procedures, has to work on that departement. There must be also a near cooperation with the medical staff. The contents of nursingfiles needs to support the methodical nursing. A good active support from the head of the departement is necessary.

The functions of clinical paths are: an expedient for the way of nursing; a learning instrument for new colleagues; an expedient for testing the quality of nursing.

Results: After a short period of testing these procedures, we became the following results. The nurses have more time to solve the problems of patients, especially the first day of admission. The quality of nursing is increasing. Patients are more satisfied. The new members have more confidence to do their job. The lay-days are decreased in some sheduals with 10%. The cooperation between the departement and the one-day-clinic is tending upwards with 15% in a week.

Conclusion: Clinical paths are useful on any departement. Nurses are very satisfied to work with the system, but it takes a lot of time to make it happen. Even that time will be compensaded with the results you get.

Innovations in cancer nursing II

163 ORAL

An interactive patient information CD ROM on specific side effects in chemo- and radiotherapy

G. Vandevelde[1], J. Peeters[2], G. Ponnet[3], J. Vandebotermet[4], L. Verpoorten[5]. [1]*UZ Gasthuisberg, Radiotherapy, Leuven;* [2]*Inst. J. Bordet, Oncology, Brussels;* [3]*Free University, Haematology, Brussels;* [4]*Hospital St. Luc, Pediatric oncology, Brussels;* [5]*Virga Jesse ZH, Oncology, Belgium, Belgium*

Patients receiving chemo- and/or radiotherapie are eager to get as much information as possible on how to manage the burden of their treatment. Providing them with adequate and detailed information will help to control their own problems much better and will influence the quality of life in a positive way. A working group of oncology nurses from 8 different hospitals had developed a package of information leaflets on 25 different acute side effects. Each leaflet contained very specific information on the nature, the onset, intensity and duration of the side effects. Useful information on how to cope with was provided as well as recommendations when major symptoms became apparent wre available. The content of this information package has recently be reviewed by a core group of oncology nurses resulting in an interactive CD ROM. As patients as well as health care professionals will have increasing access to information technology, patient information should be made available in a more advanced way. The benefits of patient information on CD ROM format are continuous access to the data, the ability to produce an unlimited number of copies at the lowest cost and finally the freedom to adopt the content for specific situations and patient groups by mixing common text processes and data, based on local experience and situations.

This project has been supported with a grant of Smith Kline beecham.

164 ORAL

Why oncology units should provide a website for their patients

L. Dalton[1], A. Deary[1], K. Akass[1], R. Thomas[1,2]. [1]*Primrose Oncology Unit, Oncology, Bedford;* [2]*Addenbrooke's Hospital, Cambridge University NHS Trust, Oncology, Cambridge, United Kingdom*

Purpose: The level of information patients require following a diagnosis of cancer is high[1]. Our muticentre audit presented at ECCO '97 showed that 87% of our patients looked for additional information outside the clinic with 17% of these from the internet[2] We repeated this audit to establish a trend in internet usage over the last 2 years. We also aimed to established methods how best to harness the internet to help future patients find information they wish.

Methods: 100 questionnaires were given to patients over 2 weeks (March '99) during 24 separate oncology clinics. Patients who used the internet were contacted and their experiences of useful sites discussed in a series multidisciplinary focus group meetings.

Results: 85 (85%) of the questionnaires were retrieved from 37 males 48 females, average age 58 years. 26 (31%) had used the internet to gain additional information on their disease or treatment. This represented a 14% increase form two years ago (17% v 31% Binomial chi-squared test $p < 0.001$). The decision form the focus group was to develop an internet site for our future patients using the information gained from the multidisciplinary discussions. (www.cancernet.co.uk). This site provides local logistical fact, information on cancer, radiotherapy and chemotherapy, it contains the official advise leaflets giving advise on diet, skin care, diarrhoea etc. Gives useful contacts to directs patients to other useful sources of information such as videocassettes (eg HEP Tel: (44)1222 403022, health.education@btinternet.com). It provides a gateway to other useful sites.

Conclusions: The internet is here to stay, this study shows a significant proportion of our patients use it to gain additional information on their disease and this portion is increasing rapidly. Developing a local web provides a useful bulletin board for patients and directs them towards useful information sites internationally. We are now conducting a prospective study with integrated software to see which areas of the web site are used most frequently in order to adapt to future patients demands.

[1] Audit commission. What seems to be the mater? HMSO London, 1993
[2] Shingler G. Where do patients seeks additional information? EJC '97. 33 (8). 1426

165 ORAL

Caring for cancer patients in diverse healthcare environments – Meeting the challenge to educate nurses and healthcare professionals

E.M. Davidge, A.G. Freemantle. *Department of Clinical Oncology, Notingham City Hospital NHS Trust, Hucknall Road, Nottingham NG13 8UJ, United Kingdom*

Purpose: Nurses and Healthcare professionals, irrespective of the clinical environment in which they work, come into contact with people who have a diagnosis of cancer. Evidence suggests that many professionals lack the relevant knowledge and skills to effectively care for cancer patients (Hancock, 1996, RCN, 1996, Calman-Hine, 1995). The *Oncology Foundation Programme* has been developed out of a need to bridge this gap across today's multi-sector, multi-agency, multi-professional society.

Method: Using a collaborative, partnership approach a project group was established to develop an *Oncology Foundation Programme.* A systematic training needs analysis approach generated emergent themes from which specific learning outcomes were identified. This culminated in the design and subsequent delivery of an innovative, multi-professional education programme which utilises a flexible, student-centred approach to facilitate the application of the theoretical perspectives into the individual's practice and practice setting.

Results: The 12-week programme, facilitated by a Clinical Educator, with multi-professional, cross-Trust participation encourages staff development through diverse educational approaches, sharing of knowledge and experiences and the creation of communication and support networks. A comprehensive evaluation strategy has demonstrated the benefits of shared learning and the ability of the programme to facilitate the integration of theory into practice.

Conclusion: The success of the *Oncology Foundation Programme* lies in its flexible, lucid, pragmatic approach, which has made accessible specialist cancer care knowledge to healthcare professionals working within quite diverse environments. This project has demonstrated that rigorous, credible multi-professional programmes, grounded in clinical practice, without the constraints of academic accreditation, have a valuable role to play in the education and training of healthcare professionals caring for cancer patients.

166 ORAL

Job sharing senior clinical roles: Heaven or hell!

D. Cathmoir, C. Mullooly, D. Brewer, C. Miller. *Guy's and St Thomas' Hospital Trust, Cancer Directorate, London, United Kingdom*

Purpose: Recruitment and retention of advanced clinical nurses are vital to maintain clinical leadership and excellence in cancer care during a time of acute nursing shortages. This study looks at how to optimise the complexity of job sharing by using the Lifestyles Inventory.

Methods: The Lifestyles Inventory was undertaken by 3 CNS job sharing 2 roles. The individuals' profiles were analysed by an independent management consultant. Objectives and projects for the forthcoming six months were discussed and, using their individual inventory, the 3 staff selected to lead initiatives, given their specific aptitudes and developmental needs.

Results: The paper outlines the processes each nurse undertook to determine a lead project and how this met organisational and individual needs.

Conclusion: The Lifestyles Inventory was useful in appreciating particular characteristics of each nurse and where their strengths and weaknesses lay in the workplace. This appreciation sensitised work situations in which there is a potential role for conflict, possessiveness and misunderstanding of role boundaries.

167 ORAL

The development and implementation of a clinical pathway for the diagnosis and staging of lymphoma

K. Vanhaecht[1,2], W. Sermeus[1,2], R. Paridaens[2], J. Thomas[2]. [1]*Center for Health Service and Nursing Reseach, Catholic University Leuven, Leuven;* [2]*University Hospitals Leuven, Catholic University Leuven, Leuven, Belgium*

Purpose: Lymphoma are diagnosed and staged based on clinical, radiological and histological information, usually collected during a hospital stay. A clinical pathway aims to improve the cooperation between the various health care professionals in reaching this objective in an effective and efficient way.

Methods: A quasi-experimental study design, with pre- and posttest, has been used. The effect of the pathway upon some process- and outcome variables has been analysed. The process variables under study are: time between the prescription and execution of the diagnostic procedure and the variance to the clinical pathway. The outcome variables are: length of stay, diagnostic interval, anxiety, patient satisfaction and nurses job satisfaction. Sample size is 15 patients. The study is conducted in an oncology ward of the University Hospitals Leuven. Before implementation a pretest was performed. After implementation a posttest was performed. Job satisfaction was measured by 10 nurses in the pretest and 8 nurses in the posttest. Both groups (patients and nurses) were comparable regarding demographical characteristics.

Results: There was no significant decrease in timespan between prescription and execution of the diagnostic procedures. The variance to the pathway was due to overcrowding of the technical units. There was a significant decrease in length of stay from 6.9 to 5 days ($p < 0.05$) and a significant decrease in diagnostic interval from 9.7 to 5.2 days ($p < 0.05$). The anxiety score (STAI-DY-1) decreased from 53.4 to 41.5 ($p = 0.02$). Patient satisfaction concerning patient information increased significantly ($p = 0.007$). Nurses' job satisfation increased significantly after implementation of the clinical path ($p = 0.02$).

Conclusion: The implementation of the clinical pathway resulted in better outcomes for patients, nurses and the organisation.

168 ORAL

Fatigue in cancer, a new education course for nurses

H. Hummel, R. Rietema, G. Vaessen. *Comprehensive Cancer Centre Noord-Nederland (IKN); Acade Groningen; Hogeschool Limburg, Netherlands*

Introduction: Fatigue is a complaint that occurs sooner or later in every patient who suffers from cancer. It is an overwhelming symptom that affects quality of life. Attention for this fatigue is an important part of oncology nursing practice. To provide this care, in depth knowledge of all aspects of fatigue (from causes to treatment) is essential. On basis of this knowledge and insight, this creates a bases for the nurse to develop nursing interventions.

Objective: Since 1998, under the auspices of the Dutch Oncology Nursing Society (VvOV), a new education course has been developed together with a group of experts. The study material will become part of the curriculum of the post basic course in cancer nursing, the course can also be used as an refresher course for oncology nurses.

Results: The study material will be given in provisional form as a pilot in April and May 1999 to a group of students taking the post basic course of cancer nursing and as training for nursing specialists in oncology in the IKN area. The definite version will be produced on the basis of evaluation of the pilots studies. In September 1999 a train-the trainer course will be organised for representatives of the training schools and for professional promoters of the comprehensive cancer centres to teach them how to apply the study material.

Conclusion: From September, training schools providing the post basic course in cancer nursing, as well as the comprehensive cancer centres, can offer their target groups knowledge of 'fatique in cancer' in a structured way, according a clear-cut outline programme.

169 ORAL

Hospice as a resource centre pilot project. Nursing staff education in the principles of palliative care in private nursing homes

L. Fergus[1], S. Munroe[2], M. McGill[1], I. Paterson[3]. [1]*Marie Curie Centre, Nursing, Glasgow;* [2]*Marie Curie Centre, Administration, Glasgow;* [3]*Marie Curie Centre, Research, Glasgow, United Kingdom*

Acknowledgement to the Nursing Home Steering Group.

Hypothesis: Involvement of the specialist palliative care team in education and training will illustrate a change in palliative care awareness of nursing home staff, improvements in patient care and increased confidence in nursing home staff providing palliative care.

Purpose: The two year pilot project will evaluate the effectiveness of an education and training needs assessment and development of the education/training package in the principles of palliative care in 14 Glasgow Nursing Home Association nursing homes in the Greater Glasgow area.

Summary: An education/training needs assessment questionnaire was developed, piloted and distributed to over 460 nurses in the participating nursing homes. Formal and informal education programmes were developed taking into account the stated needs of each individual nursing home. Two trained nursing staff from each home volunteered to be further educated and trained in the principles of palliative care and to disseminate and facilitate the education of the remaining trained and untrained nursing staff in their nursing home. There was development of palliative care protocols and guidelines and each education session was evaluated. There is also continual monitoring and audit of referrals for specialist palliative care advice and palliative care patients requiring transfer to hospital or hospice.

Conclusion: Data collection is ongoing. All new data will be presented at the conference.

170 ORAL

Recovery & stability, health promotion and rehabilitation for cancer patients

B.C.M. Gijsen, J.M.J. de la Fonteijne, H.W. van den Borne, J.W.S. Vlaeyen. *Comprehensive Cancer Centre Limburg; University Maastricht; University Maastricht/Institute Rehabilitation Research, Netherlands*

Purpose: Cancer is considered more and more as a chronic disease and survivors need appropriate support at their rehabilitation. The Comprehensive Cancer Centre Limburg recognised this actual need of cancer patients and developed, in cooperation of two rehabilitation centres, a health oriented program for cancer patients.

Methods: In November 1996 the first pilot started and since then groups of 12 to 18 cancer patients (in remission) followed the program consisting of a fysical and psychosocial component:

- an individual tailored fitnesstraining, based on the theory of graded activity;
- a group-exercise program and body-education in the water, aimed at decreasing kinesiophobia;
- relaxation and thematic group-education, aimed at increasing self-esteem and general feeling of control.

In week 0, 6 and 13 the participants were tested on variables as fatique, quality of life, kinesiophobia, medical consumption.

Results: Up to now (April 1999) about 150 patients have participated in the program. Of them 3/4 is female, the age range is 25–75 years. By September 1999 the results of the participants will be available. The first analyses show a significant improvement in quality of life regarding fysical, psychosocial condition and a decrease of fatique.

Conclusions: The participants consider the program as very beneficial for themselfs and cancer patients in general, and of high quality. The first results show significant effects on the quality of life and condition of cancer patients. This may indicate the program is an important after care intervention in oncology nowadays. An experimental study will be caried out in the next years. Of the program a protocol and an educational course for trainers are developed to support the implementation of the program in other institutes.