

distress, quality of life, even survival, since nowadays limited systematic research has been conducted. The purpose of this descriptive, cross-sectional and correlational study was the identification of the occurrence of specific parameters of sleep-wake disturbances in a sample of Greek cancer patients.

Material and Methods: Researchers visited two oncology units of "St. Savvas" Oncology Hospital in Athens during a five-month period time. All patients who met inclusion criteria completed a set of sleep and symptom questionnaires; participants' medical records were reviewed for demographic and clinical data. Comparative and correlational analyses were used.

Results: Between April and September 2006, 103 consecutive cancer patients with multiple primary diagnoses during active-phase cytotoxic chemotherapy entered the study. The mean age was 53.3 ± 13.3 years and 60% were women. Women had significantly more sleep problems ($p < 0.001$), while tended to use sleep medication more frequently than men. 60% of participants were recognized as having poor sleep quality, even if only 38% used sleep medication to help them sleep. Mean sleep latency reached 35.6 ± 42.9 minutes, where mean real-time sleep was only 5.9 ± 1.7 hours. The average sleep efficiency hardly exceeded 70% ($71\% \pm 20.7\%$). Daytime sleepiness reported as a significant problem by 40% of the respondents, with 50% having at least some problem in keeping up enough enthusiasm to get things done. The majority (70%) of patients in pain indicated that pain interfered with sleep at least twice a week. Significant correlations were found between anxiety ($p < 0.001$) and time since initiation of current chemotherapy regimens ($p = 0.046$) and time to fall asleep; poorer performance status and poorer sleep quality ($p = 0.015$) and depression ($p < 0.001$); increased distress from physical symptoms with direct effect on sleep and use of sleep medication ($p = 0.046$) and sleep inefficiency ($p = 0.010$); and use of opioids and occurrence of bad dreams ($p = 0.021$).

Conclusions: These preliminary results confirm already published data, revealing that Greek cancer patients also experience severe problems with sleep during chemotherapy. Further research is necessary to meet the needs of oncology patients with sleep-wake disturbances.

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ORAL

Health behaviour after cervical cancer – a phenomenological inspired study

C. Andersen¹, L. Adamsen². ¹Copenhagen University Hospital, Department of Oncology, Copenhagen, Denmark; ²Copenhagen University Hospital, University Hospitals Centre for Nursing and Care Research, Copenhagen, Denmark

Background: Despite national screening efforts 400 women in Denmark are diagnosed with cervical cancer each year. Known causes include transmission of the HPV virus, smoking, multiple sexual partners and early sexual debut. Surgery, chemotherapy and radiation therapy are highly effective treatment options. However, adverse physical and psychosocial effects may be serious and persistent, and treatment may disrupt existing health behaviours or exacerbate unhealthy behaviours. How survivors of cervical cancer regard behavioural changes remains unexplored. With a growing number of survivors of cervical cancer, the overall health and well-being of these individuals will require attention.

Purpose: To explore health behaviour experiences in survivors of cervical cancer three to eight years post-treatment. Data were analysed using a phenomenologically inspired method.

Methods: The study had an explorative and descriptive design and used semi-structured in-depth interviews. Five ($n = 5$) women (31–70 years old) were interviewed. Themes included (1) current health behaviour, (2) negative and positive influence of cancer on feelings of vulnerability, (3) planned health behaviour changes.

Results: The analysis yielded four themes: Increased Health Consciousness, Unique Strategies for Health Behaviour, Praise and Comfort and Vulnerability and Triumph. The women were conscious about the importance of healthy lifestyles and tried to correct previous health risk behaviours. Irrespective of the fact that cancer can be both a mentally and physically disabling illness, the period of cancer diagnosis and treatment can be seen as a resourceful time where individuals can decide to make permanent and health promoting changes in their lives.

Conclusion: The women did not make considerable changes in their health behaviour during the treatment or rehabilitation process. The women felt healthy before their cancer diagnosis and continued to be conscious in regard to health promoting behaviour/life style (physical activity, low fat diet, limited alcohol use, smoking cessation). Symptoms and side-effects influenced the women's choice of life-style and health behaviour – the women found themselves in a quandary between wanting to live healthy in accordance with the public recommendations and coping with late side-effects of diagnosis and the treatment – a balance between vulnerability and triumph.

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ORAL

A randomised controlled trial of a remote monitoring, mobile phone based, advanced symptom management system in patients with colorectal, lung and breast cancer receiving chemotherapy

R. Maguire¹, N. Kearney¹, L. McCann¹, M. Miller¹, L. Taylor¹, J. Norrie², P. Gray³, M. McGee-Lennon³, M. Sage⁴. ¹Cancer Care Research Centre, Nursing and Midwifery, Stirling, United Kingdom; ²University of Aberdeen, Health Services Research Unit, Aberdeen, United Kingdom; ³University of Glasgow, Department of Computing Science, Glasgow, United Kingdom; ⁴Kelvin Connect, Hillington Innovation Centre, Glasgow, United Kingdom

Background: The majority of patients with cancer are likely to receive chemotherapy at some stage of their illness. The toxic effects of chemotherapy can be serious/life threatening if not detected early (Kudraker et al, 2006). Furthermore, with the shift of care to the community, patients have to manage side effects without direct supervision from clinicians. The effective monitoring of symptoms in this group is therefore vital. The use of information technology may be used to remotely monitor symptoms in the community setting. The results of a UK wide RCT which evaluated the impact of remote monitoring, mobile phone based advanced symptom management system (ASyMS©) on chemotherapy related toxicity in patients with colorectal, breast and lung cancer will be reported in this paper.

Materials and Methods: Randomised controlled trial of 112 patients from six UK sites using a mobile phone based intervention (ASyMS©). Intervention: Patients completed a symptom questionnaire on the mobile phone for 14 days for 4 cycles of chemotherapy. They received self care advice on the mobile phone on the symptoms that they had just reported. Symptom data was sent to the server where an integrated risk model alerted clinicians in acute care via a 24 hour pager system of symptoms that were of concern/life threatening; they then accessed a secure web page with information on the patient's symptoms and intervened, triaging care to relevant services. Outcome measures: The primary endpoint was chemotherapy related toxicity, measured by patients in both groups completing a paper copy of the symptom questionnaire at baseline and prior to cycles 2–5.

Results: Symptoms that are more amenable to self care, such as fatigue, were significantly improved in the ASyMS© group ($P = 0.04$); with symptoms where there is poor clinical assessment, such as hand-foot syndrome, the ASyMS© group reported higher levels and were more bothered by the symptom ($P = 0.03$). For acute symptoms such as vomiting, there was limited affect.

Conclusions: The monitoring of symptoms using the ASyMS© system is feasible and resulted in significant improvements in patients' symptom experiences. It has the potential to promote a preventative model of care, facilitating early identification of symptoms and initiation of timely interventions.

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ORAL

Multiple cancer symptom patient subgroups: impact on quality of life and performance status

K.A.S.L. Ferreira¹, M. Kimura², M.J. Teixeira³, J.C.M. da Nóbrega⁴, S.R. Graziani⁵. ¹School of Nursing and Hospital das Clínicas – University of São Paulo, Medical-Surgery Nursing and Multidisciplinary Pain Center, São Paulo, Brazil; ²School of Nursing – University of São Paulo, Medical-Surgery Nursing, São Paulo, Brazil; ³School of Medicine-Multidisciplinary Pain Center, University of São Paulo, Neurosurgery, São Paulo, Brazil; ⁴School of Medicine, Multidisciplinary Pain Center, University of São Paulo, Neurosurgery, São Paulo, Brazil; ⁵Hospital das Clínicas, School of Medicine, University of São Paulo, Gynecology, São Paulo, Brazil

Background: Cancer patients present different symptoms simultaneously. The increase in the severity in some of these symptoms has been associated with reduction in general health-related quality of life (HRQOL) and decline in performance status (PS). Unlike previous researches, this study examines not only global HRQOL, but also specific HRQOL domains. The aims of this cross-sectional study were to identify clinically distinguishable groups of patients based on their symptoms severity and to examine their relation to poor HRQOL and PS.

Methods: Data was from a sample of 115 cancer outpatients, who were not receiving active cancer treatment and were recruited in a university hospital in São Paulo, Brazil. The EORTC-QLQ-C30 was used to assess HRQOL and symptoms, Beck Depression Inventory to measure depression and Brief Pain Inventory to evaluate pain severity. TwoStep cluster analysis was used to identify patient groups. After patients were categorized into groups based on symptom severity, their risks for poor HRQOL and PS were estimated with logistic regression models. The symptoms considered in the analyses were pain, depression, fatigue, insomnia, constipation, lack of appetite, dyspnea, nausea, vomiting, and diarrhea.