

and adult oncology wards during the period of data collection. Forty percent of the collected prescriptions fulfilled the criteria. We considered rounding to an amount within 15% for targeted therapy and 10% for cytotoxic drugs. Chemotherapy dosing was calculated according to body surface area. The potential cost savings from dose rounding per year was US\$ 192,800. Data was extrapolated from the determined monthly cost savings. The highest cost saving was for breast cancer drugs US\$ 80,819 (42%), followed by colorectal cancer US\$ 47,965 (25%), while in non-Hodgkin's lymphoma cost savings was US\$ 45,107 (23%) and for other types of cancer that include non small cell lung cancer, prostate and ovarian cancer, in addition to head and neck cost savings was US\$ 18,867 (10%).

Conclusion: Dose rounding of chemotherapy to an amount within 10% and up to 15% for targeted therapy would lead to significant cost savings. Although controversial, routine minor dose reductions might be acceptable to oncologists. Acceptance and opinion of oncologists in Saudi Arabia need to be surveyed.

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POSTER

The Development and Implementation of an Institution-based Communication Skills Training Program for Oncologists

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Background: Communication skills training (CST) has been shown to improve clinical communication. However, advanced CST programs in oncology have lacked institutional integration, and have not attended to institutional norms and cultures, the "hidden curriculum", that may counteract explicit communication skills training. The goals of this project were to develop an evidenced-based CST curriculum; address the "hidden curriculum" through faculty development; implement the program for the institution's fellows, residents and faculty; assess the effectiveness of the program.

Method: We developed an advanced CST program, made up of nine teaching modules. Training included didactic presentations and experiential small group work. Key faculty were identified to serve as facilitators and role models in the implementation phase. Trainees included residents, fellows, and faculty. Anonymous course evaluations and pre-post self-efficacy were completed at the end of each module. Skills uptake and behavior change were evaluated through coding of pre-post video recordings of actual and simulated patient encounters.

Results: Since 2006, 473 clinicians have participated in this training program. Course satisfaction was rated as *Agree/Strongly agree* in a range of 92%-97% for all modules. Pre-post self-efficacy significantly increased ($p < 0.01$) across modules for both attending physicians and trainees. The use of *Establish the Consultation Framework* and *Checking communication skills* were shown to significantly increase from baseline ($p < 0.01$).

Conclusion: Our initial work in this area demonstrates the implementation of such a program at a major cancer center to be feasible, acceptable, and beneficial.

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POSTER

Evaluation of Quality in Symptoms Management of Patients Receiving Home and Inpatient Palliative Care

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Background: Development of Palliative Care (PC) as a system was started in Georgia about ten years ago. Currently several significant successful steps have been taken: Amended legislation, supporting and promoting to PC development has been approved; Georgian-language educational-methodological material in PC are prepared and issued; PC pilot programs were implemented with financial support of Governmental Budget; The Georgian National Association for Palliative Care and the Office of Coordinator of PC National Program were established.

Aim: To support development of adequate symptoms management and quality of care in chronic incurable patients via recovering the deficit in knowledge and information:

- Reveal the barriers of adequate symptoms management caused by deficit of in knowledge and information of health care professionals (HCP), patients and their family members (FM);
- Reveal the barriers of quality palliative care caused by negative opinion of society toward opioids usage;
- Support the improvement of knowledge of HCP and Society in quality palliative care and symptoms management by preparation and delivery of educational-training courses and informational materials.

Methods: Resolution of objectives provided by using of questioning method. Elaboration of questionnaire performed correspondingly of international experience and WHO recommendations; the data-base created and analyzed.

Results: 350 chronic incurable patients, family members and care givers and also HCP were interviewed. Survey showed that in 267 (76.3%) cases were achieved quality pain and symptoms management. In 49 cases (14%) noted not significant improvement and 34 (9.7%) cases were exclude from date analysis.

Conclusion: The problems of quality symptoms management of end-of life patients in Georgia should be caused by lacking of: (1) legislative bases, (2) list and forms of opioids and their availability, (3) knowledge and experience of HCP, (4) Opioid phobia of the society and HCP, (5) problems in shearing bed news and communication; (6) lack of palliative care services in the country, (7) society awareness, (8) problems in decision making and clarification of goals of palliative care.

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POSTER

Integrated Care Pathways for Non Small Cell Lung Cancer (NSCLC) Patients: Avoidable Costs Analysis in a Quality Improvement Project

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Background: Among quality improvement strategies, Integrated Care Pathways (ICPs) have been proposed as effective means to translate guidelines into clinical practice. The quality of the existing care process for NSCLC patients (pts) referring to a University Hospital has been assessed, in order to estimate the potential room for improvement, to make the current care process more appropriate and to reduce the avoidable costs.

Methods: 175 NSCLC pts referring to the Oncology Department of the Udine University Hospital from 1/1/2008 to 31/12/2008 were identified. A multidisciplinary focus group composed by all the professionals involved in the management of NSCLC pts was formed. The focus group identified 11 quality of care indicators and corresponding benchmarks, both from previously published studies and from international professional guidelines. By means of the electronic information system of the hospital, the performance indicators were tested on the study population. In cooperation with the researchers of the Cergas Center, Bocconi University of Milan, the extra costs for inappropriate procedures were estimated by the sums through which the regional health care system funds the hospital.

Results: The gap between current practice and the benchmark objectives has been identified, allowing the quantification of the distance of real pathways from the benchmark standards, also in terms of avoidable costs. Preliminary data analysis evidenced that the most critical area was early disease stage pt management. However, even the follow up phase seems to be more intensive in terms of visits and procedures than the one suggested by the guidelines. The radiodiagnostic procedures and chemotherapy were the most frequent services delivered: 90% of the total cost (302,549€ out of 336,271€) was due to chemotherapy sessions and brain, chest and abdomen CTs. The average estimated costs for each pt were 6,482€ and 1,860€ for in- and out-pt, respectively. Overall, the management of early stages is more expensive than the management of the other stages.

Conclusion: The study shows that the analysis of ICP in NSCLC is feasible and allows the monitoring of the current application of international guidelines in a Public Hospital, not only in terms of better appropriateness, but also reduced avoidable costs. The extension of this methodology could produce interesting results that should be shared and discussed with the hospital managers in order to guide the redesign of ICPs.

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POSTER

Analysis of a Screening Campaign for Cervical and Breast Cancer in Uganda on Behalf of Oncology for Africa, Non-Profit Organization - Italy

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Background: Cervical cancer (CC) and Breast cancer (BC) are the most frequent female malignancies in Uganda (incidence 45.6/100,000,

23.4/100,000 respectively). Patients are often seen in late stages because of lack in screening programs and limited accessible Units, so the 5-years cancer mortality is high (81 and 55% respectively).

Aim of the study: Oncology for Africa is a Italian non-profit organization founded by several specialist working in oncologic field that actually works in agreement with St. Raphael of St. Francis Nsambya Hospital in Kampala, providing opportunities for female cancer prevention and treatment. A mission was held in January 2011 in order to assess the sustainability of a screening campaign, the population compliance and the effectiveness of nurses training.

Methods: The mission was organized in two-steps; in December 2010 informative pamphlets edited in local language announcing the coming screening were distributed to 1000 women living in Kampala and in two rural villages by the help of local AISPO-NGO and nurses. On January 2011a 3-weeks CC and BC screening was performed by 2 gynecologists, 1 pathologist and 5 nurses according to the local methods (VIA TEST for gynecological inspection and breast palpation – BP). Suspected cases were referred for further investigations to Nsambya Hospital. A specific data base was provided and managed in collaboration with the nurses involved in the screening.

Results: 844 women accepted screening (median age 36.8), irrespective of religion (513 in Kampala and 331 in rural areas) with a median accrual of 49 pts/die. We found 9.8% VIA and 3.4% BP abnormal cases, further addressed to PAP test/colposcopy or breast FNAB. The compliance to screening/further therapy was 84/79% respectively. Two pts (stage Ic BC, FIGO IB CC) underwent radical surgery, a FIGO IIIB CC pt has been addressed to concomitant CT+RT and 1 pt with CC did not accept operation. 6 pts with new-diagnosed HSIL (21.4% of total biopsies) were also found. The total mission cost was 12,000 Euros.

Conclusions: The screening campaign is affordable regarding women compliance, sensitization and training of the local paramedical staff. Our findings indicate a higher rate of CC compared to the existing data about cancer in Sub-Saharan countries. These descriptive results would also sensitize to the growing incidence of female cancer in Africa and stimulate collaboration with Sub-Saharan Health Units to ameliorate their efforts in the assessment of a better standard of care and screening organization.

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POSTER

Cost Identification of Nordic-FLIRI, Nordic- FLOX, XELIRI and XELOX in Palliative Colorectal Cancer in Sweden-a Clinical Practice Model Approach

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Introduction: Nordic-FLOX, Nordic-FLIRI, XELIRI, XELOX are four commonly used chemotherapies in the first line treatment of metastatic colorectal cancer in Sweden. The role of health related economic research in the health and pharmaceutical sector is crucial due to the finite health care resources. In the decision-making, consideration is given to economic costs associated with therapies. Cancer treatments are no exception and need to be evaluated. There is an interest in conducting national and clinically adapted evaluations.

Aim: To describe and compare costs associated with four commonly used treatments for metastatic colorectal cancer in clinical routine practice.

Materials and Methods: The retrospective study was carried out using observations and a clinical database of cancer colorectal patients treated with the intravenous regimens Nordic-FLOX (n=163) and Nordic-FLIRI (n=58) or the partly per oral alternatives XELIRI (n=27) and XELOX (n=10) at an oncology clinic in Gothenburg, Sweden. All patients treated between 2003 to 2009 were included. The clinical outcome of the therapies was equal and median treatment time was six months. The treatments are used side by side in the clinical practice. A clinical economic evaluation model was designed. All direct cost associated with the base line treatment, administration of chemotherapy and drug costs were collected and evaluated.

Results: The maximal mean cost for the four treatments was estimated to be 60,000–65,000 SEK per patient for six months, adverse effects excluded. During six months the intravenous treatments include 17 more outpatient visits per patient compared to the per oral alternatives.

Conclusion: The results indicate that the two Nordic regimens are similar in terms of treatment costs and that the per oral alternative could be a cost saving alternative for the clinic. The main difference is the opportunity cost. This makes it possible to treat additional patients with the same labour force resources.

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POSTER

Psycho-Oncological Aspects of Chernobyl Disaster

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Background: 25 years have passed since Chernobyl disaster. Thousands of "Liquidators" of the consequences of the explosion are dead or disabled. Psycho-neurological disorders are the leading in Liquidators. In cancer patients-Liquidators the mental co-morbidity is more than 75%. This research is focused on psychological factors of complex psycho-social and medical help in victims of radiological disaster.

Material and Methods: 300 Liquidators of Chernobyl disaster – patients of Russian Scientific Centre of Radiology – including 20 cancer patients were systematically psychologically tested since 1991 till 2010. Narrative interview and different personality tests were used as well as neuropsychological complex testing.

Results: The higher scores of personality anxiety and not-effective copying strategies positively correlate with the manifestation of the psycho-neurological and cardio-vascular diseases in 5–10 years after catastrophe and with the manifestation of cancer in 10–15 years. There is particularly Liquidators' victim pattern of copying. The brain functions disorders decrease the effective copying strategies.

Conclusions: The participation in the liquidation of the radiological disaster leads to the specific Psycho-Oncology consequences. Liquidators need the adopted complex psychological help.

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POSTER

Gender Differences in the Relationship Between Work and Psychological Distress in Cancer Physicians

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Background: Levels of psychological distress amongst physicians are high and have been attributed to the nature of their job. Few studies have examined gender differences although there are known differences in some vulnerability and protective factors related to psychological distress. The changing demography in medicine, with an increasing proportion of females entering the profession makes this an important issue to investigate.

Material and Methods: A mixed methods programme of research comprising: (1) Secondary analysis of a UK national survey of the mental health, job stress and job satisfaction of consultant physicians (surgical, clinical and medical oncologists, radiologists & gastroenterologists) (n = 1308, 78% response rate); (2) Exploratory interviews with 26 male and 26 female participants in Stage 1 survey; (3) the development of an explanatory framework for poor mental health in consultant physicians based upon relevant literature and findings from stages 1 and 2; (4) A confirmatory interview study involving 12 male and 12 female consultant physicians from male dominated (surgery) or balanced gender (radiology) specialty groups working at one of two UK NHS hospital trusts.

Results: Female physicians were more likely to report psychological distress (GHQ-12 score >3) compared to male physicians (39% vs. 31%, p=0.02). Equal levels of job stress were reported, but female physicians reported lower levels of job satisfaction (particularly for perceived work control and professional esteem) which was associated with their higher prevalence of psychological distress (Stage 1). This lower job satisfaction seems to relate to part-time working and/or domestic/childcare responsibilities, lack of 'social' support (managerial, emotional and practical support) and the perceived negative attitudes of co-workers and the organisation (Stage 2). The explanatory framework for poor mental health in hospital consultants was verified (Stage 4).

Conclusions: Attention should focus on ensuring that physicians are able to balance the high demand of their job with having sufficient control over, and satisfaction from, it. Organisational policies regarding childcare, maternity cover, career breaks and part-time working require review to determine how to best manage the implications of the changing workforce whilst protecting the mental health of physicians.

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POSTER

European Patient Online Information Needs

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Background: Good quality health information can help in disease prevention, promotion of self-care, inform treatment decisions and improve the effectiveness of clinical care [1]. Increasingly people are accessing