

692 patients were included and only 6 patients failed to return the questionnaires. Mean score were respectively 63.6 and 72.5 for the QLQ-C30 global health scale and the OUT-PAT35 overall satisfaction scale. In a multivariate analysis, localization of the primary cancer (breast, prostate, head and neck, rectum, or lung) and type of treatment received (radiotherapy, and/or chemotherapy) were included in two separated models because of a colinearity between these two variables. Patients treated for head and neck cancer appeared to be less satisfied with care ( $p = 0.03$  for the overall satisfaction scale). The clinical determinants significantly and unfavourably associated with most scales of the OUT-PAT35 were poor global health status (all  $p < 0.01$ ), and radiotherapy (at least  $p = 0.03$  for the scales evaluating doctors, nurses or technologists). The socio-demographic determinants, significantly linked to bad perception of satisfaction with care, were marital status (living alone or not), associated with both doctors' and nurses' information provision, young age ( $< 55$  versus  $> 55$  years) with doctors' availability, and high income with nurses' information provision.

Based on the EORTC OUT-PAT35 questionnaire, we identified a number of treatment, clinical and socio-demographic factors significantly associated with different scales of satisfaction with care in cancer outpatients. Further analyses are currently performed to determine the responsiveness of this questionnaire to changes over time.

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POSTER

#### Chemotherapy-associated constipation (CAC): a neglected clinical problem

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**Background:** Constipation is not known as a common side effect of chemotherapy. In our department, though, patients seemed to frequently report bothersome constipation. Therefore we performed a survey.

**Methods:** 70 consecutive patients in the outpatient chemotherapy clinic were asked to participate in the survey. Patients were asked about changes in bowel habits, the consistency of their stool, abdominal or general discomfort, and whether they had sought medical help for constipation. Also a Constipation Assessment Scale (CAS), a validated instrument for measurement of constipation, was collected.

**Results:** A total of 49 patients responded to the survey and completed the bowel function questionnaire. Most patients were treated for breast cancer ( $n = 11$ ), Non-Hodgkin Lymphoma ( $n = 8$ ), lung cancer ( $n = 8$ ), ovarian cancer ( $n = 7$ ) and colorectal cancer ( $n = 6$ ). Five patients (10%) were on opioids + laxative. In our hands, the CAS was not a useful instrument, since patients with diarrhoea scored high on "abdominal discomfort". Nineteen patients (39%) stated they were constipated after chemotherapy. Of constipated patients 10 (53%) felt "a little" discomfort, and 9 patients (47%) felt "much" or "very much" discomfort. Of constipated patients 17 (89%) indicated diminished general wellbeing due to CAC. Seven patients (37%) sought medical assistance from the hospital or their general practitioner. Predictive factors in our patients were limited, due to small numbers, to bowel habit before chemotherapy ( $p = 0.01$ , X-square-test) and ovarian cancer treated with carboplatin/paclitaxel ( $p = 0.04$ , X-square-test). No correlation was detected with the use of 5HT3-antagonists, but only 6 patients received chemotherapy without.

**Conclusion:** Constipation is prevalent among cancer patients treated with chemotherapy, negatively influences general wellbeing and makes patients seek medical attention. Therefore CAC deserves special attention in the prevention and management of side effects of chemotherapy.

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POSTER

#### Taste and smell dysfunction in paediatric oncology patients receiving chemotherapy

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**Background:** Taste and smell changes are much more prevalent in patients undergoing chemotherapy. The literature yields little information on taste and smell changes. In this study, the frequency and features of these changes were evaluated in paediatric oncology patients.

**Patients and Methods:** Forty-four children receiving chemotherapy in paediatric oncology clinic were evaluated with questionnaire about taste and smell changes.

**Results:** The mean age was 12.15 (4–8) and male to female ratio was 25 to 19. The most frequent histopathological diagnosis were osteosarcoma (15 patients) Ewing's sarcoma (12 patients) and Hodgkin disease (7 patients). The most frequently administered chemotherapy regimens were high dose methotrexate (10 patients), doxorubicin + cyclophosphamide + vincristine combination (8 patients) and ABVD regimen (5 patients).

Taste and smell dysfunction was reported by 33 (75%) and 34 (77%) patients, respectively. Seven patients (70%) treated with high dose methotrexate reported taste changes, while nine patients (90%) were reported smell changes. Seven patients (87.5%) treated with doxorubicin + cyclophosphamide + vincristine combination reported taste changes, while 6 patients (75%) reported smell changes. Three patients (75%) treated with ABVD regimen reported both taste and smell changes. Eleven female patients (57.8%) reported taste and 14 female patients (73.6%) reported smell changes. Twenty-two male patients (88%) reported taste and 20 male patients (80%) reported smell changes. Increased sensitivity to odors was reported by 20 patients (58.8%) and 14 patients reported decreased sensitivity. Taste changes were described as bitter (11 patients), metallic (10 patients), sour (8 patients) and salty (4 patients). Twenty patients (60.6%) informed their families and health professionals about these changes. Meat and fish products were the most common undesired foods for 14 patients. Twenty-two patients had not taken any measures against these changes. But eleven patients had taken some measures like increased water intake, some spices and souces.

Twenty-nine patients (87.8%) reported that taste and smell changes were the most severe during chemotherapy administration.

**Conclusions:** Much more research is needed to understand the nature, frequency, severity and duration of taste and smell alterations and their significance for the quality of life of cancer patients. Objective testing methods should be developed to detect these changes.

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POSTER

#### The effect of a digital instruction program on the safe handling of cytostatic drugs of homecare professionals

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**Background:** Many professional carers working in a homecare environment are often unaware of potential exposure to cytostatic drugs, protective measures are rarely taken. This, combined with the fact that there are limited protocols or guidelines available, can lead to high dermal exposure levels through contact with patient excreta or with contaminated materials. To encourage professionals in the homecare setting to work safely with patients receiving cytostatic drugs, a digital instruction program was developed. Each procedure is illustrated with realistic pictures, accompanied by (printable) written text and narration to cater to the different learning strategies of individuals (hearing, seeing and reading).

The CD is part of a complete package:

- Management guidelines on how to implement the program
- Cost implications
- An overview of protective clothing, requirements and suppliers.

Aim of the pilot study was to see if:

- The knowledge of the different home care professionals increased due to the digital instruction program
- The different home care professionals were able to put their knowledge into their daily practice
- The knowledge persists over a certain length of time (3 and 6 months after introduction of the program).

**Material and Methods:** Professionals employed by four homecare institutions across the Netherlands were asked to participate in the study. Written questionnaires were used. They were asked to fill in the first questionnaire before the digital instruction program was introduced. And again three and six months after the introduction of the program.

**Results:** The knowledge of all homecare professionals of the safe handling of cytostatic drugs was slight before and after the introduction of the program. However a small increase in knowledge was visible after the introduction of the program (especially after three months). There was also an increase in the knowledge of how to take protective measure before and after the introduction of the program. According to the respondents they take more protective measures after the introduction.

The knowledge achieved during the project seemed to enable the homecare professionals to take the proper protective measures.

The use of the digital instruction program is an effective measure to enhance knowledge. It had a positive outcome on the existing knowledge which increased after the introduction.

In December 2008 the program was broadly introduced to all homecare institutions in the whole of the Netherlands where it is now being implemented.