needs are met or that 2nd/3rd line treatment can be instigated. Follow-up provides the opportunity to understand the natural history of a disease and survivorship issues after treatment although this data is not routinely collected. Clinicians therefore have a lack of quality of life data to help advise patients in treatment choices. This is particularly important for new multi modal treatments when long term impact of treatment is unknown. Increasing importance is now being placed on the assessment and surveillance of lung cancer patients due to the development of further lines of anti-cancer treatment. Participants highlighted that taking a history was the most valuable assessment of a patient's progress. Follow-up plans are individualised but set within the parameters of UK guidelines. Interviews highlighted clinicians' preference for regular HCP initiated appointments; participants expressed concern that a patient initiated system would lead vulnerable patients to *'fall through the net'* and miss opportunities for supportive care or *'miss the boat'* for further treatment.

Conclusions: There are moves in the UK to reduce or stop routine follow-up appointments and alternatives to regular surveillance focused aftercare are being investigated. Participants highlighted the clinical value of follow-up. The disease trajectory for lung cancer is often short with rapid deterioration in a patient's condition and patient led, less intensive models of care were felt unsuitable for this patient group.

4252 POSTER

Multidisciplinary Recommendation of Physical Activity for Patients With Rectal Cancer During Neoadjuvant Therapy

A. Soria Verdugo[1], M.J. Ortega Solano[1], L. Brea Alejo[2], A. Ruiz Casado[1], J. Martin Moreno[1], M.E. Garcia Vega[1], J.J. Garcia Arroyo[1], M.R. Lopez Melero[1], D. Gonzalez Bravo[1], J.A. Guerra Martinez[1]. *[1]Hospital Universitario de Fuenlabrada, Medical Oncology, Madrid, Spain; [2]Universidad Europea de Madrid, Sports Science, Madrid, Spain*

Background: Physical activity (PA) is one of few modifiable attitudes for cancer patients that could have a beneficious impact in their outcomes. But adopting and keeping this behaviour is difficult for healthy adults and it is still more difficult after the diagnosis of cancer. Educative sessions and reinforcement of recommendations by the different involved specialists (surgeon, radiation oncologist, medical oncologist and specialized nurses) could help to maintain this healthy way of life.

Material and Methods: This is a descriptive study. Patients diagnosed with rectal cancer and candidates to neoadjuvant therapy will be included. Before starting neoadjuvant therapy, patients participating are asked to wear an accelerometer for a week. Quality of life (EORTC QLQ30) and psychological distress (HADS) are evaluated through the aforementioned validated scales by trained nurses. Anthropometry (Body mass index, waist perimeter) is measured by specialized nurses. Aerobic capacity and strength are evaluated through simple tests: "one − mile" and "sit to stand" tests as well as dynamometry (by physical activity specialists). Six sessions of supervised exercise training during the neoadjuvant period will be performed. Recommendations about amount and quality (aerobic and resistive) of PA will be done by a specialist during these sessions. After neoadjuvant treatment a new evaluation consisting of the same tests will be performed again. The main objective consists of 70% of patients atteding four out of six preplanned sessions.

Results: Recruitment is now ongoing. Results will be ready for the meeting. (1) Adherence to physical exercise (2) Changes in physical activity evaluated by accelerometry (3) Changes in aerobic capacity and muscular strenght (4) Changes in quality of life (5) Changes in psychological distress (6) Changes in BMI.

Conclusion: Education about benefits of physical activity together with multidisciplinary backup could achieve a good adherence to the sessions plan. This programme could have benefitial emotional and physical effects. This project is funded by a grant of the Catedra Real Madrid.

4253 POSTER

Sleep Disorders in Long-term Survival of Cancer − Cross-sectional Survey in a Population of Southern Europe

S. Bordonaro[1], S. Rametta Giuliano[1], A. Di Mari[1], M. Iacono[1], C.L. Lo Piano[1]. *[1]Ospedale Umberto I, Oncology Unit, Siracusa, Italy*

Background: Various studies have placed more attention on quality of life of long-term survival. The early and late complications of neoplastic diseases and side effects of cancer treatments interfere with the quality of life of patients. Sleep disorders are common in long-term survival, but little is known about the prevalence of these problems in the Italian population. The aim of our study is to determine the prevalence of sleep disorders in a population of long term survivor's patients affected with malignant disease followed as outpatients at the Department of Medical Oncology in Syracuse (Italy).

Material and Methods: Patients with cancer, disease-free without treatment for at least three years, were included in a cross sectional evaluation. A questionnaire was administered to determine patient characteristics (age, sex, marital status, education), tumour characteristics (date of diagnosis, histology), type of treatment and the quality of sleep.

Results: Among 429 patients screened, 237 accepted and were included in the study. The average age was 63 years (range 28−89), 73% were female and 27% male. Among patients recruited 56.1% suffered from breast cancer, 26.6% from colon cancer, 3% from melanoma, 1.7% from testicular cancer, 0.8% from lymphoma and 11.8% from other tumours. More than of 90% of patients reported a previous surgery for cancer; 40% received chemotherapy and 25% radiotherapy. More than 10% received endocrine treatment. One hundred and twentyseven patients (53.5%) experienced one or more disorder that interfere with the quality of life; 58% (22% men and 78% women) of these patients suffer of sleep disorders, mainly reported as difficulty falling asleep.

Conclusions: This study confirms the high incidence of sleep disorders in a population of long term survival cancer of Southern Europe.

4254 POSTER

Different Meanings of Mastectomy Due to Breast Cancer and Reflections About Breast Reconstruction

U. Fallbjörk[1], P. Salander[2], B.H. Rasmussen[1]. *[1]Umeå Universitet, Nursing, Umeå, Sweden; [2]Umeå Universitet, Social Work, Umeå, Sweden*

Background: Due to early detection and advanced treatment options more women with breast cancer survive after mastectomy and thus have to face the choice of living with or without a reconstructed breast.

Purpose of the study: To explore different meanings of mastectomy due to breast cancer and reflections about breast reconstruction (BR).

Material and Method: In 2008, 15 women were strategically chosen from a previous population-based study on mastectomy to participate in thematic research interviews. The interviews were performed 4.5 years after mastectomy.

Results: All women initially welcomed the mastectomy as a means to get rid of a diseased part of the body. The interviews then diverted into the three types of storylines about the meanings of losing a breast and reflections of undergoing BR or not. In the first storyline the mastectomy was described as "no big deal" and BR was not even worth consideration. In the second storyline the mastectomy was described as threatening their identity and they felt their womanliness to be lost. The BR was described as a means to be restored as a person, woman and sexual being. The third story line fell in between "no big deal" and "loss of self" and breast reconstruction was described as a welcomed offer making it easier to look and feel like a woman.

Conclusion: Our findings suggest that the experience of mastectomy due to breast cancer is very much individual and contextual. Losing a breast may be of minor or major importance and health care should thus be attentive to how the woman herself narrates her personal meaning of losing a breast instead of relying on vague preconceptions about what she needs due to her age and phase in life.

4255 POSTER

Breastfeeding After Breast Cancer − Are Health Care Providers Ready to Answer?

V. Brunelli[1], A. Milani[2], F. Peccatori[3], S. Manera[4], L. Libutti[5], A. Tonali[5], S. Gandini[6], E. Dossena[7], G. Magon[2]. *[1]European Institute of Oncology-IEO, Division of Clinical Pharmacology and New Drugs, Milano, Italy; [2]European Institute of Oncology-IEO, Health Care Services, Milano, Italy; [3]European Institute of Oncology-IEO, Allogeneic Transplant Unit, Milano, Italy; [4]European Institute of Oncology-IEO, Breast Unit, Milano, Italy; [5]European Institute of Oncology-IEO, Division of Clinical Pharmacology and New Drugs, Milano, Italy; [6]European Institute of Oncology-IEO, Division of Epidemiology and Biostatistics, Milano, Italy; [7]European Institute of Oncology-IEO, Division of Medical Oncology, Milano, Italy*

Background: Breast cancer is the most frequent tumour among women worldwide: twelve per cent of women in Europe and North America are affected by breast cancer. Almost 11% of these women are less than 40 years old and 7 to 14% of them are affected by breast cancer during pregnancy.

A recent meta-analysis highlights that there are no contraindications to conceiving for women who have a history of breast cancer; nevertheless it is crucial to define when the best time to have a child is; the authors recommend at least 2 years after diagnosis.

Breastfeeding creates the best psychophysical conditions for both the child and the mother. Even today there is no artificial milk that is equivalent to maternal milk. Breastfeeding after breast cancer is possible; there is no evidence that shows an increase either in tumour recurrence or in new cancer onset.

A study conducted at the European Institute of Oncology (IEO) on 20 women with a history of breast cancer, highlights that 5 women who received adequate counselling, prolonged breastfeeding till 12 months. Both women from the IEO and those who participated in a qualitative investigation by Gorman et al., reported that they needed more counselling and support on breastfeeding in respect to their specific condition.

Are nurses and physicians ready to answers to these women? Have they the adequate knowledge?

Materials and Methods: A anonymous test of eleven questions have been elaborated. The test was given to nurses and physicians of IEO clinic Division where in childbearing women, affected by breast cancer, come to.

Results: Seventy-four tests were given back (92.5%). Forty-six nurses (97.8%) and twenty-eight physicians (82.3%) have answered. 68% of physicians and 65% of nurses suggest breastfeeding, but while physicians in 73.8% of cases answer that is always possible to breastfeed, nurses answer "always" only in the 50% of cases and never in 8.82% of cases ($p = 0.04$). 31.8% of health care providers suggest the use of the artificial milk.

Conclusions: Results highlight that health care providers need to deepen this subject, in order to better counsel these women from the beginning of their care pathway.

4256 POSTER

Knowledge, Attitudes, Beliefs and Practice of Immigrant Arab Women Toward Breast Cancer and Breast Cancer Awareness in United Kingdom

A. Redha[1], A. Dewey[1], T. Dean[1]. [1]*University of Portsmouth, School of Health Sciences and Social Work, Portsmouth, United Kingdom*

Background: Despite evidence that breast awareness leads to early detection and decreased mortality, it continues to be underused by ethnic minority women, especially Arab immigrants. There are now more than 1 million Arabs living in the UK. Research shows that Arab women are more likely to be diagnosed with breast cancer at a more advanced stage. Since they are likely to be diagnosed with breast cancer, some ten years younger compared to western women, breast awareness, as well as screening, is vital. To our knowledge no one yet has studied UK Arab immigrant women's understanding of breast cancer and breast awareness with the view of informing practice and gaps in knowledge relevant to this population.

Material and Methods: Semi-structured audio taped interviews (one to one in-depth interviews) were conducted with ten first and second generation immigrant Arab Muslim women (20−59 years of age, mixed educational attainment and English proficiency). The interviews were conducted by an Arab researcher fluent in English and Arabic.

Two approaches to recruitment were adopted to recruit this "hard to reach" population; a purposive sampling framework together with snowballing sampling. Termination of data collection was based on the principles of no new themes emerging (data saturation) and informational redundancy. Data was analysed using a stage-by-stage process in order to provide a detailed, systematic and transparent method of analysis.

Results: Qualitative analysis of the findings generated five main themes: (1) cultural and social beliefs and attitudes related to breast cancer which include gender roles and Arab family structure; (2) Religious beliefs related to breast cancer; (3) Female modesty practices; (4) Low level of knowledge about breast cancer, lack of awareness of breast cancer symptoms, risk factors and breast screening procedures; (5) systemic access barriers and preferred sources of breast health information and education in Arabic language.

Conclusion: In summary, the findings showed very low levels of knowledge and awareness about breast cancer and low utilization of screening and breast awareness among Arab immigrant women. Our findings suggest that there is a need for future services to provide culturally appropriate breast awareness that recognises their unique social, cultural and religious dynamics.

4257 POSTER

Investigation of the Rehabilitation Needs of Incurable Lung Cancer Patients

J. Brabrand[1], H. Andersen[1]. [1]*Herlev University Hospital, Lung Cancer Unit, Herlev, Denmark*

Background: Recent legislation has focused on the rehabilitation of cancer patients in Denmark. Rehabilitation for lung cancer patients is particularly difficult because most patients already have severe symptoms at the time of diagnosis and on average lung cancer patients are from lower social classes. The combination influences their wish and ability to accept and enter rehabilitation offers. Experience from Danish rehabilitation, is that lung cancer patients are underrepresented and further knowledge of the underlying causes is needed.

The lung cancer Unit at Herlev Hospital treats 400 patients yearly and due to acceleration of treatment the initial focus of patient interviews is on side effects, economical and practical issues. Patients go through a period of disease monitoring after finishing 1st line chemotherapy. This period is particularly stressful and many patients experience anxiety for relapse, insecurity and feelings of void. Since March 2011 we have offered individual rehabilitation interviews and action plans after ended 1st line chemotherapy, but currently little is known about the rehabilitation needs of lung cancer patients and it's optimal implementations.

The **aim** of the present project is 1) to investigate the rehabilitation need of incurable non-small cell lung cancer (NSCLC) patients after the initial treatment and 2) to evaluate the effect of the individual action plans developed in collaboration with the patients and their relatives.

Methods: NSCLC patients and their near relatives are summoned for rehabilitation interviews three weeks after ended 1st line chemotherapy by their contact nurse. The patient fills in a survey document from which the three most important issues are selected as a starting point of the interview. During the interview a realistic action plan is formulated to help the patient and relatives cope with their situation. After the interview the nurse fills in a form identifying the most important needs for the patient's quality of life and documenting the actions employed. The patient is contacted per telephone two weeks later and interviewed about the perceived value of the action plan and about the extent to which they have followed it. The project is evaluated after six months.

Conclusions: The data will be available at the time of presentation. From the data we will evaluate the rehabilitation needs of the NSCLC patients and usefulness of the interviews in the described form as an approach to these needs.

4258 POSTER

Nursing Care in Network for Women Younger Than 40 Years of Age, Who Receive Adjuvant Treatment for Breast Cancer

R. Østergaard[1]. [1]*Aarhus Universitets Hospital, D7/D-amb, Aarhus, Denmark*

Background: Young women with breast cancer are in a stage of life, where they often are concerned about education, changes in their body, work, heredity, breast reconstruction, delayed effects/side effects, suicidal thoughts, anxiety and depression, sexuality and children. They often have an unfulfilled need to meet other women in equal age and situation, who understand precisely what they mean and feel, when they get angry, sad, frustrated, afraid etc. The young women find that they cannot use their family and usual girlfriends to talk about how the cancer affects them. The cancer is gone, but the physiological and psychological late effects remain. It can be difficult to explain to family and friends, why you are not jubilant at the last course of chemotherapy, but in reality very worried to let go of the feeling of control you experience, while still actively fighting the cancer with chemotherapy.

Objectives:

- To establish a network, where women younger than 40 years of age receiving treatment for breast cancer, get an opportunity to exchange experiences and have room to create a fellowship with other young breast cancer patients
- To evaluate the effect of a network established by an experienced cancer nurse, who also professionally participates in the network

Method: The nurse found the young women via the booking system in The Oncology Department.

An invitation was sent out and closed groups were made.

The nurse chaired the first meeting, set the framework and created a sense of security and provided room for discussions for the women.

After the first meeting, the women met in self-run network groups. After 4−5 months the group met with the network nurse for a follow-up, where the nurse brought up subjects known to be difficult for the women to talk about based on professional experience and knowledge.

After nine months the network was evaluated by questionnaire and focus group interviews.

Results: Age, state of life, life perspective and similarly diagnose were important factors.

The cancer nurses' role as chair at the first and fifth meeting is important. First for establishing the group, then for setting the framework and at last for bringing up difficult subjects known to be important to the women.