and treatment is best individualised according the type and the extent of the skin lesions. The task of nurses is one of rending information and educating patients. Besides information on general measures, nurses can provide extra support and encouragement for patients struggling to cope psychologically with rash and help patients understand that the rash is usually a transient and manageable condition that usually disappears without scarring. The approach of treatment and guidance of patients with skin-toxicity is multidisciplinary: nurses, oncologists, dermatologists and psychologists must collaborate.

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1513 INVITED

Is oral chemotherapy an option in treatment of cancer?

H. Marse, L. Lemmens, E. Van Cutsem. *University Hospital Leuven, Digestive Oncology Unit, Leuven, Belgium*

For several decades, intravenous chemotherapy has played and still plays a major role in the standard care of most tumours. However, delivery problems associated with infused administration are well-known. Intravenous therapy can be uncomfortable for the patient, time-consuming due to regular hospital visits and can generate venous access related complications (infections, thrombosis or blockage of the venal port). At the moment several chemotherapeutic agents and other novel targeted agents are available and approved in an oral form and several new ones are under development. In colorectal cancer it has been shown that the oral fluoropyrimidines (esp. capecitabine) are at least as active as IV 5-FU/FA. Two studies [1,2] in colorectal cancer showed a strong patient preference for oral therapy over intravenous therapy. The most important reasons for this preference were administration related (minor risk of infection, can be taken at home) and almost no interference with daily activities. Also the toxicity profile of oral versus intravenous chemotherapy influences the patients' preference. But in spite of preference for oral chemotherapy, most patients do not want to sacrifice any efficacy for convenience. A study of quality of life in cancer patients receiving palliative chemotherapy demonstrated that also patients' quality of life was significantly improved with home-based chemotherapy [3].
Since oral chemotherapy is taken in an outpatient setting, there are consequences for both, care giver and patient. The care givers are responsible for supporting and educating patients on dosing, compliance and how to handle side effects. The patient is responsible for correct recognition and evaluation of severity of the side effects and the action to undertake. Therefore selecting the right patient for an oral therapy is a very important contribution to the safety of oral chemotherapy.
In conclusion, oral chemotherapy can be a valid treatment option preferred by most patients if the toxicity profile and efficacy are at least equal compared to intravenous chemotherapy and the patients are well selected, educated and supported during their home based therapy.

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Proffered papers
Nursing interventions

1514 ORAL

Ethical and legal requirements in clinical research; the importance of structure and skills of the clinical trial nurse in the department.

G. Jessing, F. Budtz, M. Lyngsoe. *University Hospital of Aarhus, Section of Clinical Research, Department of Oncology, Aarhus, Denmark*

In Department of Oncology, University Hospital of Aarhus, Denmark approximately 25% of the cancer treatment is conducted as clinical trials. Research demands a structure in which roles and responsibility are clearly defined. Section of Clinical Research (SCR) has an important function in the matter of enabling the organization to handle this high activity of research.
SCR was established as an integrated part of our department of oncology in 1994, with the purpose of structuring and raising research activity, and also to develop a strong and noticeable unit for clinical research. An important aim is to ensure that we meet the obligations of quality requirements, our own as well as external, including the rules of Good Clinical Practice.
Any clinical trial to be initiated in the department of oncology has to be handled in SCR in order to discuss the scientific quality and to discuss whether the department has the capacity to carry out the trial.
The 7 Clinical Trial Nurses (CTN) in SCR manage a long list of tasks regarding the initiation and implementation of every clinical trial. The CTN plays an important role indicating the conditions and expertise that are needed for performing the clinical trials in the ward and in the out-patient department. The CTN is essential in educating all staff involved – primarily doctors and nurses – before initiating any clinical trial. We have high expertise and experience in composing informed consent documents, which is helpful in securing that the patients are well informed about the actual clinical trial.
We consider clinical cancer research to be a daily obligation with the responsibility for two patients: the patient entering the door today, as well as the future patient. The patient today should be given the best possible treatment that is available, and the future patient should be given an even better treatment. This dual responsibility demands a high research activity and high ethical standards. The CTN plays an important role in securing medical ethics – a matter the patients in general will find hard to relate to – and to secure that the patient is protected in every way regarding his rights, his safety and his welfare. In 2004 our department received an award of honor from the National Ethics Comity for our high ethical standards in research along with these words: "The department serves as a role model for priority of ethics in research".

1515 ORAL

Testing the effect of an educational intervention on nursing staffs' knowledge and attitudes on cancer pain management

E. Patiraki[1], E. Papathanassoglou[1], C. Tafas[2], V. Akarepi[3], S. Katsaragakis[1], A. Kampitsi[3], C. Lemonidou[1]. [1]*University of Athens, Nursing Faculty, Athens, Greece;* [2]*University of Connecticut, School of Nursing, Connecticut, USA;* [3]*"St Savas" Cancer Hospital, Nursing Education Department, Athens, Grecce*

Background: The purpose of the study was to explore the effectiveness of an educational intervention on nurses' knowledge and attitudes regarding cancer pain management. The study was funded by EONS-ROCHE grant 2003.
Material and Methods: An experimental randomized 4-Solomon group design with alternative groups was utilized. The sample (n = 112) was recruited from "St. Savvas" a public Cancer Hospital, Athens, Greece. The following randomized groups were tested: a) pre- and post-test intervention group, b) post-test only intervention group, c) pre- and post-test sham-intervention group, and d) post-test only sham-intervention group. The educational intervention was based on viewing a series of 4 educational videotapes by Mc Caffery translated in Greek. The validated Greek version of the Nurses Knowledge and Attitudes Survey Regarding Pain was used at both pre-test and post-test measurements.
Results: 92.9% of the participants (mean age 37.94±8.10 years of age) were female and had an average 14.56±8.63 years of experience in cancer nursing. 2.7% of nursing personnel held a Bachelor degree in nursing, 56.3% were graduates of technological institutions of nursing, and 12.5% held assistant nurse diplomas. There were no significant differences between the intervention and control groups in regard with background variables.
Pre-intervention scores revealed various limitations in regard with pain assessment and management. At the pre-test, the average number of correct answers was 17.58±7.58 (45.1±19.3%). Pre-intervention scores differed significantly among participants with different educational backgrounds ($p < 0.0001$). A significant effect of pain education on total knowledge scores as well as regarding specific questions was detected. Intervention group participants provided 6.11±5.55 additional correct answers (15.66±14.23% improvement, $p < 0.0001$), and they exhibited significantly improved post-test scores compared to controls ($p < 0.0001$).
Conclusion: Study findings suggest relatively low pre-test knowledge scores among Greek oncology nurses. Despite the significant improvement in knowledge for the majority of test items after the educational intervention, some of the common misconceptions about pain management persist even immediately after the intervention. Moreover a trend for a potential negative effect of pre-intervention testing on knowledge acquisition remains to be further explored.