation.

PHYSSURG-C. RANDOMIZED CONTROLLED TRIAL OF PREHABILITATION BEFORE COLORECTAL CANCER SURGERY

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BACKGROUND: Prehabilitation has been shown to decrease complication rate after thoracic surgery and increase both fitness and quality of life before colorectal surgery. However in colorectal cancer surgery endpoints assessing recovery such as sick leave, or complication rate have not yet been investigated. In Physsurg-C our hypothesis is that, increased physical activity before and after surgery for colorectal cancer improves recovery measured as time of sick-leave, self-assessed mental and physical recovery as well as complication rate.

METHODS: Physsurg-C is a randomized controlled multicentre trial, with 370 patients, aiming to assess the impact of pre- and postoperative physical training on recovery after colorectal cancer surgery. Primary endpoint is physical recovery, self-assessed as well as measured as time of sick leave. Secondary endpoints are complications, in-hospital stay, mental recovery, readmissions, reoperations, quality of life, and mortality, changes in IGF-1 & IGFBP-3, postoperative pain and health economy. All patients planned for elective colorectal cancer surgery are eligible and are asked for participation and randomized to either control or intervention. Patients in the intervention group are asked to increase their daily physical activity 2 weeks prior to surgery and during 4 weeks after leaving the hospital with an additional 30 minutes of moderately intensive aerobic physical activity as well as inspiratory muscle training preoperatively. Control group receives standard care.

RESULTS: Since January 2015, 140 patients have been enrolled in the study. No results have been analysed. In a preparative observational study, patients reporting to be highly physically active had a 3.3 times increased chance of feeling highly recovered 3 weeks after colorectal cancer surgery ($p = 0.038$).

CONCLUSION: Preliminary data indicate improved recovery in patients with high physical activity and if our randomized trial confirms the hypothesis, we will be able to improve the outcome after colorectal cancer surgery with fairly simple measures.

MAINTAINING LIFESTYLE BALANCE IN BREAST CANCER SURVIVORS

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BACKGROUND: Lifestyle balance can be understood as a consistent pattern of daily activities that might improve well-being and subsequent health. An increasing number of women survive from breast cancer (BC), and some have to live with bothering symptoms leading to an imbalance in their everyday life activities. Since a transition to cancer survivorship is critical to long-term physical and psychosocial health, this presentation is to identify challenging elements for achieving a sustained daily lifestyle balance in breast cancer survivors.

METHODS: Participants recruited from a seven-year follow-up study of BC survivors were consecutively invited to write a Time Geographic Diary over the course of one week. The analysis of the written diaries illustrated routines and preferred activities in a social and geographical context, and indicated what can be desirable and necessary activities as well as limitations for their lifestyle balance. Based on the diary information, semi-structured individual in-depth interviews were conducted. The sampling ended when saturation had been reached with 11 women, aged 48 to 74.

RESULTS: Two main themes were identified. "Bodily and mental loneliness", describing how the women were challenged by their vague understanding of information provided by the health care system and their striving and coping with mental and bodily changes. The second theme, "New center of gravity in everyday life", describing how they adapted to partner- and friendships and to their situations at work and at least how they reoriented their daily activities to promote a healthy lifestyle balance.

CONCLUSION: Maintaining lifestyle balance in BC survivors includes self-managing strategies and accommodating elements

in arenas of daily activities, work and relations. This information should to a greater extent be included in the follow-up programs to promote healthy lifestyle in cancer survivors.

ANTICANCER TREATMENT OF BREAST CANCER RELATED TO CARDIOTOXICITY AND DYSFUNCTIONAL ENDOTHELIUM. THE ABCDE-STUDY

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BACKGROUND: With increasing number of breast cancer survivors, long-term consequences of curative cancer treatment should be studied. Several cytotoxic regimens are related to endothelial cell damage and vascular toxicity. Endothelial dysfunction is implicated in the pathogenesis of all known cardiovascular diseases (CVD) and closely related to the metabolic syndrome. Both CVD and diabetes contributes importantly to the mortality among breast cancer patients.

METHODS: Our study consists of an epidemiological part and a clinical part. In the epidemiological part, we will determine the prevalence and incidence of cardiovascular and metabolic morbidity in early breast cancer patients compared to the Danish background population. In the clinical part, we will study the changes in endothelial function and metabolic parameters in breast cancer patients before and after receiving chemotherapy. For comparison, we will examine healthy age-matched controls. Patients and controls will be characterized by the following parameters: Age, smoking status, concurrent medication, BMI, body composition, blood pressure, metabolic parameters, and endothelial function. For patients tumor characteristics and anticancer treatment will also be described. We strive to follow minimum 25 patients from before start of treatment to one year after ended treatment.

RESULTS: We have included 30 patients, and so far, we see a clear tendency to worsening of the metabolic parameters after chemotherapy. In addition, a trend towards decreased blood flow prior to start of treatment compared to healthy controls, and increased flow after treatment compared to the flow before.

CONCLUSION: The results imply that cytotoxic therapy worsens metabolic parameters. The changes in flow could indicate that the endothelium is dysfunctional in patients compared to controls, but more results are needed. If our findings are true, the next step will be to evaluate how strict metabolic control will affect prognosis. Our results may be applicable to other types of cancer.

DEVELOPMENT OF A NEEDS ASSESSMENT QUESTIONNAIRE FOR USE AMONG THE BROAD SPECTRUM OF CANCER PATIENTS IN GENERAL PRACTICE

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BACKGROUND: Needs assessment is crucial to rehabilitation and survivorship care of cancer patients. Patient questionnaires are recommended to facilitate the communication between patient and professional and to support decision-making. General practitioners have an important role in this process and have requested an electronic patient questionnaire that at the same time focuses on symptoms, physical and psychosocial impairment, prioritisation between needs, and considerations about solutions. We aimed to develop a questionnaire meeting these expectations.

METHODS: Based on the literature and experts of the field, a first version of the questionnaire was formulated and evaluated in focus group interviews with general practitioners invited for this specific process. Next, a second draft will be evaluated in focus groups with cancer patients with different cancers, ages and expected needs. If needed a second round of interviews will be conducted before field-testing in a broad sample of cancer patients.

RESULTS: The first interviews with the general practitioners underlined the need of a thorough introduction to both patients and professional users of this tool. It should clarify a realistic number of needs that could be addressed at a time, the fact that the general practitioner's knowledge may not completely cover all issues and the range of possible interventions may be limited. The general practitioners seemed willing to take on survivorship care and to try using this patient questionnaire. They found inclusion of comorbidity issues very important. Furthermore, inclusion of patient reflections regarding prioritisation and proposed solutions were asked for as well as a quick overview of the results.

CONCLUSION: The development process continues and more results will be ready to present at the conference. An acceptable tool targeted needs assessment in the general practice setting may support implementation of individualized rehabilitation and survivorship care and thus improve patient quality of life.

ABSTRACT NUMBER: P-14
ABSTRACT TYPE: POSTER SESSION

REINFORCING PARTNERSHIP BETWEEN CANCER PATIENT, GENERAL PRACTITIONER AND ONCOLOGIST DURING CHEMOTHERAPY – A RANDOMISED CONTROLLED

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BACKGROUND: International guidelines underline the importance of strengthening the coordination and continuity of cancer care. The different roles of general practitioners and oncologists with regard to treatment, follow-up and rehabilitation during and after cancer treatment are often obscure to cancer patients. Parallel courses of healthcare are often taking place instead of coordinated care characterised by continuity and partnership between care providers. Patients may feel uncertain about the health professionals' skills and area of responsibility. Therefore, healthcare seeking and support during and after cancer treatment may be inappropriate, leaving patients feeling insecure and lost between care providers.

AIM: The study aims to design and evaluate a new way of communication and shared decision-making that brings the patient, the oncologist and general practitioner together in a shared video-consultation in the early phase of chemotherapeutic treatment.

METHODS: The effect of the intervention in addition to usual care will be tested in a randomised controlled trial at Vejle Hospital in the Region of Southern Denmark. Based on sample size calculation, we intent to include 300 patients at the Department of Oncology and their general practitioners.

RESULTS: Data collection for pilot study is ongoing. Results and process outcomes will be evaluated qualitatively and quantitatively, using footage of the consultations, questionnaires to patients, general practitioners and oncologists, and data from registers. The quantitative outcomes at patient level will include shared-care (primary outcome), health-related quality of life, continuity, illness intrusiveness and depression and anxiety.

STATUS AND PERSPECTIVES: Results and evaluation of the pilot study will be presented at the conference.

ABSTRACT NUMBER: P-15
ABSTRACT TYPE: POSTER SESSION

EXISTENTIAL COMMUNICATION WITH CANCER PATIENTS IN GENERAL PRACTICE – A MULTI-PHASED DEVELOPMENT OF A SUPPORTING TOOL

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BACKGROUND: International and national scientific studies report that patients throughout the cancer trajectory express the need to communicate with their GP about the existential issues related to their disease. However, general practitioners (GPs) report substantial barriers related to communication with cancer patients about existential issues and concerns.

AIM: To describe the development of a tool facilitating GPs' communication about existential and spiritual problems and resources with cancer patients.

METHODS: A mixed-methods design was employed comprising a literature search, user evaluations through 13 focus group interviews with GPs and patients (n = 55), and a modified Delphi consensus procedure initiated with a meeting with 14 experts followed by two email-rounds.

RESULTS: The multi-phased development procedure resulted in a semi-structured question guide containing suggestions for 10 main questions and 13 sub-questions grouped into 4 themes covering psycho-existential-spiritual dimensions: "Introduction", "Identification of patient's problems", "Identification of patient's resources" and "Conclusion and action plans".

CONCLUSION: This study resulted in a question guide supporting GPs when communicating with cancer patients about existential problems and resources. This guide may qualify GPs' assessment of existential and psychological distress, increase the patient's existential and psychological well-being and help deepen the GP-patient relationship.

ABSTRACT NUMBER: P-16
ABSTRACT TYPE: POSTER SESSION

WHAT DO EMPLOYERS NEED TO SUPPORT THEIR CANCER SURVIVORS FOR RETURNING TO WORK?

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BACKGROUND: Employers in the Netherlands are legally obliged to support return-to-work (RTW). Knowledge on the employer perspective is a missing link to develop interventions for persons with cancer in working age in order to optimize their RTW. A single Belgian study¹ showed that employers experience RTW of cancer survivors difficult to manage and express an urgent need for support. We aim to explore the Dutch employers' experiences with RTW of cancer survivors and the related employers' support needs.

METHODS: We investigated how Dutch employer representatives (n = 14) from public, private and non-profit sectors (medium and large enterprises) experience their role during the RTW of an employee with cancer and their needs for support regarding this. A Grounded Theory analysis took place based on the Qualitative Analysis Guide of Leuven (QUAGOL).

RESULTS: Supporting cancer survivors is experienced as intense and specific. This specific involvement means: paying more attention and giving more trust to the employee when compared to other medical conditions. Employers do their utmost to search for RTW opportunities, using the law to either justify one's choices or as a convenient route planner. Communication and decision-making is regarded to be demanding but also satisfying if solutions that fit both the employee and the organization are found. Employers appear to have 1) a procedural approach (focus on action plan), 2) a caring and/or coaching approach (focus on employee needs) or 3) an ethical approach (focus on being a good employer). Differences between employers can be understood in the context of differences in organizations, employer and employee characteristics. Employers express a need for support regarding information, communication skills and decision-making.

CONCLUSION: The employers acknowledged their role and responsibility in RTW and strived for decisions that fit employee and organization, using three different approaches. Employers should be supplied with information and training on cancer, communication and decision-making.

ABSTRACT NUMBER: P-17
ABSTRACT TYPE: POSTER SESSION

COMMUNICATING WITH SERIOUSLY ILL PATIENTS ABOUT DEPENDENT CHILDREN: WHAT TRAINING PROGRAMS FOR HEALTH PERSONNEL MAY CONSIDER - A QUALITATIVE STUDY

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BACKGROUND: Training programs for health personnel targeting communication among seriously ill patients and their relatives mostly address general communication skills such as showing empathy and using “open questions”. Meanwhile, we lack knowledge on ward specific challenges regarding health personnel’s communication about how to involve the patients’ dependent children, and about the specific skills that this requires. In order to contribute to the development of a training program, we examined how the medical context of hospital wards influence communication challenges regarding patients’ children.

METHODS: We conducted a qualitative study based on ethnographic methods on three hospital wards to explore the complexity of doctors’ and nurses’ clinical practice, experiences, and attitudes regarding challenges related to communicating with patients who had dependent children. The three wards were hematology, neurointensive care, and oncological gynecology. The study included 49 semi-structured, in-depth interviews (n = 19 doctors and n = 30 nurses) and 27 days of participant observations. The analysis of the empirical data followed general criteria for qualitative analysis with open coding and thematic approach to the material.

RESULTS: We found that the communication between health personnel and patients about their dependent children was influenced by ward specific factors as well as the patient’s diagnosis. For example lack of physical contact between parents and children because of infection risk (hematology); risk that children are left behind with one parent unconscious and the other in acute crisis (neurointensive); challenges in explaining to children that their mother has cancer or is waiting for hospice (oncological gynecology). Thus, communication had different foci on different wards: patient as a unit (haematology); relatives as substitutes (neurointensive) and family as a whole (oncological gynecology).

CONCLUSION: Training programs that address children as relatives may consider local medical contexts, including specific diagnostic factors, since these factors influence health personnel communication and how children are involved.

ABSTRACT NUMBER: P-18
ABSTRACT TYPE: POSTER SESSION

EXPERT AND STAKEHOLDER PERSPECTIVES ON EDUCATION OF NON-PROFESSIONAL FOOTBALL COACHES IN CHARGE OF COMMUNITY-BASED FOOTBALL IN PROSTATE CANCER

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BACKGROUND: We report expert and stakeholder perspectives on the development of a training course and intervention manual used to support adherence, fidelity, and safety in a randomized trial examining the effectiveness of community-based soccer training in men with prostate cancer (the FC Prostate Community (FCPC) trial).

METHODS: The two-step qualitative design included triangulation of methods, data sources, and researchers. Step 1 comprised key informant interviews (n = 4) with clinical and scientific experts, including a professor in physiology and Football science, a clinical psychologist specializing in men’s health, and two experienced medical doctors from two different urology departments. Step 2 included stakeholder focus group interviews (n = 7) with nurses (n = 7), non-professional soccer coaches and local soccer club representatives (n = 5), and men with prostate cancer (n = 7).

RESULTS: The importance key informants put on the coach’s qualifications, structure of the training, prevention of injuries, and promoting a non-patient environment informed development of the training course and intervention manual. Stakeholders agreed with key informant input, mentioning the importance of clarifying the coach’s responsibility, the value of positive competition, and inclusion of men in the club. Based on these results, we present the final templates for the training course and intervention manual.

CONCLUSION: The training course and intervention manual will be an integral component of the FCPC trial. Actively involving experts and stakeholders generated shared ownership, potentially facilitating the implementation and reproducibility of the intervention.

ABSTRACT NUMBER: P-19
ABSTRACT TYPE: POSTER SESSION

COMMUNICATIVE PROCESSES AND DECISION-MAKING IN RELATION TO PROSTATE CANCER PATIENTS

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BACKGROUND: There are many benefits of involving patients in decision-making, including increased patient safety and improved health. Many patients with prostate cancer wish to be involved when making decisions in the course of their treatment. However, studies show that Patient Involvement and SDM is far from being something patients experience. For many men with prostate cancer the disease and its treatment have long-term, and often lifelong, serious physical and psychological consequences. Many patients experience a reduced quality of life. In relation to the significant side effects of treatment, it is essential to involve patients’ preferences, needs and desires when making decisions during the course of their disease. Furthermore, it is important that patients are adequately informed about treatment, side effects, and other specific issues important for the individual patient. The aim of this project is to examine the processes of communication between prostate cancer patients and health professionals related to decision-making in the course of the patient’s treatment. Organizational possibilities and constraints related to the involvement will also be examined.

METHODS: Data will be collected through participant observation followed by qualitative interviews of 15 patients with prostate cancer, and of health professionals employed at a urological clinic involved in the treatment of patients. The project is carried out in the phenomenological-hermeneutic research tradition. Interpretation of data will be based on Ricoeur’s theory of interpretation, i.e. a naive interpretation, a structural analysis, and a critical interpretation. In addition to contributing with detailed knowledge about patient involvement related to prostate cancer patients, the project will provide the basis for a specific intervention study, including developing and testing decision aids for the use of both patients and health professionals. This could enhance focus on the person rather than the patient and contribute to a greater extent of involvement in decision-making.

ABSTRACT NUMBER: P-20
ABSTRACT TYPE: POSTER SESSION

FACTORS INFLUENCING IMPLEMENTATION OF A SURVIVORSHIP CARE PLAN – A QUANTITATIVE PROCESS EVALUATION OF THE ROGY CARE TRIAL

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BACKGROUND: Although Survivorship Care Plans (SCPs) have been recommended by the IOM for all cancer survivors, few studies have evaluated the implementation process of SCPs in clinical practice. This study aims to investigate the factors that influence implementation of SCPs in the intervention arm of the ROGY care trial by 1) assessing the level of SCP receipt in the ROGY care trial and 2) identifying patient- and provider-level factors that influence SCP receipt.

METHODS: Between 2011 and 2015, a pragmatic cluster randomized-controlled-trial was conducted on the effects of automatically generated SCPs. Endometrial (n = 117) and ovarian (n = 61) cancer patients were allocated to ‘SCP care’, as provided by their SCP care providers (n = 10). Associations between SCP receipt (self-reported SCP receipt and actually generated SCPs), patient-factors (socio-demographic-, clinical-, and personality factors) and care provider factors (profession, a-priori motivation regarding SCP provision) were tested in univariate analysis. The odds ratios of factors influencing self-reported SCP receipt were estimated with a multivariate regression model.

RESULTS: Of all patients in the SCP care arm (n = 178), SCPs were generated by the care provider for 90 % (n = 161) of the patients and 70 % (n = 125) of the patients reported that they had received an SCP. Patients with older age, ovarian cancer, type D (distressed) personality, and patients that completed the questionnaire a longer period of time after the SCP consult were more likely to report no SCP receipt.

CONCLUSION: SCP receipt was influenced by patient- but not care-provider factors. Patients with older age, ovarian cancer

and a type D personality were less likely to report SCP receipt. Whether all these patients are in need of information as provided in an SCP requires further investigation. If they do, more efforts need to be made towards the implementation of SCPs.

ABSTRACT NUMBER: P-21
ABSTRACT TYPE: POSTER SESSION

MONITORING OF PATIENTS' POSTOPERATIVE MOBILIZATION AFTER ELECTIVE COLORECTAL SURGERY AND OBSERVATION OF TIME TO FIRST POSTOPERATIVE DEFECATION

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BACKGROUND: Postoperative mobilization is one of the five components in fast-track surgery and also part of standard care. Evidence from fast-track surgery shows a reduction in length of stay, postoperative pain; reduced paralytic ileus and increase in patient satisfaction. Recommendations for best practice in relation to mobilization are unclear and have only been explored in relation to fast-track surgery. However, evidence regarding the specific effect of mobilization on bowel function after colorectal surgery is lacking. The aim of this study is to examine mobilization as a "stand alone" intervention. Early bowel function may decrease complications like nausea, constipation and ileus. Methods: The study is an on-going prospective observational study including patients after surgery for colorectal cancer. Using ActivPal (micro) accelerometers placed on the thigh and chest the time the patients spend lying, sitting, standing and walking is quantified by proprietary algorithms (Intelligent Activity Classification™). Participants register abdominal function daily in a booklet until first defecation after surgery. The booklet consists of two parts: One part identifying bowel function using the Bristol Stool Scale in order to ease classification of defecation. The second part is a table with tick-off-possibilities for patients on experiences related to abdominal sensations.

RESULTS: Expected inclusion of up to 40 patients. Interim analysis will be performed and inclusion will be ceased when the standard deviations for time spent on different activities is achieved. Preliminary results indicate that colorectal patients are less mobilised postoperatively than recommended from evidence and patient recommendation. Preliminary results regarding mobilization and time of first defecation will be presented.

CONCLUSION: The study is ongoing. Thus, conclusions regarding the potential impact of time spend lying, sitting, standing and walking on time to first defecation after colorectal surgery is dependent on the results.

ABSTRACT NUMBER: P-22
ABSTRACT TYPE: POSTER SESSION

THE DUTCH GUIDELINE CANCER REHABILITATION: EVALUATION OF IMPLEMENTATION IN PRACTICE AND TREATMENT OUTCOMES

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BACKGROUND: In 2011, the Dutch guideline Cancer Rehabilitation was published, followed by implementation in six pilot centres (2012-2014). Guideline implementation requires: 1) structural detection of patients' signs and symptoms and referral to cancer rehabilitation; 2) tailoring cancer rehabilitation care based on an structured intake; 3) rehabilitation programs for the whole cancer trajectory: during and after curative treatment and in the palliative phase. This study evaluated the implementation process and treatment outcomes.

METHODS: Six rehabilitation departments implemented the guideline with a combined strategy of knowledge brokering and the break through method. Implementation was evaluated by process and outcome indicators in online recorded data of 764 participants. Descriptive statistics were used to analyse the degree of implementation. Treatment outcomes – fatigue (MFI), quality of life (EORTC-QLQ-C30) and depressive symptoms (CES-D) – were measured before and after rehabilitation.

RESULTS: Primary oncology specialists' include scores on recommended screening instruments for distress, depressive symptoms, specific complaints and fatigue only limited with their referral to rehabilitation medicine (range Distress thermometer

3.3 % to Patient Specific Complaints questionnaire 0.3 % included in referral letter). As recommended, the structured intake prior to cancer rehabilitation was mostly done by – or under supervision of – an oncological Consultant in Rehabilitation Medicine (74.1%). The recommended rehabilitation programs were generally provided for the whole cancer trajectory, however most frequently after curative treatment. Fatigue, quality of life and depressive symptoms improved significantly after rehabilitation. Most important improvements were seen in physical fatigue and role functioning.

CONCLUSION: Recommendations of the guideline were largely applied in practice, particularly for structured intake and for rehabilitation during the whole trajectory. There is room for improvement, especially for including patients' scores on screening instruments with referral to rehabilitation medicine. Rehabilitation according to the guideline showed significant improvements in fatigue, quality of life and depressive symptoms.

ABSTRACT NUMBER: P-23
ABSTRACT TYPE: POSTER SESSION

REHABILITATION NEEDS AND PLANS AMONG PATIENTS WITH CANCER, ASSESSED AT HOSPITALS AND WHEN REHABILITATION PROGRAMMING STARTS

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BACKGROUND: National policies entitle Danish cancer patients to an assessment of rehabilitation needs shortly after hospital treatment begins and when rehabilitation begins in the municipalities. Systematic assessment of rehabilitation needs seem prerequisite for sufficient rehabilitation, but little is known about patients' needs. The aim of this study was to describe specific rehabilitation needs and plans among patients with cancer at hospitals when diagnosed and when rehabilitation programming starts in the municipality.

METHODS: We analysed assessment-forms for rehabilitation needs for 188 cancer patients from two hospitals and two municipal cancer rehabilitation programmes from April to December 2015. The forms included 1) stated needs: 58 fixed areas categorised in six domains and 2) an area to document the rehabilitation plan. All data were categorised using the International Classification of Functioning, Disability and Health (ICF) and descriptive statistics were used to describe them.

RESULTS: 188 patients stated their needs during the study period and 97 (52 %) hereof had a rehabilitation plan. In total 89 patients in hospitals stated 666 needs whereas 99 patients in municipalities 836. The needs stated were primarily within the ICF component "body functions and structure". Most frequent needs were (hospitals/municipalities): fatigue (57 %/67 %), reduced muscle strength (55 %/67 %), worried (37 %/36 %) and weight loss or gain (33 %/34 %).

CONCLUSION: The results show how the most stated rehabilitation needs were fatigue, reduced muscle strength, worried and weight loss or gain and that only 52 % of the patients had a rehabilitation plan. The results underpin the need for a systematic procedure on assessment of rehabilitation needs in clinical practice: it is a prerequisite for identifying needs, ensuring a rehabilitation plan, and referral to rehabilitation. Systematic procedures will also facilitate suitable adjustments to current rehabilitation.

ABSTRACT NUMBER: P-24
ABSTRACT TYPE: POSTER SESSION

TOWARDS A BETTER UNDERSTANDING OF "CANCER SURVIVOR"

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BACKGROUND: The term "cancer survivor" still lacks unanimous and detailed definition, even if it is commonly used by different people, clinical institutions, academic bodies, and political organizations. Therefore, our aim was to conduct a systematic review of published, and proposed definitions of "cancer survivor" in order to give an overview concerning existing definition.

METHODS: Utilizing a systematic search strategy with different occurrences of "cancer survivor" term, we probed the following databases: Medline (June 1975-June 2015), Scopus (all the years), Web of Science (all years), Google Scholar (all the years), ERIC (all the years).

RESULTS: Although the most widely used definition sees cancer survivorship as a process that begins at the moment of diagnosis and continues through the balance of life, there is still no consensus about who is a “cancer survivor” and what is “cancer survivorship”. Both the care providers and patients do not have a shared definition because everyone gives a definition based on personal life experience. Consequently, the definition varies among countries and in each of them there are people who prefer to split the fight against cancer in different periods, each with its own name, and who, instead, see illness experience as a continuous process, without precise categories. This definition highlights patient’s psychological and legal needs, as well as medical ones, to receive care and assistance from the beginning and, at the same time, it establishes valid criteria for making scientific and statistical sampling research.

CONCLUSION: This compendium of proposed definitions may invite a reflection about establishment of a shared definition that could satisfy both clinical and research aspects and may improve communication among patients and patient’s organizations. The International classification of Functioning, Disability and Health may represent a common framework for measuring the diversity of survivorship conditions at both individual and population levels.

ABSTRACT NUMBER: P-25
ABSTRACT TYPE: POSTER SESSION

HEALTHCARE PROFESSIONALS’ ATTITUDES TO REHABILITATION PROGRAMMING FOR MALE CANCER SURVIVORS

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BACKGROUND: Cancers are diagnosed more frequently in men and unfavourable prognoses and survival rates are seen in men by comparison to women. Although male cancer survivors have unmet rehabilitation needs, they are nevertheless significantly underrepresented in current programs. Those responsible for care, treatment and rehabilitation are predominantly female healthcare professionals. The purpose of this study was to describe and interpret the attitudes and conduct of health care professionals in association with male cancer survivors and their rehabilitation participation in the primary healthcare system.

METHODS: Ethnographic fieldwork was conducted, consisting of participant observation and 9 semi-structured focus group interviews with 58 hospital healthcare professionals. Using interpretive description methodology with symbolic interaction as a theoretical framework, data were collected through fieldwork in three oncology wards in Denmark.

RESULTS: The analysis revealed two strongly held and relatively consistent categorical themes - perceptions of gender and rehabilitation - both of which served as overarching patterns in the hospital healthcare professional’s attitudes and conduct implying an influence on men’s participation in cancer rehabilitation. Together the two categorical themes show how the conduct of the healthcare professionals may result in a dual obstruction, forming a barrier for the male cancer patients’ rehabilitation participation. These perceptions represent two categorical themes presenting themselves as further barriers produced by the healthcare professionals’ attitudes and conduct, indicating an impact on the male cancer survivor’s participation in cancer rehabilitation.

CONCLUSION: Gender and rehabilitation perceptions formed barriers in this context, suggesting that male cancer survivors’ rehabilitation outcomes may be compromised by healthcare professionals’ attitudes and conduct. These findings provide insight into approaches to guide hospital situated healthcare professionals to take responsibility for rehabilitation and further take gender into account in their work.

ABSTRACT NUMBER: P-26
ABSTRACT TYPE: POSTER SESSION

MANIFESTATIONS OF PATIENT EMPOWERMENT IN CANCER FOLLOW-UP. A QUALITATIVE ANALYSIS OF THEMES RELEVANT TO INCLUDE IN A PATIENT REPORTED OUTCOME MEASURE

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BACKGROUND: The concept patient empowerment has roots in the social rights movements and may be defined as the opportunity for patients to master their own health. The aim of this study was to identify themes relevant to address in a questionnaire assessing empowerment manifestations in cancer follow-up.

METHODS: Patients in follow-up up after first line treatment for their cancer were recruited from two hospitals (Roskilde Hospital and Copenhagen University Hospital) and five different departments (two departments of oncology, one department of surgery, one of urology and one of haematology) using strategic sampling ensuring a diverse population. Using a semi-structured interview, guide patients were interviewed about their experiences with follow-up. Interviews were analysed by coding themes depicting manifestations of empowerment in relation to the health care system.

RESULTS: In total 16 patients participated in the interviews. Patient empowerment in cancer follow-up manifested itself as having the possibility of - and the possibility of acquiring knowledge and skills relevant for - influencing: a) level of information (about care, the health care system, adverse events, late effects, prognosis, treatment and biology), b) timing of information, c) involvement in decisions about treatment and care, d) timing of treatment and care, e) information given about possibilities of self-care, f) the content of health care consultations, g) which doctors and nurses to consult, h) the possibility of getting access to the opinion of different doctors, i) level of self-care, j) access to other patients in the same situation and k) access to support inside and outside the hospital system.

CONCLUSION: Patient empowerment in cancer follow-up is a complex construct. The definition has to acknowledge that the need for influence and involvement differs between patients and that it is often not possible to have complete mastery. The study was funded by the Danish Cancer Society (R113-A6922-14-S34).

ABSTRACT NUMBER: P-27
ABSTRACT TYPE: POSTER SESSION

HOSPITAL-BASED FOLLOW-UP AFTER CURATIVE THERAPY FOR BREAST CANCER IN AN ONCOLOGICAL DEPARTMENT FROM THE PERSPECTIVE OF CLINICAL ONCOLOGIST AND PATIENT

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BACKGROUND: Internationally and nationally follow-up guidelines and recommendations request for evidence based knowledge in procedures to improve breast cancer related outcomes as morbidity, mortality and patients unmet needs. The purpose of this study was to investigate a standard follow-up program in an oncological department in Denmark and to assess treatment related morbidity and recurrent disease from the perspective of both patients and clinical oncologists. But also assess unmet needs and fear of cancer recurrence.

METHODS: The present cross-sectional study measured morbidity and recurrence in 194 patients at one point visit within a time period of 3 months to 5 years after treatment for primary breast cancer. Cancer Survivors Unmet Needs (CaSUN), 35 items and fear of cancer recurrence (CAR-Q5), 5 items were assessed.

RESULTS: Most morbidities were seen up to 3 years past follow-up and generally the clinical oncologists had a lower reported frequency of physical and psychosocial reported morbidities than the patients themselves and eight loco-regional or distant recurrences were suspected. After further investigations, no recurrences were discovered. Most clinical oncologist reported morbidities were from the breast and cicatrice, bone pain and climacteric symptoms compared to moderate to severe patient reported hot flushed, fatigue, sleep disturbance, memory- and concentration impairment and vaginal dryness. Statistically significant prevalence divergences between comparable clinical oncologists and patient reported morbidities were seen in climacteric symptoms, psychosocial symptoms, weight changes and vaginal dryness. The majority of women endorsed at least one unmet need and have fear of cancer recurrence.

CONCLUSION: The present study showed breast cancer related symptoms of recurrences, but no recurrences were diagnosed after further investigations. Most physical and psychosocial morbidities were seen up to three years past follow-up assessing the various needs particularly for women under long-term endocrine therapy is important. In addition, unmet needs were reported. The role of a specialised breast nurse throughout a patient’s follow-up and patient education is a possibility to improve those needs and morbidity.

MUNICIPAL RETURN TO WORK MANAGEMENT IN CANCER SURVIVORS UNDERGOING CANCER TREATMENT: A PROTOCOL ON A CONTROLLED INTERVENTION STUDY

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BACKGROUND: Cancer survivors are often left on their own in order to deal with the challenges of resuming work during or after cancer treatment, mainly due to unclear agreements between stakeholders responsible for occupational rehabilitation. Social inequality exists in cancer risk, survival probability and continues with regard to the chance of being able to return to work.

AIM: The aim is to apply an early, individually tailored occupational rehabilitation intervention to cancer survivors in two municipalities parallel with cancer treatment focusing on enhancing readiness for return to work.

METHODS: Patients referred to surgery, radiotherapy or chemotherapy at the Oncology Department, Aarhus University Hospital, Denmark for the diagnoses; breast, colon-rectal, head and neck, thyroid gland, testicular, ovarian or cervix cancer are eligible for the study. Patients must be residents in the municipalities of Silkeborg or Randers, 18-60 years of age and have a permanent or temporary employment (with at least 6 months left of their contract) at inclusion. Patients, for whom the treating physician considers occupational rehabilitation to be unethical, or who are not reading or talking Danish are excluded. The control group has identical inclusion and exclusion criteria except for municipality of residence. Return to work is the primary outcome. Effect is assessed as relative cumulative incidences within 52 weeks and will be analysed in generalised linear regression models using the pseudo values method. As a secondary outcome, co-morbidity and socio-economic status is analysed as effect modifiers of the intervention effect on return to work.

DISCUSSION: The innovative element of this intervention is the timing of the occupational rehabilitation which is much earlier initiated than usual and the active involvement of the workplace. Trial registration: Current Controlled Trials ISRCTN50753764. Registered August 21st, 2014.

POTENTIAL SAVINGS FOR EU ECONOMY DUE TO CANCER SURVIVORS WITH A DISABILITY RETURNING TO WORK

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BACKGROUND: The number of cancer survivors is growing due to progression in diagnosis and treatment. Approximately half of cancer survivors are at working age, however many of them do not return to work. One of the reasons is a disability of cancer survivors. Although cancer related disability is usually more severe compared to disability due to other diseases, real-life data showed up to 85 % of disabled cancer survivors may return to work after comprehensive rehabilitation programmes. The aim of this study was to estimate potential savings to EU economy due to return to work of disabled cancer survivors.

METHODS: Data on indirect cost of a cancer related disability were calculated based on Luengo-Fernandez at al. study and our own estimation of a contribution of disability to indirect cost related to morbidity. Disability structure i.e. percentage of a partially disabled cancer survivors, was adopted from Polish Social Insurance Institution data (we assumed that population with complete disability or inability for independent existence cannot return to work). Presenteeism and absenteeism in cancer survivors were adopted from our previously published studies.

RESULTS: We estimated the indirect cost of cancer due to disability in EU at the amount of 4223.2 million EUR. However partial disability account for approx. 20-25 % of this sum and reduces potential savings to the amount of 844.6–1055.8 million EUR. Further correction, taking into account the efficacy of rehabilitation programs (up to 85 %), reduces this savings to 717.9–897.4 million EUR. Considering the loss of productivity due to sickness absence and presenteeism measured in cancer survivors' population (19.1 % and 37.3 % respectively) potential savings for EU economy due to return to work of cancer survivors with a

disability are calculated at the amount of 364.2-455.2 million EUR.

CONCLUSION: Indirect cost of cancer related disability can be reduced, but probably only to a small extent.

CAN THE PATIENT NAVIGATION PROJECT IMPROVE DISTRESS, WELL-BEING, HEALTH LITERACY AND SOCIAL SUPPORT AMONG SOCIALLY VULNERABLE CANCER PATIENTS?

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BACKGROUND: Social inequality in cancer survival and rehabilitation is a major problem. Patient navigation has shown to improve quality care among cancer patients. These promising results makes it relevant to explore whether patient navigation can improve quality care among vulnerable groups. The purpose of this study is to examine whether the nation-wide Patient Navigation Project improves distress-levels, well-being, health literacy and social support among socially vulnerable cancer patients.

METHODS: Socially vulnerable cancer patients were included in the project and matched with a navigator (volunteer). The navigators, who had a background in social welfare or health care, supported the patients during a 6-month period. A theory of change describes how desired changes are achieved within the three domains, well-being, health literacy and social support. The patients filled out a baseline questionnaire and 6-month questionnaire after enrolment. They contained validated questions regarding distress and well-being, and questions referring to the theory of change.

RESULTS: The 65 patients who are currently included in the project are predominantly on welfare (69 %) and has no or a short education (78 %). At baseline the mean distress level was 8.1, and 63 % had a low well-being and therefore at risk of depression/ long term stress. 33 % is always or often alone although they want to be together with other people.

CONCLUSION: The method used in the Patient Navigation Project is promising regarding recruitment of socially vulnerable cancer patients. Autumn 2016, we have sufficient data to present whether patient navigation improves distress-levels, well-being, health literacy and social support.

IMPLEMENTATION OF CANCER COORDINATORS IN PRIMARY HEALTH CARE IN NORWAY - EXPERIENCES AND RESULTS

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BACKGROUND: In 2012, the Norwegian Cancer Society developed and partly funded (75 %) the implementation of cancer coordinators in primary health care in the municipalities. The model was established in cooperation with the municipalities themselves (they funded 25 % and are employers), patient organizations and health care personnel, and we had systematic political meetings with The Ministry of Health and Care Services to ensure political support. The aim is twofold: 1) To improve the quality of life for patients and their next-of-kin, and 2) To make the coordinator function permanent and fully funded by the municipalities.

METHODS: Develop a solid model of cancer care in the municipalities based on the documented needs of cancer patients and their next-of-kin.

RESULTS: Based on reports and evaluations we consider that we so far have reached the first aim (improve quality of life) and partly reached the second aim (cancer coordinators as a permanent function), even though it is far too early to conclude on the last aim. About 200 out of 400 municipalities have a coordinator, which cover 2/3 of the population. 95 % of the patients and next-of-kin are satisfied with the assistance from the cancer coordinator, and next-of-kin are even more satisfied than the patients (survey 2014).

CONCLUSION: Cancer coordinators who work primarily to coordinate services for cancer patients and their next-of-kin is an important step in supporting patient autonomy and empowerment, and therefore in the patient navigation. We have experienced that some areas are of specific importance: follow-up of children and adolescents when parents have cancer, cancer rehabilitation and survivorship, and contribution to stay at home longer at the end of life, including the possibility of dying at home. In our presentation, we will focus on rehabilitation, survivorship and contribution to new knowledge in accordance with the conference program.

ABSTRACT NUMBER: P-32
ABSTRACT TYPE: POSTER SESSION

RECRUITING VULNERABLE LUNG CANCER PATIENTS TO A PATIENT NAVIGATOR – LESSONS LEARNED FROM THE PACO PILOT STUDY

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OBJECTIVES: Incidence and survival from lung cancer is associated with socioeconomic position and disparities exist in both curative and palliative intended treatment for lung cancer, even when taking into account performance status and comorbidity. Patient navigation has been recognized as valuable in addressing health disparities in timely treatment and transitions in care for disadvantaged patients. However, no studies have investigated the impact of patient navigation on treatment adherence in lung cancer patients. We initiated a pilot study testing the feasibility of a randomized trial providing a patient navigator to newly diagnosed vulnerable lung cancer patients (the PACO trial). We present findings from the pilot study and discuss factors that may have affected recruitment rates.

METHODS: 24 lung cancer patients referred for chemotherapeutic treatment at the oncology department in Herlev University Hospital, Denmark, were invited to the study. Eligible patients should either live alone, have no formal education beyond secondary school, have one or more comorbidities, a performance status of 1-2, or be more than 65 years old at time of inclusion. Seven volunteers with a healthcare education were recruited as navigators and trained in skills to elicit, explore and respond to patients concerns, active listening and provide empathy, and coach and communicate effectively with patients to reinforce self-care strategies. Eight navigator-patient sessions were conducted, each with specific purpose targeting four phases in the treatment trajectory (treatment planning, initiation, adherence and end-of-treatment). A detailed manual was developed with guidelines for session contents.

RESULTS: 6 months after study start-up, we had only managed to recruit 25 % (n = 6) of invited patients due to mainly inherent problems with patient resistance. Among those who did not wish to participate (n = 18), 13 patients agreed to fill in a baseline questionnaire. The decliners had several reasons for not wanting to participate, the most frequent being the patients did not think he/she would benefit from a navigator.

CONCLUSION: In this pilot study among newly diagnosed lung cancer patients recruitment was challenged by a number of internal and external obstacles with the most important being patient reluctance. The study has provided insight into advantages and disadvantages in the recruitment of socially vulnerable cancer patients into trials and will inform future trial designs.

ABSTRACT NUMBER: P-33
ABSTRACT TYPE: POSTER SESSION

PERCEIVED MOTIVATION AND BARRIERS FOR ATTENDING SUPERVISED TRAINING DURING ADMISSION FOR PATIENTS WITH HAEMATOLOGICAL MALIGNANCIES

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BACKGROUND: Patients diagnosed with haematological malignancies often undergo aggressive treatment protocols and experience treatment-related symptoms and side effects. These patients are hospitalised for a prolonged period and thus at risk of losing physical function. Research has shown that being physically active and exercise is important to improve and maintain physical function, quality of life and to reduce fatigue. Motivating patients to adhere to physical exercise during admission remains, however, challenging. The objective was to gain an in-depth understanding of patients' motivation for and barriers towards participation in supervised training during admission to a haematological department.

METHODS: A qualitative study was performed including 12 inpatients. During admission patients are offered daily training in small groups supervised by a physiotherapist. Six patients with and six patients without previous experience in attending supervised training, were interviewed. Interviews were analysed using the Self-Determination Behaviour Theory.

RESULTS: The study showed that all patients suffered from cancer-related fatigue and loss of physical function. The six patients who had previously participated in supervised training had been exercising until diagnosed with a haematological malignancy, they maintained their level of activity when not hospitalised. Their motivation for participation in supervised training was focused on fears of losing physical function as well as being social with other inpatients. The six patients who did not participate in supervised training had all stopped exercising 1-2 years before diagnosed with a haematological malignancy. Their barriers for not participating were lack of engagement and information about the supervised training.

CONCLUSION: Patients participating in supervised training during admission were highly motivated because they continued being physically active during admission but also after discharge. Informing and coaching inpatients about supervised training and the benefits of being physically active may reduce barriers for participating in supervised training.

ABSTRACT NUMBER: P-34
ABSTRACT TYPE: POSTER SESSION

WORTH THE RISK? PROSTATE CANCER PATIENTS' ATTITUDES AND EXPERIENCES WITH INJURIES RELATED TO PARTICIPATION IN COMMUNITY-BASED FOOTBALL

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BACKGROUND: Men are underrepresented in cancer rehabilitation and less than half of prostate cancer patients meet the recommended level of physical activity. The FC Prostate Community trial is an ongoing national multicentre randomized trial investigating the effectiveness of community-based soccer in men with prostate cancer. A previous study indicates that football has a positive impact on prostate cancer patients' physical and mental wellbeing and stimulates maintenance of physical activity. However, the risk of injuries in football is considered rather high, and may constitute a barrier in referral of men with prostate cancer – men who has a quadruple risk of bone fractures. Also, studies show that sports injuries are hard to overcome, may isolate the individual and lead to considerable psychological distress. However, most research on sports injuries is conducted with young athletes. The purpose of this study is to investigate prostate cancer patients' attitudes and experiences with injuries related to participation in community-based football (CBF).

METHODS: Videotaped focus group interviews exploring attitudes were carried out with four football teams (n= 32). Furthermore in-depth narrative interviews will be conducted with patients who have experienced an injury, which has excluded them from football (n≈5). Data from the focus groups are analysed by means of thematic network analysis, while situational analysis is used to analyse data from the narrative interviews.

RESULTS: The study is in progress (terminated late August) but preliminary results suggest that this particular group of elderly patients do not suffer the same negative consequences of sports injuries as younger athletes. The mere fact of having a body that can be football-injured is a statement of vitality and aliveness. The positive effects of football and the fear of getting injured is a trade-off that favours participation in CBF.

CONCLUSION: Due to the relative high risk of injuries in football, fear of injuries is likely to prevail among patients and healthcare professionals. However, this may be nuanced and challenged by this study pointing to injuries being largely acceptable to patients.

SOCIAL CONSEQUENCES OF CHILDHOOD CANCER LATE EFFECTS - A QUALITATIVE STUDY OF CHILDHOOD CANCER SURVIVORS' UNIQUE KNOWLEDGE ABOUT LATE EFFECTS

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BACKGROUND: 200 Danish children are annually diagnosed with cancer. Over the last 20 years, the survival rate has improved, and up to 80 % children are cured. As a result of this, an increasing number of adults are living with late effects of childhood cancer. 50 % of childhood cancer survivors have documented physical late effects.

PURPOSE: The purpose of this qualitative study is to generate new knowledge about how late effects influence the childhood cancer survivors' social life, once treatment has ended. The study includes patients' perspectives and is based on the unique knowledge and experiences provided by young adult childhood cancer survivors. The study includes knowledge about physical, mental and social late effects.

METHODS: Empirically, the study is grounded in 25 semi-structured qualitative interviews with childhood cancer survivors between the age of 18 and 39. Besides attending the interviews, participants were asked to provide personal details, including their disease history.

RESULTS: Different types of late effects may amplify and affect each other, which may lead to new mental and social late effects with major consequences for daily life. Therefore, it is important to focus of the total sum of all the late effect complications to understand the overall consequence of life with late effects. Four aspects of childhood cancer survivors' social life can especially be negatively influenced by late effects: 1) Education, job and economic opportunities 2) Participation in social life 3) Establishment of own family 4) Relationship to siblings and parents. The study explores three terms, which are relevant to fully understand and uncover the consequences. These are: 1) Complications on each late effect 2) Present amount of consequences of all the various late effects 3) Present life situation.

CONCLUSION: The final conclusions imply that childhood cancer survivors' late effects can influence the quality of social life.

MUSIC & CANCER - RANDOMIZED STUDY OF THE EFFECT OF LIVE MUSIC DURING INFUSION OF CHEMOTHERAPY

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BACKGROUND: Chemotherapy involves major physical and psychological problems. Not much has been provided in the clinical setting, which relieves the symptoms of anxiety associated with chemotherapy. A review of the literature illustrate the need for developing new potential areas of intervention that takes into account, that not only do cancer patients face challenges in everyday life but also during treatment procedures, which may cause a higher level of anxiety associated with these procedures, e.g., chemotherapy infusion. So far, seven RCT's have investigating the effect of music interventions applied among adult cancer patients in active chemotherapy showing positive effect on anxiety and mood. However, there are many unknown confounders in these studies in relation to the occurrence of side effects, for example type of cancer, stage, and comorbidity. Furthermore, the majority of the studies are compromised by small sample-size, lack of statistical power and unclear randomization methods.

RESEARCH QUESTION: Can live music moderate the level of chemotherapy related anxiety in patients with hematological cancer?

DESIGN: Randomized controlled trial, 3-arm parallel group and multiple session design.

SETTING: 6 hematological departments in Denmark.

PARTICIPANTS: 144 newly diagnosed malignant lymphomas initiating first-line chemotherapy with a 1-day administration schedule.

METHOD: Participants were randomly assigned into three groups receiving either 30 minutes of patient-preferred live music during chemotherapy (n = 48), 30 minutes of patient-preferred taped music during chemotherapy (n = 47) or standard care during chemotherapy (n = 49). Level of anxiety was measured by STAI before and after treatment and serum catecholamines were obtained pre- and post intervention to measure arousal-levels.

RESULTS: Preliminary results will be presented at the ECRS 2016 symposium.

PERSPECTIVES: A broad range of specialists - from professional musicians, clinical haematologists, endocrinologists to neurologists for psychosocial cancer specialists - are involved in the Music & Cancer project. The present project may be of importance for the development of a non-drug tool that may affect the immediate responses to cancer treatment. Antiemetic and other drugs, which inhibit some of the physiological responses to infusion of chemotherapy, have been developed. This study goes a step further and uses a cultural and artistic sound exposure, which combined with treatment already given hopefully potentiates the effect of the pharmacological treatment. Possibly, some of the pharmacological treatment can be omitted, if the musical exposure has an effect. The connection between the patients' musical competences and the physical and psychological measurements may allow us to target and make music interventions further extensive.

CANCER SURVIVORS' REFLECTIONS ON PARTICIPATION IN MUNICIPAL REHABILITATION PROGRAMMING

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BACKGROUND: Cancer survivors experience the transition from being hospitalized cancer patients, to re-establishing a meaningful everyday life after ended care trajectory as an ambivalent step. They often express wishes to be free of the limitations occasioned by the healthcare system caused by their disease. Nevertheless, the patients fear letting go of the safety and expert opinions provided by the system. Insufficient information from healthcare professionals in relation to cancer patients transition from hospital to the municipality, often causes unmet needs amongst some cancer survivors, and the frequency of participation in rehabilitation programs is still low. The purpose of this study was to examine what goes prior to, and constitutes the cancer survivors' reflections on whether to participate in municipal rehabilitation programming.

METHODS: Ethnographic fieldwork at a haematological ward in Denmark was conducted during a 4-month period. The fieldwork consisted of participant observation and 48 semi-structured patient interviews with nine patients with lymphoma. Data were collected and analysed using anthropological methodology with social practice as theoretical framework.

RESULTS: The analysis revealed how, engagement in an institutional care trajectory, like chemotherapy for the patients, was expected to lead to a quick transition from being sick to being healthy again, or at least be able to live a meaningful life with the cancer diagnosis. On this basis, the need to participate in rehabilitation was non-existent, as engagement in rehabilitation was thought of as an extension of the disease and an obstacle towards their normal everyday life.

CONCLUSION: The cancer survivors in this study refer to rehabilitation as an extension of their disease, instead of a way to recreate and prevent late effects and/or relapse. The study provides insight into the importance of healthcare professionals referring to and promoting rehabilitation as a health promoting program and emphasizing the benefits from rehabilitation.

A FIRST STEP IN SHARED DECISION MAKING – DEVELOPING A DECISION AID FOR THE CHOICE OF ANAL CANCER RADIOTHERAPY

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BACKGROUND: In shared decision making (SDM), clinicians and patients participate in an options-based conversation, such that joint preferences and mutually desired outcomes can be incorporated into treatment decisions. The use of decision aids supports SDM, and this contribution describes the practical processes and learning outcomes of developing a decision aid in a clinical setting. The decision aid was developed for use in a pilot clinical study of dose adaptation in anal cancer chemotherapy incorporating patient preferences.

METHODS: Relevant literature about SDM was reviewed and interviews were held with national and local experts on SDM. Topics of great relevance were communication of risk and benefit. The consensus was to design a simple qualitative decision aid. To incorporate the patient perspectives in the decision aid, five patients undergoing radiotherapy or in their routine follow-up were asked for feedback.

RESULTS: No specifically relevant literature on SDM in an anal cancer radiotherapy setting was found. All 5 patients asked had useful points of view on the decision aid. All patients would have been able to make the choice they were asked for, based on the options described. Importantly, all 5 patients interviewed said they would like to make the choice themselves. The final decision aid consisted of a visual illustration, side-by-side comparison of common questions and two hypothetical patient stories.

CONCLUSION: Significant clinical learning outcomes were complexity of designing decision aids and awareness of involving patients as partners in their radiotherapy treatment. We noted a paucity of published data on late effects relating to patient-specific outcomes. This emphasises the need to orient research outcomes in a more patient-centred direction. Patients were effective partners in the development of the decision aid; patient feedback was essential for refining the decision aid. Our SDM protocol has received ethics approval, and we intend to commence enrolment shortly.

ABSTRACT NUMBER: P-39
ABSTRACT TYPE: POSTER SESSION

PORTRAYING HOPE. A STUDY AMONG WOMEN NEWLY DIAGNOSED WITH GYNAECOLOGICAL CANCER

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PURPOSE: The purpose of this study is to investigate the experiences of hope for woman newly diagnosed with gynaecological cancer. This is accomplished by performing a metasynthesis of hope by interviewing and by drawings. Background: Today more people survive cancer because of improved possibilities of cancer therapy. However, the experience will stay in their minds, probably forever. Hospitalized women with cancer make an increasing group; every year 1200 women in Denmark get a hysterectomy because of cancer. The project analysed the experienced of hope as the women are telling it in words and through drawings. The study is built on the assumption that hope and hopefulness are most important to tackle emotions, also that hope and hopelessness are so closely related that the professionals easily can spoil hope and create hopelessness.

METHODS: This is a qualitative study. The data collection is based both on interviews and drawings. Fifteen women, all diagnosed with cancer, were interviewed the same day they was diagnosed and were asked to draw their experience of hope. Semi-structured interviews were chosen in order to investigate the informants lived experiences of hope. Data will be analysed using a phenomenological and a visual approach.

RESULTS: To the extent that they are available, preliminary results will be presented. We expect a participation of 70-85 % corresponding to a total of 280-340 patients.

PERSPECTIVE: The perspective of the project is to illuminate hope from the patient's perspective, to gain knowledge for cancer treatment and cancer nursing and thereby hopefully to increase quality of life and the effect of survival for this group of patients.

ABSTRACT NUMBER: P-40
ABSTRACT TYPE: POSTER SESSION

IMPROVING COMMUNICATION AFTER ENDED ADJUVANT TREATMENT - EXPERIENCES OF A COACHING INTERVENTION

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BACKGROUND: Cancer is a potential life-threatening illness likely to trigger existential concerns related to the meaning of life, hope or faith. Such concerns have shown to influence patients' perception of their identity and have also proven to worsen physical symptoms related to their cancer illness. To improve the conditions for cancer survivors the objective of this study was to develop and evaluate a coaching intervention aimed to improve the communication with the patients.

METHODS: Three nurses participated in a two-day training program focusing on coaching methods. A total of 10 patients were included in the study after completion of their adjuvant treatment and approximately three months ahead. The intervention consisted of two personal conversations succeeded by two follow-up phone calls carried out by the specially trained nurses. The patients' experiences of participating in the intervention were collected through qualitative interviews. Data were analysed in accordance with the phenomenological-hermeneutic tradition.

RESULTS: The patients described a comprehensive process of regaining mental as well as physical strength and well-being after ended treatment. They put words to a feeling of emptiness in the sense that they were now on their own in contrast to the period of treatment, during which they had felt an experience of security in the continuous contact with the health professionals. Several of the patients expressed that during their treatment focus in the conversations had mostly been on their specific treatment. Consequently, the extended communication intervention based on a more coaching approach gave them the opportunity of setting their own agenda and to talk about their concerns.

CONCLUSION: A possible implication of the results may be an increased attention towards the fact that some cancer survivors are in need of more psychosocial- and existential support. Further, coaching methods may underscore the growing development of more patient-centred communication initiatives.

ABSTRACT NUMBER: P-41
ABSTRACT TYPE: POSTER SESSION

RETURN TO WORK INTERVENTIONS PARALLEL TO CANCER TREATMENT- A QUALITATIVE STUDY OF THE PROVIDERS' PERSPECTIVE

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BACKGROUND: Return to work (RTW) parallel to cancer treatment is a challenge for many cancer survivors. Addressing and involving the work place; employers and co-workers during cancer treatment has shown to increase the RTW rate and reduce work impairment. The purpose is to reach a deeper understanding of how providers involved in an early RTW intervention experience the intervention and are challenged while patients are undergoing cancer treatments.

METHODS: A qualitative research design was employed using semi-structured individual interviews of providers involved in the early RTW intervention and participant observation at a hospital department and two job centres. 10 providers were included (4 treating physicians, 4 nurses and 2 municipal job consultants). A combination of a phenomenological and hermeneutic approach in the analysis was applied, and divided into two phases involving 1) coding and identification of themes of importance and 2) interpretation of meaning in the providers' perspective on the intervention.

RESULTS: Preliminary results located three major themes with corresponding sub-themes in the providers perspective on the intervention: 1) Treatment first 2) Work as an integrated component in cancer rehabilitation and 3) Challenges in bringing up issues about work. Differences in providers' perspectives among sectors were identified, covering work being a second priority in the hospital setting to being an integrated component of cancer treatment in the municipality job centres.

CONCLUSION: Results of the study show great differences in the providers' perspectives on RTW interventions for cancer survivors and highlight some of the challenges providers across sectors experience in implementing an early RTW intervention parallel to cancer treatment. Despite the small sample size the results highlight themes of importance to consider when future RTW interventions are implemented. Further studies are needed to investigate how and when occupational rehabilitation services can be implemented in order to increase cancer survivors RTW.

ABSTRACT NUMBER: P-42
ABSTRACT TYPE: POSTER SESSION

CHANGES IN HEALTH-RELATED QUALITY OF LIFE DURING REHABILITATION IN PATIENTS WITH OPERABLE LUNG CANCER – A FEASIBILITY STUDY (PROLUCA)

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INTRODUCTION: Surgical resection in patients with non-small cell lung cancer (NSCLC) may be associated with significant morbidity, functional limitations and decreased Quality of Life (QoL).

OBJECTIVE: Is to present HRQoL changes over time before and one year after surgery in patients with NSCLC participating in a rehabilitation program.

METHODS: 40 patients with NSCLC (disease stage I-IIIa) referred for surgical resection at Department of Cardiothoracic Surgery RT, Rigshospitalet, were included in the study. The rehabilitation program consisted of a supervised group exercise program two hours weekly for 12 weeks combined with individual counselling. Study endpoints were self-reported HRQoL (FACT-L, EORTC-QLQ, SF-36) and self-reported distress, anxiety, depression, and social support (NCCN Distress thermometer, HADS, multidimensional scale of perceived social support) measured pre-surgery, post-intervention, six months, and one year after surgery. The patients were also asked about smoking and alcohol habits. Results: 40 patients were included, and rehabilitation was completed by 73 %. Results regarding emotional well-being ($p < 0.0001$), global quality of life ($p = 0.0032$) and mental component score ($p = 0.0004$) showed an overall statistical significant improvement during the study. Levels of distress ($p = 0.0006$) and anxiety ($p = 0.0003$) decreased significantly during the intervention but reversed between six months and one year after surgery without reaching baseline levels. The changes in smoking habits showed a reduction in number of currently smoking patients from 25 % at baseline to 5 % post intervention followed by an increase to 12 % one year after surgery. The same pattern was seen regarding alcohol consumption.

CONCLUSION: This feasibility study demonstrated that global health, mental health and emotional well-being improved significantly during the study period, in patients with NSCLC participating in rehabilitation. There was a reduction in distress and anxiety, smoking and alcohol habits from baseline to six months, followed by an increase one year after surgery, which underlines the need of optimizing maintenance from rehabilitation.

ABSTRACT NUMBER: P-43
ABSTRACT TYPE: POSTER SESSION

CONTENT VALIDATION AND RELIABILITY OF THE DANISH M.D. ANDERSON DYSPHAGIA INVENTORY (MDADI) IN PATIENTS WITH HEAD AND NECK CANCER

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BACKGROUND: Dysphagia is the most common sequelae to head and neck cancer (HNC) treatment and is associated with significant effects on health-related quality of life (HRQoL). There is lacking Danish tools to measure the impact of HNC treatment on dysphagia-specific quality of life, such as the M. D. Anderson Dysphagia Inventory (MDADI). The aim of this study was to translate MDADI into Danish and to content validate and reliability test the Danish version.

METHODS: A formal forward-backward translation was performed according to international guidelines. A pre-final version was tested on 14 subjects who all finished HNC treatment for head and neck cancer (HNC) through structured one-on-one

interviews according to EORTC guidelines. Reliability tests are ongoing. Minimum 50 HNC-patients in a self-perceived stable condition will perform test-retest with 1-week intervals. Internal consistency is investigated for each domain in MDADI (global, emotional, functional and physical) by Cronbach's Alpha (α), requiring $\alpha > 0.7$. A paired-sample t-test will calculate the mean difference between test and re-test. Absolute and relative reliability is assessed by standard error of measurement and intra-class correlation coefficient (ICC), respectively, with $ICC \geq 0.7$ considered acceptable. Floor and ceiling effects will be studied as proportions of the most extreme summary scores. Results: In the translation process, four extra questions were added to the original 20 questions, as inspired by the revised Swedish MDADI version 1.4. All 24 questions were content validated. Few minor changes were made after the first 10 interviews to improve cultural adaptation. After a total 14 interviews a final translation was approved by the original MDADI developer. The test-retest reliability remains to be tested. So far, 20 patients have returned both questionnaires.

CONCLUSION: The Danish MDADI is valid in its content among the target population. Reliability remains to be shown but is ongoing. The Danish MDADI would benefit from construct validity tests, especially since an extra four questions have been added to the present Danish version.

ABSTRACT NUMBER: P-44
ABSTRACT TYPE: POSTER SESSION

HEALTH-RELATED QUALITY OF LIFE, ANXIETY AND DEPRESSION IN PATIENTS DIAGNOSED WITH CHOLANGIOCARCINOMA. A PROSPECTIVE COHORT STUDY OF 76 DANISH PATIENTS

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BACKGROUND: Cholangiocarcinoma (CC) is a rare cancer associated with a poor prognosis. Psychosocial challenges may negatively affect daily functioning and health related quality of life (QoL). The primary aim was therefore to evaluate QoL and secondly anxiety and depression.

METHODS: From 93 eligible patients diagnosed with CC, 76 were included in a prospective cohort over a period of 21 months. Patients answered European Organization for Research and Treatment of Cancer QLQ C-30 and Hospital Anxiety and Depression Scale (HADS) questionnaire at baseline, 1, 3 and 6 months after initial treatment; defined as radical operation, explorative laparotomy, chemotherapy or drainage of the bile ducts. Scores were compared between the radical operated patients ($n = 25$) and palliative patients ($n = 51$; $n = 12$ had explorative laparotomy), using repeated measures ANOVA and unpaired ANOVA.

RESULTS: The groups were similar in demographic characteristics, except for fewer radically operated men ($p = 0.015$). There was no significant change over time in QoL in total or in the groups. At baseline nausea and vomiting scores were higher for palliative patients ($p = 0.035$), and at 1-month follow-up, radical patients had higher pain scores ($p = 0.009$). The majority reported normal/mild anxiety and depression throughout the study; there were no differences between the groups. 31.8 % of the radical patients reported moderate anxiety score at baseline. Survival was 28 % in the palliative group and 60 % in the radical group after 400 days of follow-up ($p = 0.004$).

CONCLUSION: The groups were stable and did not differ in QoL or HADS. In clinical settings, observed mean changes in QoL scores are generally small; probably due to psychological adaptation by patients to changing health status over time. Interestingly, it was not possible to measure any difference between the groups with the scales despite the fact that one of the groups had the prospect of total cure.

ABSTRACT NUMBER: P-45
ABSTRACT TYPE: POSTER SESSION

MEASURING PATIENT EMPOWERMENT IN CANCER TREATMENT AND FOLLOW-UP – A SYSTEMATIC REVIEW OF PATIENT REPORTED OUTCOMES

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BACKGROUND: Patient empowerment has gained considerable attention and is in increased demand in cancer treatment and follow-up. This calls for properly developed measurement tools assessing empowerment from the user perspective. The aim of this review was to identify questionnaires and subscales measuring empowerment and empowerment manifestations among cancer patients. Empowerment was defined as feeling in control or having mastery in relation to cancer and cancer care.

METHODS: We conducted a systematic search of the databases PubMed, PsycINFO and CINAHL. Empowerment and multiple search terms associated with empowerment were included. We included peer-reviewed articles published in English, which described instruments measuring empowerment or empowerment manifestations in a cancer setting. In addition, the instrument had to be a patient-reported outcome measure for adult cancer patients.

RESULTS: Database searches identified 831 records. Title and abstract screening resulted in exclusion of 482 records. The remaining 349 full text articles were retrieved and assessed for eligibility. This led to the inclusion of 31 individual instruments measuring empowerment and empowerment manifestations. Of these, only four were specifically developed to measure empowerment, and only one originally developed for the cancer setting. The remaining three had been developed elsewhere but adapted to the cancer setting. The remaining 27 were not intended to measure the concept of empowerment but focused on patient-centered care, patient competence and self-efficacy etc. However, they were included because part of the instrument (at least five items) was considered to measure empowerment or empowerment manifestations.

CONCLUSION: Our findings offer an overview of the available instruments, which can be used by researchers and practitioners who wish to measure the concept of empowerment among cancer patients. Very few questionnaires were explicitly developed to explore empowerment, and the review illustrated a lack of questionnaires measuring patient empowerment comprehensively.

ABSTRACT NUMBER: P-46
ABSTRACT TYPE: POSTER SESSION

DANISH TRANSLATION AND VALIDATION OF THE INSOMNIA SEVERITY INDEX (ISI-DA)

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BACKGROUND: Insomnia is one of the most common sleep disorders. During a cancer trajectory, insomnia may prevent patients from managing the different challenges related to treatment and side effects. Consequently, there is a need for a usable tool to identify insomnia early to support the patient.

METHODS: The Insomnia Severity Index (ISI) is a brief validated instrument that assesses insomnia according to the criteria from the International Classification of Sleep Disorders. In different hospital settings, this study translated and validated the Danish version (ISI-DA) in two phases. Phase 1: Forward and backward translation, consensus meetings and cognitive interviews to ensure content validity. Phase 2: Key psychometric parameters of reliability and measurement error were tested within Classical Test Theory. In Phase 1, patients were carefully selected, 4 from a general medical ward, 4 from a surgical ward, and 4 from an oncology ward. In Phase 2, 152 patients from the same departments were asked to fill out ISI-DA twice, two weeks apart.

RESULTS: The cognitive interviews with 12 patients, 7 women (46-73 years) and 5 men (50-66 years) were consistently completed, and did not reveal any semantic changes in the ISI-DA. In Phase 2, 118/152 (78 %) patients filled out ISI-DA the first time at the hospitals and 68/118 (58 %) patients returned ISI-DA the second time. The respondents had a mean age of 60.6 years (SD 13.6) and 50% were women. Exploratory factor analysis supported the original scale structure. Internal consistency (Cronbach's alpha) was 0.89 and the test-retest reproducibility (intra-class-correlation) was 0.79 [95 % CI 0.63; 0.89]. ISI-DA had low ceiling and floor effects < 6 %. Standard Error of Measurement was low at 3.61 and the Smallest Detectable Change was 10.00. Conclusion: ISI-DA can be considered a valid and reliable tool for screening the severity of insomnia in Danish patients in a hospital setting.

ABSTRACT NUMBER: P-47
ABSTRACT TYPE: POSTER SESSION

MOTIVATIONS, NEEDS AND BARRIERS REGARDING RETURNING TO WORK AFTER CANCER IN ROMANIA

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The presentation discusses the implications cancer has on work in Romania. With constantly growing cancer incidence and survival rate at younger ages in Europe and Romania, returning to work after treatment is a problem more and more cancer patients have to consider. Cancer employees face considerable barriers (physical, psychological, social) regarding return to work (RTW) and work retention. The research question concerns the individual perspective of cancer employees on returning to work in Romania. The research aims to offer an exploration of the survivors' motivations and needs regarding RTW after cancer and the barriers encountered that hinder the RTW. After briefly presenting the context concerning the support cancer patients get in Romania (programmes of early detection, treatment and rehabilitation), the research uses semi-structured interviews with two categories of cancer patients: those who resumed their work after cancer and those, which have chosen to terminate their career. Participants (N = 20) have been recruited through oncologists and specialized physicians. Findings suggest important differences in the two sub-samples, with regard to three issues: the motivations for the returning to work, how work is understood and experienced and the barriers encountered. The patients which returned to work experienced cancer less as a biographical disruption (Reeve et al. 2010), but rather as 'a life episode'. The topic of returning to work is raised only accidentally by oncologists and specialized physicians, during treatment and rehabilitation phase. Returning to work is done with almost no accommodation of the work conditions and no preparation regarding workload and responsibilities. The research brings important insights on returning to work after cancer in Romania, where the support offered to cancer survivors is scarce. No studies on this theme were previously done in Romania. The study is based on a research project entitled 'Community participation for reducing the burden of cancer: stakeholders' involvement in facilitating the return to work of cancer patients', supported by a grant from the Romanian National Authority for Scientific Research, CNCS – UEFISCDI [project number PN-II-RU-TE-2014-4-0478].

ABSTRACT NUMBER: P-48
ABSTRACT TYPE: POSTER SESSION

EARLY AND LATE PHYSICAL AND PSYCHOSOCIAL EFFECTS OF PRIMARY SURGERY IN PATIENTS WITH ORAL AND OROPHARYNGEAL CANCERS: A SYSTEMATIC LITERATURE REVIEW

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BACKGROUND: The purpose of the systematic literature review was to explore the early and late physical and psychosocial effects of patients treated with primary surgery for oral and oropharyngeal cancers and to investigate the factors that influence these effects. Methods: PubMed, Cinahl and PsycInfo were searched for studies concerning patients diagnosed and treated with primary surgery for oral and oropharyngeal cancers and followed the treatment trajectory from time of diagnosis and nine years onwards; studies measured quantitative assessments and qualitative experiences of patient's physical and psychosocial wellbeing.

RESULTS: 438 articles were accessed. 20 articles qualified for inclusion, of which 16 and 4 are quantitative and qualitative articles and mainly Quality of Life assessments. Time of measurement ranged from time of diagnosis to nine years after the surgical procedure. The total number of patients included in this review is N = 3,386; treated by surgery alone (n = 1,996), and combined surgery and adjuvant RT and/or CT (n = 1,390). Conclusion: Studies showed that patients are negatively affected by treatment for oral and oropharyngeal cancers, with both early and late effects, due to the nature of the illness; the different types of surgical treatment and side-effects of adjuvant therapy. The review has been accepted for publication in Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, in January 2016.

ABSTRACT NUMBER: P-49
ABSTRACT TYPE: POSTER SESSION

ASSOCIATION BETWEEN EDUCATIONAL LEVEL AND PHYSICAL FUNCTION, PAIN AND LOSS OF APPETITE AMONG ADULT DANISH CANCER SURVIVORS

BACKGROUND: Late effects after cancer diagnosis and treatment are common among cancer survivors but only few studies have examined the association between educational level and risk of developing late effects. The aim of this study was to examine the association between educational level and physical function, pain and loss of appetite among cancer survivors. Methods: We conducted a prospective cohort study of adult cancer survivors in Denmark. The survivors in the cohort received a questionnaire in 2010 in the first 4 months after cancer diagnosis and again in 2012 between 2-2.5 years after cancer diagnosis. Educational level was measured as basic, medium and higher and outcomes were measured using the EORTC QoL-C30 questionnaire. Multiple logistic and multiple linear regression will be conducted, separate for men and women and with adjustment for age, cohabitation status, cancer treatment, cancer site, comorbidity, anxiety and depression.

RESULTS: A total of 2,391 cancer survivors were included in the study (response rate of 55 %). The mean age was 64 years and 55 % of the survivors were women. Physical function was significantly higher among higher educated ($p < 0.001$). Symptom scores for pain and loss of appetite showed higher symptom levels among basic educated. Analyses are ongoing and results from regression analyses are not yet available.

CONCLUSION: Final results are expected to be ready for presentation at the ECRS 2016.

RATIONALE, DESIGN AND IMPLEMENTATION OF THE CAESAR STUDY - A MULTIREGIONAL, LARGE-SCALE POPULATION-BASED STUDY ON LONG-TERM CANCER SURVIVORS

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BACKGROUND: Cancer registries (CRs) are an underused resource for cancer survivorship studies. In this presentation, we describe the study design including recruitment, data collection, and instruments, as well as overall characteristics of the CAESAR study, a multicentre, population-based study on cancer survivorship aspects among long-term survivors of breast, colorectal, and prostate cancer in Germany.

METHODS: Eligible for inclusion in the study were patients with a primary diagnosis of invasive breast (ICD-10 C50, women only), prostate (C61) or colorectal carcinoma (C18-C20) between January 1st, 1994 and June 30th, 2004, who were reported to one of the participating population-based CRs. Further inclusion criteria were an age between 20 and 75 years at diagnosis and being alive at time of recruitment (2008-2011). Eligible cancer survivors were identified by six population-based CRs and asked to provide detailed information regarding their cancer survivorship experience via a postal questionnaire. Due to state specific legislations, different strategies had to be implemented to contact and to recruit study participants.

RESULTS: Overall 7,012 out of 15,734 eligible survivors (44.6 %) could be successfully enrolled in the CAESAR study. Participation rate was higher among breast (46.7 %) and prostate cancer survivors (47.2 %) than among colorectal cancer survivors (37.8 %). Survivors aged 55 to 74 years were more likely to complete the questionnaire than younger or older survivors. Years since diagnosis and advanced tumour stage were inversely associated with participation. Participation was lower in densely populated, urban areas, with higher proportions of foreign residents, and low average income. Mode of recruitment was associated with level of participation but did not substantially affect pattern of participation.

CONCLUSION: The CAESAR study is one of the largest and most comprehensive studies worldwide addressing long-term cancer survivorship issues. It includes a wide range of internationally validated instruments. This allows comparisons and collaborations with other research groups.

REFERENCE DATA OF THE EORTC QLQ-CIPN20 QUESTIONNAIRE IN THE GENERAL DUTCH POPULATION

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BACKGROUND: Chemotherapy-induced peripheral neuropathy (CIPN) is a debilitating side effect of chemotherapy. However, CIPN symptoms are also reported by patients not receiving chemotherapy. Normative data could help to interpret CIPN among cancer patients. Our aim was to generate normative data for the European Organisation for Research and Treatment of Cancer (EORTC) QLQ-CIPN20 questionnaire designed to assess CIPN from the patients' perspective. The normative CIPN data have also been generated for stratified subgroups formed on the basis of sex, age, and comorbidity.

METHODS: The QLQ-CIPN20 and the Self-administered Comorbidity Questionnaire (SCQ) were administered to a representative panel of the Dutch-speaking population in the Netherlands.

RESULTS: 2,012 (77.8 %) of those invited completed the questionnaires. The majority reported no CIPN symptoms (83-97 %). Cronbach's alpha coefficients for the sensory, motor and autonomic subscales were 0.76, 0.82 and 0.49 respectively. Compared to men, women scored significantly worse on the total score and motor and autonomic scales, but this difference was not clinically relevant. CIPN symptoms increased significantly with age among both men (for the total score and all scales) and women (for the total score, sensory scale and motor scale). Those with self-reported comorbidities reported significantly more CIPN symptoms, both statistically and clinically, than those without comorbid conditions.

CONCLUSION: A low prevalence of neuropathy was observed in the normative population without cancer, although neuropathy did increase with age and the presence of comorbidities. These data can aid in the interpretation of QLQ-CIPN20 scores and can help increase our understanding of the influence of age, sex and comorbid conditions on CIPN among cancer patients.

COGNITIVE FUNCTION IN HODGKIN LYMPHOMA (HL) AND DIFFUSE LARGE B-CELL LYMPHOMA (DLBCL) PATIENTS

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BACKGROUND: Despite increasing attention to the potential adverse effect of chemotherapy and radiation therapy on cognitive function in cancer patients, previous research has mainly focused on breast cancer patients, but very few small studies in lymphoma patients indicate that this patient group may also be at risk. In this cross-sectional study, we investigate self-reported cognitive function among patients with Hodgkin Lymphoma (HL) or Diffuse Large B-Cell Lymphoma (DLBCL) after treatment as well as characteristics of patients with poor cognitive function.

METHODS: We invite 400 consecutive patients with HL or DLBCL, in continuous remission > 6 months after treatment, scheduled for routine follow-up visit at the outpatient clinic at Department of Oncology, Rigshospitalet. Patients are asked to fill out a questionnaire on cognitive function (FACT-Cog, BRIEF) as well as mood, quality of life, stress, sleep quality, previous neurological and psychiatric illness, and sociodemographic factors. Descriptive analyses will include mean, medians and proportions of domains in cognitive function with 95 % confidence intervals. Logistic and linear regression models will be used to estimate differences in cognitive function across sub-groups of patients according to disease and treatment characteristics, mood, quality of life, stress, sleep quality, previous neurological and psychiatric illness, and sociodemographic factors.

RESULTS: To the extent that they are available, preliminary results will be presented. We expect a participation of 70-85 % corresponding to a total of 280-340 patients.

CONCLUSION: Knowledge on the prevalence of poor cognitive function as well as characteristics of vulnerable sub-groups in patients treated for HL and DLBCL will be important to better inform patients as well as clinicians and to investigate further prospectively the adversity of specific treatment regimens.

ABSTRACT NUMBER: P-53
ABSTRACT TYPE: POSTER SESSION

THE ASSOCIATION BETWEEN LATE EFFECTS ASSESSED BY PHYSICIANS AND QUALITY OF LIFE REPORTED BY HEAD AND NECK CANCER PATIENTS

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BACKGROUND: The majority of survivors from head and neck cancer (HNC) suffer from late effects. Overall, HRQL in HNC patients deteriorate during treatment, followed by a slow improvement up to five years after treatment. We examined the association between the severity of physician assessed late effects and the patient reported HRQL in survivors of HNC.

METHODS: The analysis is based on 266 survivors of cancer in the oral cavity, pharynx, larynx, and salivary glands. Physician assessments on the most common late effects (dysphagia, xerostomia, fibrosis, and hoarseness) were derived from the Danish Head and Neck Cancer Group (DAHANCA) database. The outcome was patient reported overall quality of life and the social, role, emotional, cognitive, and physical functioning from the European Organization for Research and Treatment of Cancer questionnaire (EORTC QLQ-C30). Linear regression models were used to examine the association between the severity of each late effect and HRQL.

RESULTS: Moderate to severe dysphagia was significantly associated with several of the functioning scales. Overall quality of life decreased with 16 points (95% CI -21; -3), role functioning with 20 points (95 % CI -38; -2), emotional functioning with 19 points (95 % CI -34; -4), and social functioning with 27 points (95 % CI -41; -13) when compared to patients without dysphagia. Further, mild dysphagia was associated with a decrease in overall quality of life (-12 points; 95 % CI -21; -3). Moderate to severe hoarseness was significantly associated with poorer social functioning (-25 points; 95 % CI -41; -10). There were no associations between fibrosis or xerostomia and HRQL.

CONCLUSION: Physician assessed moderate to severe hoarseness and dysphagia in all severities is associated with a clinically relevant decrease in patient reported HRQL functioning scales. Fibrosis and xerostomia in any severity were not associated with changes in any functioning scale in this study population.

ABSTRACT NUMBER: P-54
ABSTRACT TYPE: POSTER SESSION

PSYCHOSOCIAL HEALTH RESOURCES AMONG WORKING-AGE WOMEN WITH BREAST CANCER: AN INTEGRATIVE REVIEW

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BACKGROUND: Psychosocial health-related resources are found to support working-aged cancer patients' return to work-life and promote work-ability. Breast cancer is the most common cancer among women worldwide. From working-age breast cancer patients over 80 % return to work but breast cancer significantly increases the risk of unemployment or early retirement after cancer diagnosis.

AIM: The aim of this integrative review is to describe and synthesize previous knowledge concerning working-age breast cancer patients' health-related resources. The research question was: What are health-related resources among working-age women with breast cancer?

METHODS: An integrative review method was chosen for combining and synthesizing previous knowledge produced by

different research methods. The literature search has been conducted at the four electronic international databases, (CINAHL, Pubmed, PsycInfo, Web of Science and Cochrane Library). The searches were limited in peer-reviewed, scientific papers which have been published in English between January 2005 and December 2015. The following search terms were used; resource* OR empower* AND "breast neoplasms" OR "breast cancer". The studies were selected in stages based on titles, abstracts, and full-texts, using predetermined inclusion and exclusion criteria as well as quality evaluation.

RESULTS: As a result, 2,623 titles were achieved, whereas 16 papers were selected for analysis. 9 (n = 9) of the studies were conducted by qualitative and 7 (n = 7) quantitative method. Based on our results, health-related resources by working-age breast cancer patients were found crucial to support patients at their everyday life. 7 different but inherently interconnected forms of health-related resources were found. The studied resources were i) cognitive, ii) emotional, iii) spiritual, iv) social, v) cultural, and vi) psychical resources. In addition, vii) a collaborative relationship with nursing and health care professional were found as a resource for breast cancer patients.

CONCLUSION: In order to improve health care professionals' support for working-age breast cancer patients, more research is needed to understand the health-related resources. In addition, theoretical clarifying and operationalization of the complex concept would enable empirical observation and measurement of health-related resources.

ABSTRACT NUMBER: P-55
ABSTRACT TYPE: POSTER SESSION

RISK FOR PRESCRIPTION OF PSYCHOTROPIC DRUGS AMONG PARENTS OF CHILDHOOD CANCER PATIENTS: A DANISH POPULATION-BASED COHORT STUDY

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BACKGROUND: Each year, 200 children are diagnosed with cancer in Denmark. Cross sectional studies have shown that experiencing cancer in a child may cause severe psychological distress. Knowledge about the impact on parents using objective measures, however, is lacking. The aim of this study is to investigate the risk for prescription of psychotropic drugs including antidepressants, anxiolytics and hypnotics as an indicator of psychological stress among parents of children with cancer.

METHODS: In a nationwide register-based study, we will include all parents to children diagnosed with cancer below the age of 18 years between 1995 and 2014, excluding those with previous use of psychotropic drugs. For each patient, ten cancer-free children matched by sex and age will be identified and their parents will be included as a comparison group. Using Cox proportional hazard models, hazard ratios for first prescription of antidepressants, anxiolytics and hypnotics in the parents will be estimated according to the child's cancer status. In sub-analyses including only parents of children with cancer, associations between disease characteristics, sociodemographic factors and risk for prescription of psychotropic drugs will be examined.

RESULTS: We expect to be able to estimate the risk of having psychotropic drugs prescribed in approximately 7,600 parents of children diagnosed with cancer compared with 76,000 parents of cancer-free children. Preliminary results on the risk of parental use of psychotropic drugs after cancer in a child will be presented.

CONCLUSION: If parents of childhood cancer patients have an increased risk of psychotropic drug use, this will be important knowledge for health care professionals, which has to be taken into account in the care and support trajectory. If we identify vulnerable sub-groups of parents, this knowledge will help to identify the families that are in high risk in order to offer appropriate psychosocial support tailored to their needs.

ABSTRACT NUMBER: P-56
ABSTRACT TYPE: POSTER SESSION

POSITIVE ADJUSTMENT AFTER CANCER: DEVELOPING A THEORY OF OPTIMAL POST-TREATMENT SURVIVORSHIP

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Good interventions are not only evidence-based but are based on sound theoretical constructs. The development of comprehensive, theory-based interventions for those at risk of poor quality of life post-treatment requires a knowledge of the

factors affecting quality of life outcomes, such as disease and treatment factors, lifestyle behaviours and socioeconomic factors. However, this is not a strong enough foundation upon which to build an effective intervention. In addition, it is necessary to be cognizant of the psychological factors that contribute to positive post-treatment adjustment and the processes by which these factors have their effect. This paper explores key psychological contributors to post-treatment adjustment and theoretical models and approaches to adjustment identified in the literature. These are examined and discussed in terms of developing a theory of optimal survivorship and their utility in building a positive, bio-psycho social intervention.

ABSTRACT NUMBER: P-57
ABSTRACT TYPE: POSTER SESSION

COUPLE COUNSELING AND PELVIC FLOOR MUSCLE TRAINING FOR MEN OPERATED FOR PROSTATE CANCER AND THEIR PARTNERS: A RANDOMIZED CONTROLLED TRIAL

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BACKGROUND: Radical prostatectomy (RP) following prostate cancer may be associated with immediate and long lasting erectile dysfunction and decline in urinary function, which affects both patients' and partners' quality of life and their intimate relationship. The ProCan study will test the effect of couple counseling and pelvic floor muscle (PFM) training compared to standard care on improvements in sexual and urological function among men operated for prostate cancer and their partners.

METHODS: Patients operated for histologically confirmed localized primary prostate cancer at The Urological Department at the Copenhagen University Hospital and their partners will be enrolled in this randomized controlled trial post-surgery. In total, 180 couples will after baseline assessment be randomly assigned to standard care and the ProCan intervention or standard care alone. The ProCan intervention consists of: i) up to six couple counseling's with a sexual nurse counselor ii) up to three individual instructions in PFM training with a physiotherapist and a DVD with instructions in PFM training. The couple counseling and the PFM training will be completed after 8 and 3 months, respectively. Couples in the intervention and the control group will fill out repeated follow-up measures post intervention at 8 months and 12 months, respectively. Primary endpoint is differences in erectile function from baseline to follow-ups between treatment groups. Secondary endpoints include differences between treatment groups among patients and partners in sexual function and satisfaction, dyadic adjustment, anxiety and depression, self-efficacy, quality of life and urological function among patients, as well as use of and satisfaction with medical treatment for erectile dysfunction.

DISCUSSION: This study will provide evidence based knowledge about the effect of couple counseling and PMF training on sexual function following operation for prostate cancer. Further, the study will provide results of the effect of PMF training on regain of urinary control among patients. The conduction of this trial may contribute to the reduction of barriers within the patient-provider relationship for the rehabilitation of these late effects among couples affected by prostate cancer.

ABSTRACT NUMBER: P-58
ABSTRACT TYPE: POSTER SESSION

DID THEY THINK I WOULD UNDERSTAND ALL THAT ON MY OWN?' A QUESTIONNAIRE STUDY ABOUT SEXUALITY WITH SWEDISH CANCER PATIENTS

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BACKGROUND: Between 25 % and 50 % of cancer patients have chronic sexual difficulties. Sexuality among cancer patients may be affected even if the disease does not involve the sexual organs. The various forms of cancer treatment, such as surgery, hormone treatment, chemotherapy and radiation, may affect an individual's sexual functions in various ways.

AIM: To investigate information about sexual effects of cancer on patients irrespective of age and diagnosis in terms of fertility, sexual desire and sexual function.

METHODS: The present study is quantitative and primarily descriptive, but the results are to a certain degree discussed based

on a social-constructivist perspective. A total of 205 patients received a questionnaire when consulting a physician for another follow-up visit at an oncology clinic at a university hospital in Sweden. Results: The results are based on responses from 106 questionnaires. The gender distribution in the material was 48 % men and 51 % women, range 26–86 years. Almost half (48 %) of the informants had not received information about sexual effects. Physicians as a professional group account for the majority of the information provided (40 %), followed by nurses (14 %). There was a difference between information wished for and provided, and the largest difference was in the question of whether sexual activity should be avoided (n = 106). A significantly higher number of men than women received information about effects on fertility and sexual desire. Where information about sexual desire is concerned in the 41-70 age group, 34 % did not receive the information they wanted. Conclusion: It is obvious that information about sexuality needs to be taken into account to a greater extent than is presently being done. Does the prevailing sexual script in health care mean that we in Sweden do not see our cancer patients as sexual individuals?

ABSTRACT NUMBER: P-59
ABSTRACT TYPE: POSTER SESSION

RETURN TO WORK SELF-EFFICACY (RTW-SE) AND ACTUAL RETURN TO WORK IN A DANISH POPULATION OF CANCER SURVIVORS

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BACKGROUND: Cancer survivors have more sick days and increased risk of unemployment, fewer working hours and early retirement. Considering the implications for the quality of life of cancer survivors and their families as well as the economic costs associated with sickness absence for the individual and the society, improving the work ability and the process of return to work (RTW) for cancer survivors is of major importance. Self-efficacy (SE) refers to the individual's belief in his or her own ability to handle specific future challenges. Return-to-work-related self-efficacy (RTW-SE) has been shown to be a strong predictor of actual RTW in workers on sickness leave due to both psychological and physiological causes, but has not yet been investigated in employees on sickness leave due to cancer. The aim of the present study is to investigate the predictive value of RTW-SE in cancer survivors on sickness leave undergoing chemotherapy.

METHODS: In a prospective study, cancer survivors (N = 400) from two Danish hospital wards with various cancers at different disease stages will be included during a 12-month period. Inclusion criteria: age 18-62, employed but on sickness leave at baseline. At the time of chemotherapy initiation, the participants are asked to complete the 19-item RTW-SE questionnaire in addition to questions regarding demographic and illness-related factors. The main outcome measure is RTW (yes/no) at 3, 6, and 12 months follow-up.

RESULTS: The project was initiated in February 2016 and inclusion is expected to begin in May 2016. Higher levels of RTW-SE at baseline are expected to be associated with shorter time to RTW.

CONCLUSION: To improve the work ability and the process of RTW for cancer patients it is necessary to obtain a better understanding of the RTW process of cancer patients. Work related SE may play a key role in that process.

ABSTRACT NUMBER: P-60
ABSTRACT TYPE: POSTER SESSION

PREVENTION OF OTITIS MEDIA WITH EFFUSION AFTER RADIOTHERAPY IN HEAD AND NECK CANCER PATIENTS – A RANDOMIZED CONTROLLED TRIAL (DR. TUBA)

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BACKGROUND: The aim of this protocol is to investigate the incidence of Eustachian tuba dysfunction (ETD) and middle ear morbidity after RT to the Head & Neck and to test the effect of auto-inflation of the Eustachian tube on middle ear morbidity. Middle ear complications and ETD are common following RT to the Head & Neck. This is caused by mucositis and swelling of the surrounding pharyngeal tissue and in the long-term, fibrosis. The Eustachian tube is a small channel from the middle ear to the nasopharynx that briefly opens during swallowing or yawning and equalizes the middle ear pressure. ETD causes pain, tinnitus, otitis media with effusion (OME) and hearing loss. Almost everyone experience middle ear problems shortly after RT, but up to 20 % develop chronic OME and hearing impairment years after treatment. Conventional treatment with insertion of ventilation tubes in to the tympanic membrane does not work for radiation-induced ME problems.

METHODS: By a randomized controlled trial, we will examine the effect of auto-inflation on the Eustachian tube and middle ear morbidity with a special designed balloon, Otovent®. Middle ear evaluation is carried out by otoscopy, pure tone audiometry, tympanometry and questionnaires. Expected outcomes: Prevention of OME and middle ear morbidity, better hearing, and improve the quality of life after treatment with radiotherapy.

ABSTRACT NUMBER: P-61
ABSTRACT TYPE: POSTER SESSION

THE EXPERIENCE OF OUTPATIENT MANAGEMENT BY SPOUSES TO INTENSIVELY TREATED ACUTE LEUKEMIA PATIENTS

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BACKGROUND: Outpatient management of intensively treated patients with acute leukemia (AL) is performed in the Home Unit (HU) at the Department of Hematology, Odense University Hospital. Patients live at home but appear at the hospital every second day for follow-up visits. Patients must adhere to specific precautions while at home because of a lacking immune system, which influence the life of the whole family. The knowledge about how this type of outpatient management is experienced by patients and relatives is sparse.

AIM: This qualitative study, based on individual and group interviews with spouses to AL patients in curative intended treatment elucidated how spouses experienced the outpatient management. The aim was to illustrate how the caregiver role affected their everyday lives.

METHODS: The data are from qualitative semi-structured individual (n = 5) and group interviews (n = 6) with spouses of AL patients in curative treatment conducted during the whole course of treatment as a part of a larger qualitative study. The larger study combined participant observation in the HU, individual patient interviews at three different times, and group or individual interviews with their spouses. The results were analysed in an everyday life relational perspective.

RESULTS: Relations in the family were strengthened during outpatient management, which was highly valued by the spouses. They experienced to be in a constant state of vigilance and attention as a consequence of the sense of responsibility the spouses felt during outpatient management. This influenced their partnership negatively. The social life of the spouses suffered substantially due to the precautions that were instated in the home.

CONCLUSION: This study provides valuable insight into the experience of spouses to intensively treated AL patients under outpatient management and how this affects and shapes the everyday life of themselves and the patients. To counter additional psychosocial burdens to relatives instigated by the outpatient treatment regimens, the health care system should develop ways to engage the relatives, without adding to their sense of burden. This could apply not only to relatives of AL patients but to the relatives of other severely ill patients as well.

ABSTRACT NUMBER: P-62
ABSTRACT TYPE: POSTER SESSION

EDUCATIONAL ATTAINMENT IN ADULTS WHO HAVE EXPERIENCED EARLY PARENTAL DEATH

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BACKGROUND: Approximately 5 % of children experience early parental loss with cancer being the leading cause of death. There is a lack of knowledge regarding the long-term consequences of childhood bereavement. In this study, we investigate early parental death may affect educational attainment in young adulthood.

METHODS: Using a nationwide, registry-based cohort including all persons born in Denmark between 1970 and 2000, we studied the educational attainment of persons who lost a parent before the age of 18 years. Poisson regression analyses were used to compare bereaved persons with their non-bereaved peers by gender on four educational levels: basic school, high school/vocational training, bachelor/professional programs and graduate university. We adjusted for family income, education and psychiatric illness, and examined potential effect modification according to parent gender, cause of death and child age at death.

RESULTS: Compared to non-bereaved persons, bereaved persons were less likely to finish compulsory school (RR = 0.95, 95 % CI 0.93-0.97 for men; RR = 0.96, 95 % CI 0.94-0.98 for women), high school/vocational training (RR = 0.78, 95 % CI 0.76-0.80 for men; RR = 0.82, 95 % CI 0.80-0.84 for women), college/undergraduate university (RR = 0.74, 95 % CI 0.70-0.79 for men; RR = 0.83, 95 % CI 0.79-0.86 for women), and graduate university (RR = 0.77, 95 % CI 0.68-0.86 for men; RR = 0.77, 95 % CI 0.69-0.86 for women). No significant effect modification was found for parent gender, cause of death, or child age at death.

CONCLUSION: Persons experiencing early parental death have lower educational attainment, even after socioeconomic effects and psychiatric factors are accounted for. This has implication for school and public policies regarding interventions for bereaved children.

ABSTRACT NUMBER: P-63
ABSTRACT TYPE: POSTER SESSION

FAMOS: THE EFFECT OF PSYCHOSOCIAL INTERVENTION FOR CHILDHOOD CANCER SURVIVORS AND THEIR FAMILIES AFTER ENDING TREATMENT: A RANDOMIZED CONTROLLED TRIAL

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AIMS: Objectives in this randomized controlled trial we investigate whether home-based psychosocial interventions is able to improve psychological distress in families of childhood cancer survivors.

METHODS: 150 families will be recruited (1:1) from the four paediatric oncology departments in Denmark. In addition to usual care, 75 families in the intervention group will receive a home-based psychosocial intervention. The study will take place shortly after the child completes the primary treatment. The primary outcome is post-traumatic stress symptoms (PTSS) in parents and secondary outcomes include among others parents', siblings' and survivors' quality of life, sick leave, coping strategies and family functioning. Families in the intervention group will receive a six session manualized intervention based on a cognitive behavioural framework. Four sessions will focus on the parents and two sessions will focus on the child, who had cancer, and siblings. The main goal of the sessions is to teach families how to adapt healthy psychological adjustments to the consequences of experiencing a child undergoing treatment for cancer and also prevent PTSS in family members. All family members are asked to complete questionnaires at baseline, 6 months and 12 months follow-up.

RESULTS: We will present the development of a manualized psychosocial intervention that aims to offer evidence-based support for all children with cancer and for their families, and preliminary results on the inclusion and participation of families.

CONCLUSION: Evidence-based knowledge of how to support families of cancer survivors after end of treatment will be essential for the field of paediatric psycho-oncology, as it aims to facilitate the translation of interventions from research into clinical practice as well as offering support that considers the families individual needs.

ABSTRACT NUMBER: P-64
ABSTRACT TYPE: POSTER SESSION

SUPPORTING CANCER PATIENTS AND THEIR RELATIVES THROUGH STORYTELLING

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BACKGROUND: Prior research on psychosocial support in cancer rehabilitation intervention rarely addresses how patients and relatives can be supported together, for example with regard to cancer-related concerns. The aim of this presentation is to demonstrate the use of storytelling in a supportive residential cancer rehabilitation intervention for the patients and their relatives.

METHODS: 10 pairs participated in a supportive 5-day residential cancer rehabilitation program. Data was generated data through ethnographic fieldwork and analysed by use of narrative and social-practice theory.

RESULTS: The results demonstrate that the combination of illustrative storytelling with a central metaphor of an imaginary social other combined with activity workshops served as a means for 1) dealing with fear and worry, and 2) taking agency, which turned out to be useful for the cancer patients and their relatives in their pursuits to address some of the concerns that accompany a cancer trajectory.

CONCLUSION: The narrative format of storytelling provided the pairs with strategies that they could subsequently implement in their everyday lives in order to manage e.g. cancer-related concerns.

APPLICATION TO PRACTICE: The study results may be useful for other professionals in clinical practice in order to implement storytelling in combination with activities as useful strategies.

ABSTRACT NUMBER: P-65
ABSTRACT TYPE: POSTER SESSION

APPROACHING THE END OF LIFE FROM HEPATOCELLULAR CARCINOMA AS PERCEIVED BY FAMILY MEMBERS

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BACKGROUND: Hepatocellular carcinoma (HCC), a rare liver cancer, is a frequent complication of liver disease and a growing problem worldwide. In the U.S. HCC accounts for more than 20,000 deaths annually and has the fastest increasing incidence of any solid cancer. Frequently, HCC is diagnosed at an advanced stage and there is no curative treatment for terminal HCC. This patient group differs from others with cancer or liver disease due to the combined processes of the two diseases. Although family members often provide care for patients with terminal HCC, no study was found examining their perspectives of caregiving toward the end of life. The aim of this study was to describe family members' perspectives of caring for patients with terminal HCC as patients approached the end of life.

METHODS: This U.S. conducted study used a prospective, longitudinal qualitative descriptive design. Interview data were collected from 13 family caregivers once a month for up to 6 months. Interview data were analyzed using conventional content analysis.

RESULTS: A total of 39 interviews were conducted with 13 family caregivers (10 female and three male, with a mean age of 56 years, range = 22-68 years). Five major themes (quality of relationship, response to terminal HCC diagnosis, HCC progression: symptom interpretation, treatment challenges, and unprepared for end of life) and nine subthemes were identified. From the time of the terminal diagnosis to the end of life, family caregivers felt unprepared, struggled with whether symptoms were HCC or liver related, and needed information.

CONCLUSION: Health care professionals can support family members by eliciting their knowledge and concerns, their need for help and information as the HCC progresses. Understanding the challenges facing family members is crucial for developing interventions that address their concern and needs as they develop and change over time.

ABSTRACT NUMBER: P-66
ABSTRACT TYPE: POSTER SESSION

SOCIOECONOMIC POSITION IN PATIENTS UNDERGOING RADICAL PROSTATECTOMY IN DENMARK

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BACKGROUND: Radical prostatectomy as curatively intended treatment for localised prostate cancer was introduced in Denmark in 1995. It has been demonstrated that patients undergoing radical prostatectomy have a better survival than the background population, which might be explained by socioeconomic factors. The aim of this study was to 1) identify a potential socioeconomic gradient in patients undergoing radical prostatectomy measured by disposable income, 2) describe changes in trends during the 17-year study period.

METHODS: The study included 6,742 consecutive patients who underwent radical prostatectomy at six different hospitals in Denmark between 1995-2011. Data on disposable income was obtained for each patient the year before surgery. Distribution of income in the cohort was described by comparing with age-adjusted quintile estimates of income in the overall Danish male population. Descriptive statistics were used to study the social distribution within the patient cohort, as well as temporal trends in the study period.

RESULTS: During the period studied, patients in the highest income quintile were significantly overrepresented among men undergoing radical prostatectomy. Changes in income distribution were modest, however, the data indicate a slight tendency of a more even distribution at the end of the period of the 2nd, 3rd, and 4th income quintile.

CONCLUSION: The study demonstrates that patients undergoing radical prostatectomy represent the more affluent part of the Danish population. We found only minor changes in trends during the 17-year study period. Selection bias and the correlation between income and life-expectancy are factors likely to explain previous observed relative survival rates > 1 in men undergoing radical prostatectomy. Future studies are needed to examine the interaction between socioeconomic position and treatment modalities in prostate cancer patients.

ABSTRACT NUMBER: P-67
ABSTRACT TYPE: POSTER SESSION

PROLONGED JOB-STRAIN AND SUBSEQUENT RISK OF CANCER - A LONGITUDINAL STUDY, BASED ON THE DANISH NURSE COHORT

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BACKGROUND: Despite increasing incidence of psychological stress at work, only few observational studies have examined the association between job-strain and risk of cancer. In this prospective study, the impact of job-strain over time and subsequent cancer risk was examined.

METHODS: Data on 6,571 cancer-free women aged 45-70 years at inclusion was used. The participants were a sub-sample of The Danish Nurse Cohort, including individuals who participated in questionnaire-surveys in both 1993 and 1999. Information on self-reported job-strain i.e. job demands and control, as well as possible confounding or mediating factors were linked with information on cancer diagnosis from the Danish Cancer Registry. Hazard ratios were calculated on risk of overall cancer as well as the sub-groups of virus-immune related-, hormone related-, digestive- and lung cancer. The women were followed up on cancer risk from 1999 until cancer-diagnosis, emigration, death or 31st December 2013.

RESULTS: No significant associations were identified between job demands, job control or a pooled estimate of job-strain and

