

change for both improvement and deterioration of the self-assessed health status (effect sizes were 0.57 and 1.04, respectively).

Conclusions: The PQ has demonstrated good reliability, validity and sensitivity to change for assessing patient-perceptions of CRF in the study sample. Future research will address how the PQ performs with specific cancer populations.

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POSTER

Palliative care service implementation in an oncological hospital: the experience of Hospital do Câncer A.C. Camargo, São Paulo-SP, Brazil

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Background: Palliative care is an important part of patient cancer care, and it is very important to know the service characteristics in order to implement good-quality supportive care in cancer centers. In order to present the experience of the most important cancer hospital in Latin America, we present the results of the work done in the pilot and initial phases of implementation of the service in Hospital do Câncer A. C. Camargo, São Paulo, Brazil.

Methods: We reviewed the available charts of 119 patients cared for palliative cancer care in the service, from April, 2004 to June, 2006. The case series was a convenient one, which had medical charts and records available for review. Clinical aspects, treatment and survival were the variables of interest. The palliative care assistance was offered, in a planned manner, by: physicians, nurses, physical therapists, psychologists, social assistants, nutritionists, and other professionals, whenever necessary.

Palliative treatments in Hospital do Câncer, São Paulo-Brazil: 2004–2006

Treatment	%
Analgesia	84%
Metamizol	57%
Paracetamol	6.7%
NEAI	9.2%
Codeine	34%
Tramadol	16%
Morphine	53%
Metadone	14%
Fentanil	9%
Tricyclics	20%
Chlorpromazine	18%
Corticosteroids	53%
Laxatives	48%
Anxiolytics	44%
Anti-emetics	42%
Oxygen	35%
Antibiotics	27%
Chemotherapy	15%

Results: Most patients were female (72%); mean and standard deviation (s.d.) for age was 59.5±14.3 years (range: 23–92). Mean palliative performance scale and s.d. (PPS) was 54±16.9% (range: 10–80%). Most patients had local advanced or metastatic cancer for a mean of 52.5±12.1 months (range: 0–10 years). Before starting to be seen by the palliative team, patients were hospitalized for a mean of 8.4 days; after being included in a palliative care program, they had a mean of hospital stay of 5.5 days (paired samples test $p=0.049$).

The principal symptoms related to palliative care referral were: (1) pain: 42%; (2) dyspnea: 21%; (3) asthenia: 12%; (4) cough: 5%; (5) emesis: 4%. Anxiety or depression were present in 30 and 35% of the patients. With combined symptoms, patients had: (1) pain: 76.5%; (2) dyspnea: 43.9%; (3) asthenia: 43.9%; (4) cough: 39%; (5) constipations: 33%; (6) sleep disorder: 33%; (7) anorexia: 29.4%; (8) edema: 22%; (9) emesis: 19%; (10) nausea: 18.5%; (11) agitation: 11%; (12) cachexia: 9%.

Mean and Mean survival was of 1.9 months (range: 0–23.3; interquartile range: 5–5.3). Treatments are shown in a table below. Palliative terminal

sedation was necessary in 48% of the patients, to relieve them from refractory and unrelenting symptoms.

Conclusion: Palliative cancer care is a compassionate way to care for patients with symptomatic advanced cancer; it can offer good discomfort control, improve quality of life, still avoiding excessive costs, for example, reducing length of hospital stay. It was successfully implemented in Hospital do Câncer A. C. Camargo, a center for assistance, teaching and research in cancer, which will certainly improve palliative care in Brazil and Latin America.

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POSTER

Smoking and feelings of guilt in lung cancer patients: a psychological study

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Many articles describe the personal experiences of lung cancer patients (pts). Scientific data confirms the correlation between smoking and cancer. In our department we compared the experiences of smokers (S) with non-smokers (NS) with lung cancer, their possible feelings of guilt and the strategies they use to face up to their illness. From November 2006 to April 2007, 28 pts in chemotherapy or in follow up were asked to undergo a specific interview divided into four areas: awareness of disease, life style, feelings of guilt and coping strategy. 17 pts were in the S group (15 males, 2 females), mean age 67 years (range 55–80); 11 pts had completed only primary school. In the NS group there were 11 pts (6 males, 5 females), mean age 72 years (range 60–80); 5 pts had completed only primary school.

70% S and 82% NS were fully conscious of their disease. All S compared with 54% NS had other serious health problems prior to diagnosis of cancer. There was a presence of familiarity for cancer in 18% NS and 35% S.

71% S know that smoking causes lung cancer. There is a predominant fatalistic coping style in the S group (71%) while the NS showed a prevalent reactive approach (93%).

No sense of guilt was noted in the group of S regarding the cause of their illness. This could be due to their limited capacity of reasoning, as a result of their low level of education, or their fatalistic coping style.

Another important fact to note is that as >80% pts in both groups were fully aware of their disease it can be assumed that no defence mechanism was in action.

Epidemiology

Poster presentations (Thu, 27 Sep, 08:00–11:00)

Epidemiology, primary and secondary prevention, public health

1200

POSTER

Cause-specific death in women diagnosed with cancer during pregnancy or lactation

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Background: Cancer diagnosed during pregnancy or lactation may be associated with increased risk of cause-specific death.

Materials and Methods: In this population-based cohort study with data from the Cancer Registry and the Medical Birth Registry of Norway, 45 511 women, aged 16–49 years, diagnosed with their first malignancy from 1967–2004, were allocated to one of 4 groups:

1. No pregnancies after cancer (reference group)
2. Cancer diagnosed during pregnancy
3. Cancer diagnosed during lactation; until 6 months post-partum
4. Pregnant after cancer

A Cox proportional-hazards model with time-dependent covariates assessed cause-specific survival for all cancer types combined and for two frequent cancer types in young women, breast cancer and malignant melanoma. Each group was followed from the date of diagnosis to date of death, emigration, age 60 years or Dec 31, 2004. The multivariate analyses were adjusted for age, extent of disease and diagnostic periods.

Results: For all cancer types (All) combined, the risk of cause-specific death was significantly decreased for group 4 ($p < 0.01$), with no difference between the other groups, see table. Breast cancer (BC) patients diagnosed during lactation displayed a significantly increased risk of dying from their cancer, $p = 0.003$, while women with malignant melanoma (MM) did not have a similar pattern. With the limitations of variable observation times, the risk of cause-specific death decreased during the three diagnostic periods (1967–1984, 1985–1994 and 1995–2004).

Patients			Cause-specific death	
	Groups	Number	Deaths	HR (95% CI)
All	1	42 337	13 780	1 (ref)
	2	547	139	0.9 (0.8–1.1)
	3	571	146	1.0 (0.8–1.2)
	4	2 056	143	0.5 (0.4–0.6)
MM	1	4 091	587	1 (ref)
	2	168	26	1.3 (0.9–2.0)
	3	132	15	1.0 (0.6–1.7)
	4	685	36	0.7 (0.5–1.1)
BC	1	14 005	4 224	1 (ref)
	2	65	28	1.2 (0.8–1.8)
	3	51	32	1.8 (1.3–2.7)
	4	130	30	0.7 (0.5–1.1)

Conclusion: The diagnosis of most cancer types during pregnancy or lactation does not increase the risk of cause-specific death, except for breast cancer diagnosed during lactation. Cancer survivors who consider post-cancer pregnancies can be informed of the generally good outcome.

1201

POSTER

Wine, liquor, beer, and risk of breast cancer

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Background: Drinking of alcoholic beverages has consistently been linked in population studies to increased risk of female breast cancer (BrCa), but data are relatively sparse about an independent role of choice of beverage type.

Materials and Methods: We did a cohort study of 70,033 women (59% white, 26% African-American, 10% Asian-American) who supplied information about demographics and habits at health examinations in 1978–85. Through 2004 BrCa was subsequently diagnosed in 2,829 women; the role of specific beverage types was studied among women taking more than one drink per month per month ($n = 37,879$ with 1,509 BrCa). We used Cox proportional hazards models adjusted for age, ethnicity, body mass index, education, and smoking, both with and without control for total alcohol. In one type of analysis women whose habits indicated a preponderant beverage choice were compared to women with no clear preference with these numbers: 10,570 wine (W), 3,783 liquor (L), 2,702 beer (B), and 20,824 no preference (N). In another type of analysis we examined the independent association of frequency (per day per week) of drinking each beverage type (W, L, B, and type of wine). Finally, we looked at the role of total alcohol (<1 drink/day referent) within beverage preference strata.

Results: Controlled for total alcohol, the RR's for comparison of preference groups to non-preferers (N) were: W = 1.06 (0.94–1.20), L = 1.02 (0.87–1.21), and B = 1.02 (0.81–1.29). Also controlled for total alcohol, the RR's for frequency (per day per week) of the major types were: W = 1.02 (0.99–1.04), L = 1.01 (0.98–1.04), B = 1.01 (0.97–1.06). With wine type subsetted into red, white, etc., no disparities in BrCa risk were seen; e.g., for both red W and white W, RR per day per week = 1.01. For total alcohol (vs <1 drink per day) the RR of BrCa was 1.1 for women reporting 1–2 drinks/day and 1.3 for women reporting 3+ drinks/day (p for trend <0.001), with similar trends for total alcohol within the W, L, B, and N strata. All results were similar in subgroups stratified by age or ethnicity.

Conclusion: These data show the relation of alcohol intake to increased BrCa risk is independent of beverage choice, indicating that ethyl alcohol is the likely culprit.

1202

POSTER

Prognosis of uterine corpus cancer after tamoxifen treatment for breast cancer

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Background: Tamoxifen increases the risk of uterine corpus cancer. Since only few, mostly small, studies have examined prognosis of uterine corpus cancer following tamoxifen, we conducted a large retrospective cohort study.

Materials and Methods: We examined histopathologic and immuno-histochemical characteristics of 313 patients with uterine corpus cancer following breast cancer, according to tamoxifen use. Uterine corpus cancer-specific survival in relation to tamoxifen use was examined in the same patients combined with 273 patients from a previous study with updated follow-up. Histologic review of all cancers was performed.

Results: Long-term tamoxifen users showed a higher proportion of non-endometrioid tumors than non-users (32.7% vs. 17.4%, $p = 0.004$), especially serous adenocarcinomas and carcinosarcomas. An increased proportion of FIGO stage III and IV tumors was also observed (20.0% vs. 11.3%, $p = 0.049$). Within FIGO stage I, both short-term and long-term tamoxifen users showed a higher proportion of tumors limited to the endometrium than non-users (36% vs. 23%, $p = 0.049$ and 0.004 respectively). Uterine corpus cancers in long-term tamoxifen users were more often estrogen receptor alpha-negative (37.9% vs. 19.4%, $p = 0.002$), progesterone receptor A-negative (45.3% vs. 32.6%, $p = 0.056$), progesterone receptor B-negative (47.1% vs. 13.6%, $p = 0.030$) and P53-positive (26.7% vs. 13.6%, $p = 0.015$) than uterine corpus cancers in non-users. In the pooled dataset ($n = 545$), 3-year uterine corpus cancer-specific survival was worse for long-term tamoxifen users than for non-users (82% for ≥ 2 years tamoxifen vs. 93% for non-users, $p = 0.0001$). The survival difference remained after adjustment for histologic and immunohistochemical characteristics in a Cox model (HR for ≥ 2 years tamoxifen = 2.4; 95% CI = 1.2–4.6).

Conclusions: Tamoxifen-associated tumors have less favorable histologic features and a worse survival, even though part of the tumors are diagnosed at a relatively early stage. Further investigation is needed to identify other tumor characteristics responsible for the relatively poor survival. Our results can be applied when weighing risks and benefits of tamoxifen versus other hormonal agents used in the prevention and treatment of breast cancer.

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POSTER

Trends in cancer incidence in 13 to 24 year olds in England, 1979–2003

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Background: Cancer in teenagers and young adults is a major health problem and is the most common natural cause of death in those aged 15 to 24 years in England. The distribution of cancer types in 13 to 24 year olds is different from both children and older adults, so trends over time might be expected to follow different patterns as well.

Materials and Methods: Incidence data on all cases of registered neoplasms in England from 1979 to 2003 inclusive were supplied by the Office for National Statistics. Cancer cases were grouped according to a morphology-based diagnostic scheme developed specifically for this age group. All malignant tumours except non-melanoma skin cancer were included as were non-malignant intracranial and intraspinal neoplasms. Incidence rates were calculated for five successive five year time periods and standardised to the European standard population. The significance of variability over time assessed using Poisson regression.