

hospitals and 1 university hospital) where their effective programs they practice. The scope of the study included 97 midwives/nurses who had been working as caregivers of gynecologic oncology patients in this unit at least for 6 months and who participated in this study voluntarily; 87 people composed the sampling because of the absence of nurses who were on vacation or on sick leave when the data were collected and who didn't want to participate in the study. The data were formed by descriptive information form and by the researchers and then collected via "Forms to Determine the Efficiency of Flow Charts". Before data collection process, the risks related to gynecologic oncology problems were identified, the literature scanning was made to search the existence of flow charts based on the practices and the discovered charts were reviewed so the efforts to create a flow chart began. As a result of the evaluations, it was decided to create 15 flow charts intended for risks, symptoms, operation processes and discharge. Questionnaires to determine the activity were applied to participants before and after the practice.

Results: As a result of the study, it was determined that the efficiency of the flow charts increased significantly ($p < 0.01$) after the practice of the participants and there wasn't a significant relationship ($p > 0.01$) between the age group, education level, occupational period in this job and in the gynecologic oncology field and their evaluations of the practice before and after it was applied.

Conclusion: The results of the study revealed that participants who worked in the nursing staff; who worked in university and private hospitals and who supported the existence of a flow chart in the field evaluated the flow charts positively.

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POSTER

Evaluation of a Trichometer to Quantify the Prevention of Hair Loss by Scalp Cooling During Chemotherapy

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Background: Alopecia is a distressing and common side effect of chemotherapy. Scalp cooling during chemotherapy may be a safe and effective method of preventing hair loss in medical oncology. Results vary and depend on many factors, such as type and dose of chemotherapy. Since there is a need for objective grading systems for alopecia, we have investigated the use of a trichometer to quantify hair loss.

Material and Methods: The trichometer (Hair check[®]) is a device that measures the quantity of hair (the product of number of hairs and their diameters) in a defined area of the scalp. The range of normal values when measuring fine to coarse hair with a trichometer is 75–100 Hair Mass Index (HMI). Patients with early breast cancer were treated at the Medical Centre Alkmaar with six cycles of adjuvant FEC chemotherapy (5-fluorouracil 500 mg/m², epirubicin 100 mg/m², cyclophosphamide 500 mg/m²) in combination with scalp cooling using the Paxman[®] PSC1 system. After informed consent, hair quantity was measured at the temporal area with a trichometer before each chemotherapy cycle.

Results: Since July 2010, 14 patients have been examined in this pilot study. The mean HMI before and after six cycles of chemotherapy was 63 (range:32–92) and 37 (range 29–45), respectively. Hair mass declined after each cycle of chemotherapy (mean values: 13 HMI after cycle 1, 11 HMI after cycle 2, 4 HMI after cycle 3–6). Due to unacceptable hair loss five patients stopped scalp cooling after the first cycle of chemotherapy and one after three cycles.

Conclusions: In patients treated with adjuvant FEC chemotherapy and scalp cooling, most hair loss is seen after the first two cycles. After that, only slight hair loss occurs. This study will be continued to collect information to optimise the scalp cooling protocol and improve outcome in preventing alopecia. Updated data will be presented during the ECCO conference.

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POSTER

Educating Nurses for Provision of Care to Cancer Patients Outside of Cancer Centre

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Background: Institute of Oncology Ljubljana is the only cancer centre in Slovenia. It provides cancer care services on the secondary and tertiary level. As cancer care is becoming more complex with increasing complexity of cancer treatment delivery, throughput of patients is higher every year, bed stays are short, the use of ambulatory care and oral medication is increasing, it is not possible to offer integrated cancer care to all patients at the only oncology centre in Slovenia. Current situation has shifted care

from cancer centre to general hospitals and home and created the need for widening cancer knowledge to nurses working at secondary (general hospitals) and primary (nurses working with general practitioners and community nurses) level of healthcare system.

Material and Methods: Much of the cancer nursing provision is cancer centre based, however clearly much of the care is now being provided in general hospital and in community and general health care settings. The need to up skill nurses working in those settings became one of our priorities. In the last two years we performed a number of educational programs tailored to the specific knowledge needs of nurses caring for cancer patients outside of our cancer centre. Contents of the educational programs included currently most relevant topics in cancer nursing. Delivery of knowledge and skills was provided in different mode from day seminars and workshops to extensive and intensive training.

Results: In 2009 and 2010 a number of educational programs were performed for nurses from different levels of healthcare system.

Content	Mode of education	No of nurses from cancer centre	No of nurses from tertiary and secondary level	No of nurses from primary level	No of nurses from other institutions
Care of cancer patients on oral systemic treatment	One day seminar	130	13	18	6
Care of cancer patients on systemic treatment	One day seminar and workshops	54	19	3	7
Care of cancer patients on systemic treatment – specialist nursing training	4 to 12 weeks training, duration dependent on previous experiences in cancer nursing	/	4	/	/
Caring for cancer patient with vascular access port	Workshop	/	58	37	4
Wound management in cancer care	One day seminar	53	8	26	11

Conclusions: Education is clearly an important tool for up skill of nurses for provision of care to cancer patients outside of cancer centre. Education not only improves care, but can enhance patient outcomes. Evidence is limited as to whether current educational provision is fit for purpose in meeting care demands. In future process and outcome evaluation of performed education will also be required.

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POSTER

Evaluation of the Clinical Nurse Specialist Input Into the Breast Reconstruction Pathway at Guys & St Thomas' Hospital Foundation Trust (GSTT): Addressing the Unmet Support Needs of Patients Undergoing Breast Reconstruction

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Background: Between April 2010 and April 2011, 250 patients underwent breast reconstruction at GSTT – A London cancer treatment centre. All patients diagnosed with breast cancer are offered immediate reconstruction at the time of initial surgery.

It is acknowledged that women considering reconstruction have unmet emotional & physical needs as well as important goals and concerns that can affect their decisions about an experience of reconstruction. In particular, some breast cancer patients have unmet needs and are unprepared for the full effect of surgery on their lives & for the recovery process (Lee et al, 2010). The literature highlights the importance of being offered good information & support from the clinical nurse specialist at all stages of the reconstruction pathway (Ganz et al 1992, The National mastectomy & breast reconstruction audit, 2011).

Materials and Methods: Both informal and formal patient feedback highlighted patients feeling isolated and unsupported following breast reconstruction. This led us to review the current patient pathway and CNS input at the reconstruction stage of the patient experience. Gaps in the service were highlighted which enabled us to define a very patient focused pathway whereby patients are supported at key points in the pathway by the CNS to assist with decision making and support needs following surgery.

Result: Following review of the service, a structured nurse led pre assessment clinic has been set up with input from other allied health professionals to address the specific needs of a patient having immediate breast reconstruction.

Conclusion: A service evaluation will be carried out on the new patient pathway with a patient questionnaire sent to all patients who have attended the pre assessment clinic examining their experience and support needs during their reconstruction pathway. The results of this will enable us to evaluate our current input into the service.

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POSTER

Surgical Oncology: Multidisciplinary Approach in Robotic Surgery, New Challenge for Operating Theatre Nursing

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Background: Throughout the history of nursing, the discoveries and system of belief of yesterday have served as a platform for the innovations of today. That is especially true for minimally invasive surgery (MIS) approach, exactly indeed perioperative practitioners have been challenged to stay abreast of technology in a field that is a constantly changing landscape of new techniques and improved instruments and equipment. The "laparoscopic revolution" of the 1980s propelled and encouraged the changes towards a less invasive approaches and new techniques, such as modern robotic-assisted surgery. Science and technology are advancing at an incredible pace and a critical analysis of these new developments become a duty in the perioperative nursing. Currently, minimally invasive surgeries, including robotic-assisted surgeries, are performed as routine in European Institute of Oncology (E.I.O.), especially in genitourinary, gynecologic, general, thoracic and head & neck surgery.

The goals of our investigation were:

1. To assess needs of cancer patients undergoing robotic surgeries in different specialties, regarding preparation, mentioning physical and psychological needs,
2. To assess a multidisciplinary team collaboration during robotic surgeries,
3. nursing role description, and the specific 'learning-curve' of the beginner nurses.

Methods: The investigation conducted at the European Institute for Oncology in Operating theatre by nurses involved in robotic surgery procedures. During three thousand robotic surgical procedures in different surgical specialty was registered a data using specifically designed form and analyzed daily, weekly, monthly and yearly.

Results: The professional nursing staff has an important responsibility to work following best-practice rules, and to analyze periodically roles and habits could be an effective instrument in order to improve every-day practice. A team training that involves all members of the robotic surgical team learning together, is the main key to ensuring patient advocacy and safe care. Creation and application of guide lines and specific protocols is giving positive results in daily practice.

Conclusion: The role of robotics nurse specialist is both challenging and exciting because the technology is so new and the role is open to interpretation and definition – needs of job description. Results showed us the needs of continues education, especially regarding e nursing skills, creation of guide lines and specific protocols. Nurses, as a member of Robotic Surgical team must represented very good level of professional knowledge, and be an expert in robotic technology. Playing a key role in data collection, analyzing trends and outcomes, and identifying safety issues.

In European Institute of Oncology in 2010 was open School of Robotic Surgery providing training for robotic surgery staff.

Poster Presentations

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POSTER

A Review of the Literature for Non-pharmacological Interventions for Arthralgia in Non-cancer Conditions

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Background: Following aromatase inhibitor (AI) treatment for early stage breast cancer, women have increasingly experienced joint or muscle pain and stiffness referred to as arthralgia. This is an area of increasing concern (Fenlon et al 2008). There are suggestions that changes within the joints might be similar to inflammatory arthritic processes (Burstein 2007). Women are often reluctant to take medication to treat their pain. Therefore non-pharmacological treatment options used in the field of arthritic pain may be appropriate to alleviate such arthralgia. A systematic literature review was conducted to identify evidence to support the use of non-pharmacological interventions in non-cancer conditions that could be tested in women with breast cancer related arthralgia.

Methods: Using systematic review methods, electronic databases were searched for existing literature in the fields of breast cancer, AI treatment and arthralgia. Primary research studies were scored according to the Jadad score, literature reviews and systematic literature reviews were included.

Results: Three studies, 12 literature reviews and 9 meta-analyses met the set inclusion criteria. The quality of the evidence to support non-pharmacological treatment options was low. Controlling for placebo effect, adequate control groups, small sample size and adequately powered studies to detect statistical differences were some of the limitations. Many studies focused on functional ability and quality of life more than on pain outcome. Strong evidence supported supervised exercise programmes over a set period of time to reduce Osteoarthritis knee pain. Benefits were seen with aquatic exercise and aerobic capacity training combined with muscle strength training, a heat-retaining knee sleeve, extra-depth shoes, moulded insoles and mineral baths. Acupuncture showed statistically significant benefits for pain versus control groups. However no significant difference was seen between sham and real acupuncture. Low Level Laser Therapy and ultrasound over placebo showed conflicting outcomes.

Conclusions: There was little evidence to support the use of any non-pharmacological intervention for the relief of pain in arthritic conditions. Methodologically robust studies and further research into the effectiveness of exercise, acupuncture, localised heat treatment, and low level laser therapy is needed.

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POSTER

Patient Reported Outcome Measures (PROM) for the Delivery of Supportive Care to People With Lung Cancer – Identification and Selection of Existent Tools

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Background: People with lung cancer (LC) present with significantly more unmet supportive care needs compared to people with other cancer types; yet, often these needs are not fully met. Patient-reported outcome measures (PROM) may be seen as an effective way of identifying supportive care needs in this population, especially when their application is informed by patient preferences and clinician expectations. As part of a bigger project on the use of PROM by Lung Cancer Nurse Specialists (LCNS), an innovative three-step approach was followed to identify and select appropriate Supportive Care Need Tools (SCNT) for people with LC: (a) a systematic review of the literature was conducted; (b) LCNS were consulted during selection of the most appropriate SCNT; and (c) the tools were discussed in focus groups with patients with LC.

Methods: Via use of key words and synonyms, five databases (Medline, CINAHL, PsychINFO, EMBASE, BNI) were systematically searched from 1/2000 to 11/2010 to identify SCNT introduced in studies with people with LC. As well, a similar search was performed from 1/2004 to 11/2010 to identify SCNT introduced for use in cancer care. Additional information was extracted from the findings of relevant topical reviews.

Results: The searches yielded 495 potentially relevant articles. Based on specific eligibility criteria, 19 original studies were included introducing 15 generic SCNT. Thirteen additional SCNT were included based on previous literature reviews, leading to a pool of 28 well-established, self-report, generic tools. After consensus was reached within the team, 10