did not affect women's treatment preferences. Younger women tended to judge improvements in survival sufficient to make adjuvant endocrine and chemotherapy worthwhile, as compared to older women. The comparisons were statistically significant in the 10% and 20% categories for endocrine therapy and chemotherapy.
Conclusion: Women prefer endocrine therapy to chemotherapy or trastuzumab therapy, given the same projected treatment benefits. Younger women prefer both chemotherapy and endocrine therapy as compared with older woman.

3633 POSTER

European Cancer Guidelines: a Patient Perspective

C. Maddock[1], D. Schrijvers[2], M. Rosselli Del Turco[3], L. Marotti[3].
[1]Tenovus, Research, Cardiff, United Kingdom; [2]European CanCer Organisation, External Relations, Brussels, Belgium; [3]EUSOMA, Education, Firenze, Italy

Background: Patient and consumer involvement in Clinical Practice Guideline Development (CPGD) has been advocated from the early 1990s onwards. The aim of this research is to review their current extent of involvement in CPGD and also the general awareness of Clinical Practice Guidelines (CPG).
Material and Methods: A total of 24 people affected by cancer took part in focus groups or interviews (held Mar-Dec 2010). 2 participants had previously been involved in Guideline Development Groups (GDGs). The mechanism of recruitment involved convenience and purposive techniques. Thematic analysis of transcripts was carried out. Data from the European Cancer Guidelines survey study has also been included.
Results: In the survey of 30 European Oncology organisations [1], patients are often (38%) not involved in the development of guidelines.
Patient/representatives who had been involved in CPGD in our research felt that their input was valuable to themselves as individuals, to the GDG as a whole and also to the relevance of the resultant guideline for patients and carers.
Of the 24 focus group participants, only 12 had heard of CPGs. Knowledge of whom guidelines are intended for and what they contain is generally low. The consensus was that the general population's awareness of guidelines was low to non-existent. None of the participants had, during the course of their treatment communicated with health care practitioners about their treatment plan in relation to CPGs specific to their condition. Most participants thought that CPGs were a good idea, with certain provisos (Field and Lohr 1990 definition [2]).
Conclusions: In light of these results further research and activities are needed in relation to improving awareness, dissemination and implementation of guidelines and exploring how best to work with the patient and public (PP) stakeholders to improve the current mechanisms.
Certain countries have had extensive experience of PP involvement (UK, Netherlands) and we should look particularly to these for recommendations, guidance and resources.
This survey was performed as part of the Eurocancercoms project and supported by European Union funding.

References

[1] European Cancer Guidelines: a survey. Dirk Schrijvers, Marco Rosselli Del Turco; Carol Maddock; Lorenza Marotti
[2] Field, M.J. and K.N. Lohr (1990). Clinical Practice Guidelines: Directions for a New Program. 'Clinical practice guidelines (CPGs) are described as 'systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances'

3634 POSTER

European Priorities for Hepatocellular Carcinoma (HCC) Control: a Comparison of Current Needs in Five Countries

J. Bridges[1], G. Gallego[1], T.M. Pawlik[2], J.F. Geschwind[3]. *[1]Johns Hopkins Bloomberg School of Public Health, Health Policy and Management, Baltimore MD, USA; [2]The Johns Hopkins Hospital, Department of Surgery, Baltimore MD, USA; [3]Johns Hopkins University School of Medicine, Vascular and Interventional Radiology, Baltimore MD, USA*

Background and Aims: In 2007 the European Parliament designated viral hepatitis an urgent public health issue, calling for earlier diagnosis and wider access to treatment to prevent hepatocellular carcinoma (HCC). With a paucity of comparable data on HCC control, there has been little action on this declaration. We conducted a *needs assessment* for HCC control and tested the concordance of current performance across five countries.
Methods: Clinical experts in HCC were purposively sampled from France (FR), Germany (DE), Italy (IT), Spain (ES), and Turkey (TR). Needs assessment utilized the self-explicated method, a scientific stated-preference approach, to assess country performance on a 100 point scale. Experts valued ten dimensions of HCC control previously identified in the literature, including: clinical education; early risk assessment; HBV strategy; HCV strategy; life-style risk factors; national statistics; funding for detection; funding for treatment; political awareness; and public awareness. Results were analyzed using ANOVA, with concordance tested via the F-test.
Results: Twelve experts from each country completed the survey (response rate: 33%). Respondents included hepatologists (48%), oncologists (18%), radiologists (10%), and surgeons (17%); individuals self identified as having local/regional, national (30%) or international (35%) influence. Greatest need was assigned to political awareness (only 17.7 out of 100); public awareness (18.6), life-style risk factors (21.3), and national statistics (32.3). Cross-country valuations were relatively concordant ($p = 0.170$), but significant differences were found for funding for treatment ($p = 0.013$), funding for detection ($p = 0.015$), and HCV strategy ($p = 0.017$).
Conclusion: We herein report the first study to compare current needs for HCC control across Europe. Expert respondents identified greater public and political awareness as main priorities for HCC control, indicating a significant need for increased advocacy for liver disease in Europe. Any European effort on HCC control must also address discordances in funding for detection and treatment and priority given to HCV control across countries. Our data should help inform the discussion on HCC control and help identify benchmarks that will provide the basis for addressing this urgent European public health need.

Table 1. Needs assessment score

Variable	FR	DE	IT	ES	TR	P-value
Early risk assessment	40.3	34.5	35.5	50.0	30.7	0.187
	(22.7)	(18.6)	(14.9)	(24.1)	(20.3)	
Funding for detection	76.3	42.2	55.2	39.5	46.0	0.015
	(25.2)	(21.5)	(31.6)	(36.8)	(22.1)	
Political awareness	22.0	14.5	13.5	22.8	15.5	0.419
	(16.6)	(15.8)	(10.2)	(13.4)	(19.1)	
HCV strategy	58.8	52.0	40.3	55.2	31.0	0.017
	(9.0)	(26.2)	(20.9)	(23.5)	(25.7)	
Public awareness	14.3	21.3	11.0	22.0	24.5	0.264
	(10.5)	(26.7)	(6.9)	(16.2)	(17.6)	
Clinical education	24.7	25.3	23.8	27.8	39.5	0.195
	(14.8)	(18.8)	(16.0)	(17.3)	(21.7)	
Funding for treatment	75.3	59.8	68.7	45.0	34.7	0.013
	(28.4)	(34.4)	(29.6)	(35.7)	(26.0)	
Life style risk factors	20.8	25.7	18.7	23.7	17.7	0.639
	(13.7)	(13.2)	(13.9)	(20.5)	(9.3)	
HBV strategy	44.7	58.0	63.3	50.3	46.3	0.318
	(15.1)	(30.6)	(24.2)	(28.5)	(23.8)	
National statistics	12.3	14.0	32.0	32.5	20.8	0.050
	(10.6)	(15.2)	(28.9)	(24.2)	(20.4)	
All strategies	39.0	34.7	36.2	36.9	30.7	0.179
	(28.7)	(27.7)	(28.3)	(27.0)	(22.9)	
N	12	12	12	12	12	

Notes: Standard errors in parentheses. P-value test for concordance or valuation across countries.

3635 POSTER

Pharmacoeconomic Impact of Dose Rounding for Cancer Therapy

N. Ibrahim[1]. *[1]Military Hospital, Pharmacy Department, Riyadh, Saudi Arabia*

Background: The past ten years have seen a significant and progressive cost rising in medical oncology, largely due to the increase in cancer prevalence and the incorporation into clinical practice of novel, highly expensive drugs. Dose rounding is increasingly used in oncology departments to improve efficiency of outpatient clinics. The purpose of this project was to determine the theoretical cost saving related to a dose rounding process for adult biological and chemotherapy agents at Riyadh Military Hospital.
Material and Methods: Data was obtained prospectively during December 2010. All chemotherapy and targeted therapy orders prescribed in adult oncology out patient clinics as well as in-patient adult oncology wards have been collected. Prescriptions that include cancer therapy in doses that might be rounded according to study criteria were identified.
Results: Two hundred and thirty three orders of chemotherapy and targeted therapy were processed by Adult Oncology Satellite Pharmacy

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.

3636 POSTER

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

C. Bylund[1], P. Bialer[1], T. Levin[1], R. Brown[2], D.W. Kissane[3]. *[1]Memorial Sloan-Kettering Cancer Center, Psychiatry and Behavioral Sciences, New York City, USA; [2]Viriginia Commonwealth University, Social and Behavioral Medicine, Richmond, USA; [3]Memorial Sloan-Kettering Cancer Center, Psychiatry and Behavioral Sciences, New York, USA*

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.

3637 POSTER

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

T. Rukhadze[1], T. Aladashvili[1], E. Sesiashvili[1], M. Maglakelidze[1], M. Rukhadze[2], T. Kezeli[2], D. Kordzaia[2]. *[1]National Cancer Centre, Palliative Care Service, Tbilisi, Georgia; [2]Georgian National Association for Palliative Care, Palliative Care, Tbilisi, Georgia*

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 ware 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.

3638 POSTER

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

S. Rizzato[1], V. Merlo[1], A. Follador[1], M. Gaiardo[1], I. Giusepi[2], M. Macerelli[1], J. Menis[1], G. Pacileo[2], V. Tozzi[2], G. Fasola[1]. *[1]Azienda Ospedaliero Universitaria Santa Maria della Misericordia, Oncology, Udine, Italy; [2]Bocconi University, Center for Research on Health and Social Care Management, Milan, Italy*

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.

3639 POSTER

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

A. Savarese[1], F. Occhi[2], I. Bovani[3], F. Aloi[4], M. Pozzi[5], P. Okong[6]. *[1]Regina Elena Cancer Institute, Medical Oncology, Rome, Italy; [2]NGO AISPO- Institute S. Raffaele, Obstetrics and Gynaecology, Milan, Italy; [3]NGO- Pathologist Overseas, Pathology, Milan, Italy; [4]NGO- AISPO c/o St. Raphael of St. Francis Nsambya Hospital, Clinical Pathology, Kampala, Ouganda; [5]Regina Elena Cancer Institute, Breast Surgery, Rome, Italy; [6]St. Raphael of St. Francis Nsambya Hospital, Obstetrics and Gynaecology, Kampala, Ouganda*

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