

Conclusion: Smoking related lung cancer is very high in this part of the country. Health education for antismoking and awareness generation towards tobacco hazards should be strongly recommended.

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POSTER

Survival analysis of Cancer patients in North coastal Andhra Pradesh, India

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Back Ground: Retrospective analysis of results of treatment given to cancer patients hailing from north coastal Andhra Pradesh, India, to find out their survival.

Material and methods: Extraction of the data from 1476 case sheets of cancer patients treated at Lions Cancer Hospital, Visakhapatnam, India, during two calendar years of 1998 and 1999.

Results: 1476 patients were treated during two years, 1998 and 1999. Female patients constituted 58.40% (n = 862) and males 41.59% (n = 614). Cervix, Breast cancer, Oral cancers and Cancers of Gut accounted for 61.38% (n=906) of all the cancers in North coastal Andhra Pradesh. Cervical cancer is the most common cancer occurring in north coastal Andhra Pradesh (27.71%, n = 409). Oral cancers (18.89%, n = 116) are the most common cancer among men. Cancer occurs predominantly in older people with 66.69% of all cancers occurs in people aged 45yrs and above and only 2.43% of all cancers occur in Children less than 14 years.

Table: Survival analysis of Top 10 Cancers in North coastal Andhra Pradesh, India

Rank	Cancer	No. of patients surviving for					No. of patients lost to follow up	Total	%
		1 yr	2 yrs	3 yrs	4 yrs	5 yrs			
1	Cervix	293	174	120	82	52	116	409	27.71%
2	Oral	62	32	21	14	8	142	204	13.82%
3	GIT	70	24	11	7	4	83	153	10.36%
4	Breast	84	60	47	36	25	56	140	9.48%
5	Larynx	46	18	13	6	4	57	103	6.97%
6	Blood	33	26	20	15	13	46	79	5.35%
7	CNS	23	14	8	5	2	48	71	4.81%
8	Lung	34	4	2	1	1	32	66	4.47%
9	Male Uro Genital	19	10	5	5	3	31	50	3.38%
10	Secondaries with unknown primary	7	3	1	1	1	30	37	2.50%
11	Others	58	30	18	12	6	106	164	11.11%
	Total	729	395	266	184	119	747	1476	
	%	49.39%	26.76%	18.02%	12.46%	8.06%	50.6%		

Five-year survival of all patients treated is 8.06% (n = 119). Five-year survival for women is 10.55% (n = 91) and 4.23% (n = 26). Five-year survival rate of Cancer Cervix and Breast is 12.71% and 17.85% respectively. Five-year survival is better for Patients who diagnosed below 45 years than after 45 years (P = 0.0405 and 0.0342 for men and women respectively).

Conclusion: Five-year survival rate of Cancer Cervix and Breast is 12.71% and 17.85% respectively. Five-year survival for men treated for cancer is 4.23%. Five Year survival is better in women than men. Half of the patients are lost to follow up. Low survival rates require further study to pin point the causes for low survival and to institute new treatment protocols to improve survival statistics.

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POSTER

Incidence of childhood leukemia Tianjin, China from 1981 to 2000

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Purpose: Data of the Tianjin Cancer Register was analyzed for incidence of leukemia in children under 20 years of age from 1981 to 2000 in Tianjin, China.

Methods: All cancer cases with insufficient information were traced to his/her family, clinic and employer. Tianjin Cancer Registry Center periodically conducts an active re-checking program to review all patient records on cancers that were not registered in this period. Tumor diagnosed in the study was coded according to the ICD-10. Incidence rates were calculated by age, sex and time of incidence of cases.

Results: In this study, 473 leukemia cases diagnosed between 1981 and 2000, (269 boys and 204 girls), were included in this study. The average incidence rate of childhood leukemia was 3.90/100,000 (4.32/100,000 for boys and 3.45/100,000 for girls) during the twenty years, incidence rates of childhood leukemia had not changed significantly since 1981. Moreover, the average age of leukemia in children under 15 years old were 6.59 years (6.22 years for male and 7.06 years for female). Childhood leukemia

forms one of the two peaks in leukemia incidence in the whole population, whereas the other acme is formed by the age group 65–80. Acute lymphoid leukemia, acute myeloid leukemia and chronic myeloid leukemia were the most common childhood leukemia in Tianjin, comprising 69.3%, 20.9% and 8.0%, respectively. Since study data did not allow us to conduct a survival analysis, mortality and morbidity ratio was then calculated. The ratio was around 0.51 among during the twenty years, without any clear trend of changes.

Conclusion: Combined with characteristics of individual forms of childhood cancer, further epidemic research is needed to identify the risk factors associated childhood cancers.

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POSTER

Epidemiology of childhood cancer in Bihor County during the years 1995–2004

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Objective: the objective of this study was to compare the incidence rates and survival estimates of childhood cancer during the years 1995–1999 and 2000–2004 in order to assess the effectiveness of cancer control activities in this part of the country.

Materials and methods: incidence and survival analysis of children diagnosed with cancer were determined using routine data from hospital-based cancer and population-based cancer registries. Children aged 0–14 years old from Bihor county diagnosed from beginning of January 1995 to the end of December 2004 were included in the study. The basic statistic included: the absolute number of cases, the relative or percentual incidence, the age specific rates, cumulative and age-standardized rates. The direct method of standardization and the standard European population were used. Five years interval data from 1995 to 2004 were analyzed and displayed. Estimation of survival by two-years and five-years interval were presented then.

Results: 150 children with cancer were diagnosed, the over all age standardized rate of cancer in children diagnosed between 1995–1999 and 2000–2004 being 10/100,000 and 14/100,000 respectively. The annual age standardized rates recorded in the second period of time considered were higher for almost all registered cancers: acute lymphoblastic leukemia (3.9/100,000 versus 3.5/100,000), acute non-lymphoblastic leukemia (0.7/100,000 versus 0.5/100,000), brain tumors (2.6/100,000 versus 1.1/100,000), neuroblastoma (1.2/100,000 versus 0.9/100,000), bone tumors (0.6/100,000 versus 0.3/100,000), soft tissue tumors (0.9/100,000 versus 0.3/100,000), germ cell tumors (0.4/100,000 versus 0), but not for non-Hodgkin lymphoma (0.8/100,000 versus 1.3/100,000) and Hodgkin lymphoma (0.6/100,000 versus 0.6/100,000). During the years 1995–1999 the survival analysis showed that the cumulative survival of two years follow-up was 0.55 and the cumulative survival of five year follow-up was 0.51. Patients diagnosed in 2000, 2001 and 2002 had a cumulative survival of 0.65 at the end of the two-year follow up period.

Conclusions: improvement of epidemiologic research data quantification along with the availability of better health services for diagnosis and treatment may be reflected even on small number of patients registered.

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POSTER

In vitro activity and antimicrobial resistance patterns of bacterial pathogens from hospitalized cancer patients in a single cancer institution

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Objective: The widespread emergence of resistance to antimicrobial agents among bacterial pathogens is well known and has an impact on our ability to treat patients effectively. Despite the availability of newer antibiotics, emerging antimicrobial resistance has become an increasing problem. Blood stream infections (bacteremia) among cancer patients that develop during the course of disease are potentially life threatening because of suppression in their immune systems. The changing spectrum in the incidence and epidemiology of microbial pathogens has resulted in an increase in resistance to many antibiotic compounds emphasizing the need to monitor the prevalence of resistance in these strains.

Methods: Susceptibility and resistance pattern of 180 clinically significant bacterial isolates from positive blood cultures collected during 2002–2004 was studied. The isolated strains were tested against a wide range of antibiotics belonging to cephalosporins, aminoglycosides, fluoroquinolones derivative groups. The antibacterial susceptibility was determined by the

minimal inhibitory concentration (MIC) against these drugs by broth dilution method according to National committee for clinical laboratory standards (NCCLS) recommendations.

Results: Among gram negative bacterial isolates, the overall respective MICs at which 50% and 90% of isolates inhibited (MIC50s and MIC90s) were as follows ciprofloxacin, 4 and 8 µg/mL; ofloxacin, 16 and 64 µg/mL; pefloxacin, 16 and 128 µg/mL; ceftazidime, 16 and 64 µg/mL; Amikacin, 32 and 128 µg/mL; Tobramycin, 4 and 64 µg/mL. The percentage of gram negative bacteria susceptible to ciprofloxacin, ofloxacin and pefloxacin according to NCCLS susceptibility breakpoint was 20, 2 and 3% respectively. Similarly the resistance of gram negative bacterial isolates against ciprofloxacin, pefloxacin and ofloxacin was 80, 77 and 91% respectively. Among cephalosporins, more than 90% of isolates were resistant against ceftazidime and cefuroxime whereas resistance to amikacin and tobramycin was 43% and 50% respectively. In gram positive bacteria 100% resistance were observed in case of pefloxacin, ofloxacin and norfloxacin against methicillin resistant and sensitive *S. aureus* strains whereas only 15% strains were susceptible in methicillin susceptible and 12% in methicillin resistant *S. aureus* strains against ciprofloxacin.

Conclusion: High resistance observed in this study against clinical isolates of cancer patients against potent antimicrobial agents warrants the need of evaluation and monitoring of susceptibility patterns of predominant pathogens against different antimicrobial agents in respective cancer centers. New compounds for effective therapy of infection control against antimicrobial resistant bacterial isolates are required for better patient management and treatment rather than to rely on standardized regimens.

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POSTER

European benchmarking of oncologic hospital care: a learning process to improve quality of care in cancer centres, an OECl project

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Background: Efficiency is a very important element in the provision of healthcare. It has been identified by the Institute of Medicine as one of the six relevant aspects of quality of care in its 2001 report. In view of the specific character of healthcare workers, the nature of this type of service provision is such that increased productivity is very hard to achieve. The Organisation of European Cancer Institutes has embarked upon an accreditation project in which both quantitative and qualitative analysis of organisational features is taken up. In an attempt to structure the data into a form that feedback can be given on the aspect of efficiency, especially on the issue of financial management and organisational efficiency, the OECl project included a pilot benchmarking study.

Materials and methods: The research project was performed with the University of Twente, Industrial engineering and management Unit. It focused on the aspects of financial management and the functioning of the organisation. The experimental setting was 3 volunteer cancer centres: the NKI/Antoni van Leeuwenhoek hospital, Amsterdam, the Institut Gustave Roussy, Paris, the Karolinska institute, Stockholm. Exhaustive literature study provided a theoretical basis followed by interview with stakeholders for the choice of indicators. A Pilot study of the benchmarking tool and indicators was then performed in the 3 institutes, based on auditing of financial and organisational data.

Results: A model for Financial management benchmarking and the model of the European foundation for quality management (EFQM) were selected and merged to create a new original model adapted to the structure of cancer centres. External and internal environments of the centres were studied and described. Indicators taking into account aspects of integration of research (IGR), equipment, research and care or derived from the Compath study were selected and applied to the 3 centres.

Discussion: This study allowed the design of a new original model, better integrating organisational and financial management (financial data linked to production outcomes and ways of organising).

Strategy and governance, financial and organisational management and treatment modalities can be described and compared in cancer centres using these indicators. Large variations exist among cancer centres making in some areas (like diagnostics) comparisons. Radiotherapy and research are feasible and interesting areas of benchmarking. One aspect of financial management should be selected for further benchmarking. Benchmarking of cancer centres is feasible, should be further developed and repeated.

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POSTER

Role of biological- and various social- and lifestyle-risk factors in the causation of head and neck cancer in a Hungarian study population

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Hungarians have the lowest life expectancy and the highest rate of cancer mortality in Europe. These phenomena can principally be related to the extensive environmental pollution during the past decades, and the self-destructive behaviour of the population. One of the most alarming trends can be observed in the mortality rate of head and neck squamous cell carcinomas mostly due to long-term tobacco- and alcohol use. Alcohol abuse that equals to 11 litres of absolute alcohol/capita/year on average is one of the highest in Europe. The prevalence of smoking is also high, affecting 46-49% of men in a national representative survey. The increase of death rate from head and neck cancer was doubled by the end of year 2004 compared with the data of 1994 as stated by the WHO. The dramatic increase in the mortality of head and neck cancers in Hungary points to the importance of primary and secondary cancer prevention. Therefore the search for appropriate biomarkers as tools in prevention programmes is essential. Biological and other risk factors were studied in HNSCPs, in a case-control study.

Spontaneous rate of chromosomal aberrations (CAs) as possible predictors of cancer risk were investigated in nearly 400 HNCs, and age- and smoking-matched controls. CAs in HNCs differed significantly from healthy non-drinking smokers (2.7% vs 2.1%), and differed more from non-smoking and non-drinking controls (1.8%). Sporadic CAs were clearly associated with the tobacco-smoking and the health status. CA frequency was not influenced by sex, but was slightly affected by the age. The patients' social status, mental health, occupational, behavioural and other risk factors were also compared with the control population, and the most susceptible subgroups were determined.

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POSTER

Colorectal cancer in Eastern Libya

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Colorectal cancer (CRC) continues to be a major health problem worldwide, it is the second common tumor in Libya in both sex, the adjusted standardized rate is 11.9 and 9.6 per 100,000 men and women respectively (Benghazi Cancer Registry 2003). In spite the lower prevalence of this disease in our area, there are relevant differences in its pattern in comparing with the western countries.

Method: The file of patients with CRC referred to Oncology clinic located in Aljamahiria Hospital Benghazi from 1/1/2000 to 31/12/2004 were revised. Data were analyzed for age, sex, place of residence, type of surgery, stage of the disease at the time of diagnosis and histological types.

Results: CRC accounts for 14% of all cancer patients attending oncology clinic at Aljamahiria hospital (214 cases out of 1540). The median age was 54 years and 38% of patients were below fifty. Stage distribution were, stage I 6%, stage II 19%, stage III 20% and stage IV 24%. pT 3.4 Nx 27%.

Conclusion: CRC is the second common cancer among Libyans. It differs from the disease pattern in European countries by earlier age of onset and more advanced stage at presentation. screening colonoscopy should be considered only for people with high risk. Further studies are needed to identify possible etiological factors responsible of this pattern.

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POSTER

Sample size determination in chemotherapeutics batches quality control

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Background: Among the 30,000 chemotherapeutic batches produced in 2004 in the Department of Clinical Pharmacy (DCP), 75% were qualitatively and quantitatively assessed via an analytical platform. The rate of non-conformity (i.e. concentration outside the specification limits of 10%) has decreased from 5.4% to 1.9% from year 2000 to 2004. We propose a cost- and time-saving acceptance sampling plan to determine appropriate sample sizes to analyse with the same quality level.

Material and methods: We set up and validated a cost- and time-saving acceptance sampling plan to determine appropriate sample sizes to assess a quality level representative of all batches. Risk factors were