Results: It was analyzed 12.606 cases; 53.42% cervical cancer and 46.58% uterus not otherwise specified (NOS) cancer. A reduction in the mortality due to cervical cancer and uterus not otherwise specified (NOS) for the age and period analyzed was found; at around 1.93% yearly. This reduction was mainly related with the cases of cancer of uterus not otherwise specified (NOS). In the age-period-cohort analysis the reduction was less than expected for the cohorts from 1901–1908 and 1921–1928. There was a reduction bigger than expected for the cohorts from 1913–1920, 1929–1932, 1937–1946, 1949–1956, 1963–1970 and 1969–1976. It was also found a bigger reduction than expected for the period from 2000–2001.
Conclusions: The reduction in the mortality due to cervical cancer and uterus not otherwise specified (NOS) in the state of Minas Gerais was unmistakable in the period studied. The findings show the influence of the birth cohorts over the decrease in mortality. Although the screening coverage is still considered unsatisfactory in this region, it was also pointed out the potential influence of the improvement in the access to diagnostic methods and adequate treatment in the last years, as well the possible effect of the improvement of the population education level observed along this period.

Public health, health economics, policy

Poster presentations (Thu, 24 Sep, 09:00−12:00) Public health, health economics, policy

3600 POSTER

Economic impact of breast cancer management: a revolutionary change in ten years

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Background: Modern breast cancer management has led to significant changes in the cost of treating this common malignancy. Given the projected increase in the incidence of breast cancer over the next decade it is important that policy makers have a clear understanding of the level and composition of costs as well as the factors that underlie variations in them, so that provisions can be made for cancer care in the future. We aimed to assess how changing practice patterns of breast cancer management over the last decade have affected the cost of treatment provision.
Materials & Methods: A detailed profile of care pathways for all new patients diagnosed and treated for breast cancer at UHG in 1995/1996 and the years 2005/2006 was constructed. (N = 613 patients). A bottom-up approach was used to determine costs. Differences over time, and in unit costs over the time period, were explored.
Results: The overall cost of breast cancer management increased 7.7 fold over the ten year period, from a total expenditure of 1,314,741 euro (adjusted for currency change and inflation) to 10,084,304 euro in 2005/2006. The cost of an individual breast cancer patient's care pathway profile rose from 6541 euro to 24656 euro (3.8 fold increase). Whilst the mean cost of breast cancer diagnosis more than halved over the last decade, we observed increases in the cost of all treatment modalities. The greatest increases in cost were accrued in the use of adjuvant chemotherapy (14 fold increase) and other adjunct therapies including Trastuzumab and bisphosphonates (20 fold increase).
Conclusion: The shift to minimally invasive diagnostic and treatment modalities, albeit to the patients benefit, has had substantial cost implications. The extent of such cost increases must be made known, to policy makers and service providers, in order to predict the impact this could have for cancer service provision in the future.

3601 POSTER

Breast cancer research from Low- and Middle-Income Countries (LMCs) published in high impact medical journals

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Background: In 2010, the projected number of new breast cancer cases worldwide will be 1.5 million/year. The majority will be in LMCs where 75% of new cases are diagnosed at an advanced stage. Sustainable low-cost interventions are required to help manage this burden. The aim of this review was to analyse the relevance of breast cancer research involving LMC investigators published in high impact medical journals to the management of breast cancer in LMCs.
Methods: We identified all breast cancer-related articles published in 2007 in 14 high-impact medical journals: 6 medical oncology, 5 general medicine and 3 breast cancer journals, by manually reviewing tables of contents. Articles with at least one author from a low- or middle-income country were then reviewed in detail regarding study design, type of question addressed and its relevance to management of breast cancer in LMCs. For clinically relevant articles, the intervention under study was classified into 1 of 4 levels of resources required for implementation: basic, limited, enhanced or maximal as defined by the International Breast Health Initiative Guidelines (Cancer; Oct 2008 Supplement).
Results: Of 804 articles focusing on breast cancer that were published in one of the selected journals in 2007, 84 (10%) included authorship from LMCs usually from middle rather than low-income countries, most commonly China (23/84, 27%) and Poland (13/84, 15%). In 51 (60%) articles either the primary or senior author was from a LMC. Research funding was not specified in 27 (32%) articles and from non-profit sources in 46 (54%). Of the 84 articles 38 were laboratory-based, 17 clinical trials, 8 observational studies, 2 health economic evaluations and 19 other type (such as reviews and quality of life analyses). Sixty of the 84 articles were clinically relevant. Among this subgroup, 40 (66%) articles evaluated interventions requiring at least "enhanced" level of resources and only 36% discussed LMC perspectives.
Conclusion: Only a minority of breast cancer research published in high impact journals involve investigators from select few LMCs. Even among articles that involve such investigators, majority address questions that require at least enhanced level resources likely not routinely available in these settings.

3602 POSTER

Social & geographical factors affecting stage at presentation & access to treatment for colorectal cancer

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Background: Patients from Great Britain and Ireland with cancer tend to have poorer outcomes from cancer than those from socially and economically similar countries. As part of a large study "Rural aspects of cancer survival" we have studied some factors affecting treatment for colonic (C) and rectal (R) carcinomas.
Methods and Results: Records of 39,619 patients with information on treatment received were obtained from the Northern & Yorkshire Cancer Registry and Information Service. Patients were divided into quartiles according to travel time to the nearest hospital and their socioeconomic deprivation. Age and sex affected the likelihood of intervention; illustrative odds ratios for this occurring are shown in the Table. TQ1 is the nearest and TQ4 is the most distant travel quartile and DQ4 is the most deprived. The reference group is TQ1/DQ1.

Site & variable	N for this analysis	TQ4/DQ1	TQ1/DQ4	TQ4/DQ4
C: Stage 4 vs Stage 1−3	11,163	0.969	1.157	1.257
R: Stage 4 vs Stage 1−3	7,058	1.197	1.553*	1.613*
C: Stage 3 vs Stage1−2	7,812	1.361	0.716	1.781*
R: Stage3 vs Stage1−2	5,201	0.963	1.127	1.036
C: Any treatment†	28,228	0.810	0.544**	0.322**
R: Any treatment†	11,391	1.050	0.590*	0.810
C: Chemotherapy for Stage 4	3,351	1.065	0.462**	0.535
R: Chemotherapy for Stage 4	1,857	0.969	0.707	0.766

All adjusted for age and sex: † adjusted for stage: *P < 0.05 **P < 0.01.

Conclusions: There is a tendency for patients from the most deprived areas to be denied access to treatment for colorectal cancer; this is stronger for colonic cancer, and also to present at later stages. There is no clear trend for distance of the nearest hospital from their residence to affect these.