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Associazione Nazionale Infermieri di Area Critica

31st Aniarti National Congress

Riva del Garda, 14-15-16 November 2012

Nurses and quality of life in critical care

Competence, technology, methods, efficiency, resources, relationships, policies, rights, ethics, utopia

Congress objectives:

- *To present the main changes in contemporary society and their impact on the quality of peoples' lives;*
- *To examine the possible levels of quality of life and those guaranteed to persons in critical conditions and/or at end-of-life stages and the quality of the lives of healthcare providers in these extreme situations;*
- *To expose the latest guidelines, samples of research, experiences, nursing care practices, care technologies that favor the improvement of quality of life in critical care settings.;*
- *To propose considerations on the objective responsibility of professionals in contributing to society's choices and policies, while focusing on the quality of life of medically compromised patients.*

ABSTRACT BOOK

14 November 2012 - Afternoon - Red Conference Room

Opening Session

14:00 - 14:30

The importance of quality of life today.

Fabrizio Moggia, Aniarti President
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Critical-care nurses' new and profound awareness of the quality of life may have a basic impact on daily nursing care.
The quest for quality is in many ways, society's and the world's red line.
In critical care settings, the weft of a multitude of factors impacts on the quality of peoples' lives:

- Economic factors that impact on resources and sustainability of organizations;
- Attention paid to health by politics and citizens tips the balance of treatments with respect to care;
- Complexity, utility, costs and most often extreme invasiveness of healthcare technologies;
- Frontline role to be played by evolved experiences put into practice in critical care settings;
- Critical factors set by the continual onset of new problems in interpreting human rights in fast-evolving society and cultural settings;
- Difficulties in establishing, most often in urgent and unforeseen ways, positive work relationships among operators/patients/caregivers;
- Need/obligation for quality of life also in all situations of illnesses, and restoration of invaluable dignity to the dying, when death cannot be avoided;
- Daily motivations behind the effort to enhance life in a context that is always a life-and-death battle;
- The obligation to share and spread advanced scientific skills to respond to the complex needs of citizens in an increasingly evolving society.

Nurses, as individuals and as professional communities, should be able to consciously gather the bonds existing in these realities and face the tumultuous but challenging demands.
We can no longer think that our nursing excellence ends when we have rendered direct nursing care, and that each of us should only take charge of this aspect. We are the witnesses and intellectuals in direct, intimate contact with the lives of people in critical situations.
We should be – as the implicit role of our profession suggests – protagonists who are able to identify new definitions of the quality of life within a healthcare system that calls for profound and radical changes. Nurses already have many answers, whether implemented or targeted.
It is a path towards civility which the new and future societies will have to pursue by planning policy pathways, the option for collective and shared excellence. The common good is overwhelmingly pointed out as the renewed factor of civilization. Freedom means involvement / involvement is liberty.
We shall not make a detailed analysis of quality. It is a new challenge we shall have to face with the issue of quality in the lives of really existing people, and which we will have to ensure in critical care settings.

14:30 - 15:00

Against a background of the ongoing crisis: origin, general repercussions, risks to our healthcare system and the quality of peoples' lives.

Vincenzo Comito, Economist, University of Urbino
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The critical situation before our eyes reflects the position of nurses who find themselves substantially forced to "undergo" decisions that exclusively focus on medical-care and administrative management. These types of decisions condition healthcare and are not approved by the nurses, thus resulting in increasingly difficult work conditions and the impossibility to guarantee the quality of work itself, and as a consequence, the quality of the sick persons' lives.
Attention is placed on issues that highlight the consequences of the current crisis on the healthcare system and the rendering of care, and subsequently on the quality of life of individuals and communities.
Continually growing departments of healthcare facilities, especially intensive and critical care units, have to address the use, continual changes and abuse

of technologies, and performance of activities that most often are bound to issues of methodologies rather than to the entirety/complexity of the sick. These considerations single out the risks of exasperating situations that may arise from these aspects to the detriment of equilibrium which everyone ideally hopes for.

15:00 - 15:30

Is there an urgent need for radical change?

Gianluca Favero, Head of *Laborcare journal*. Promoter of *Spazio Etico* of Empoli, former professor of Florence University
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Today, as never before, we are questioning ourselves on the "quality" of services and production efficiency, forgetting that above all, we need to reflect on the "quality of life" and how to make up for lost time to be dedicated to relationships with others which is the fundamental element to achieve this. We should thus reflect on daily issues on how we are witnessing an "anthropological breakdown" that results in solitude (also within our professions) in order to identify the reasons that increasingly underpin the need for a more humane medical system.

15:30 - 16:00

The health system and state-of-the-art quality of life in critical care settings.

Paolo Cornaglia-Ferraris, Columnist, Gruppo Editoriale Espresso - La Repubblica. Genoa
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The state of the healthcare system is being analyzed in relation to the quality of the lives of people involved in it, and the quality of life we hope to achieve as the available competences are implemented. We are debating on the problem of techniques and technology and their impact on healthcare and health; technology is an indispensable and highly determining factor. What are the criteria for a feasible equilibrium? We shall try to point out the limitations that condition the state of affairs and the resources needed to overcome them.
Basic guidelines will be followed by the medical-care system that will finally implement rules on paying greater attention to people, a proposal not practiced but only announced in the past. (Analyses, data, surveys, viewpoints, perceptions, along with the correction of inadequacies will keep the nurses' aims/needs satisfied/safeguarded).

16:00 - 16:30

What does quality of life in critical care stand for today? Nurses as advocates of quality of life.

Massimo Solaro, Emergency ICU, Careggi University Hospital, Florence
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In light of the experience of professional nurses as a whole, we made an outline of the concepts of quality of life as the aspiration and goal of nurses and disseminated information on the efforts and examples of good practice protocols and implementations.
Nursing care results were also shared: the outcomes of post-intensive care follow-ups (examples, data, proposals, priorities) and possible implications in clinical practice.

Session on "learning from experience"

Quality of life in the various critical care situations: positive and negative aspects, discoveries and considerations, suggestions to live in a better way.

17:00 - 17:25

Experiences of patients/relatives

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Perceptions, considerations and indications after long hospital stays in the ICU.

17:25 - 17.50

The presence of relatives in intensive care units.

Massimo Monti, General Hospital of Ulss Cesena, Bologna University Professor.
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There is need for a radically innovative culture in the relationships between healthcare operators and the population. Survey reports on the various ways healthcare professionals regard the presence of relatives stationing in the various intensive care units (118 emergency unit, ERs, ICUs) and the course of events that led to the decision to allow free access to the Intensive Care Unit (Treviso), through the participation and approval

of the staff.

17:50 - 18:15

Nurses' Experiences: Aniarti survey on lateral hostility. The quality of life of nurses determined by their in-house relationships: results of the national Aniarti 2011-12 survey.

Stefano Bambi, Giovanni Becattini, Giandomenico Giusti, Andrea Mezzetti, Enrico Lumini,
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Lateral hostilities are a variety of "nasty, unkind, aggressive behavior between colleagues working at comparable organizational levels" and are widely diffused phenomena documented by international literature especially in the United States and England. When this type of prevalently not physical aggression develops within nurse settings, the consequences may become serious up to the point of causing, at various professional levels, psychosomatic types of symptoms and even pushing individuals to also leave work definitively. Furthermore, if the abuses characterizing this phenomenon are perpetrated constantly, at least once a week for six consecutive months, a true and proper type of horizontal mobbing can be envisaged. Midway between the end of 2011and the start of 2012, Aniarti promoted among its members and non-members, an online survey that used a previously drawn up questionnaire, as a validation study that could quantify and estimate the phenomenon of horizontal hostility within critical care settings in Italy. The results of the analysis on the 2012 questionnaires are available, filled in by nurses operating in the 118 emergency calls, ERs and ICUs throughout Italy.

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15 November 2012 - Morning - Red Conference Room

Quality Care I

9:00 - 9:15

Intensive Care nurses and their knowledge of tracheobronchial aspiration guidelines: multicentric analysis.

Alessandra Negro, Roberta Ranzani, Mariana Cortesi, Mariagrazia Villa, Monica Marazzi, Duilio Manara , General ICU, San Raffaele Hospital, Milan
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Background. Bronco-aspiration is one of the main procedures nurses perform to stabilize and maintain suitable gas exchanges in the oxygenation and alveolar ventilation of critical patients subjected to mechanical ventilation. This procedure is associated to numerous complications and risks. and nurses have to possess the skills to implement this by applying scientific data. There are very few studies that analyze how the guidelines for the implementation of bronco-aspiration are known, perceived and performed.
Objectives. Fact-finding analysis of scientific evidences regarding bronco-aspiration techniques implemented by bronco-aspiration by nursing staff of the ICUs of various hospitals in central-northern Italy.
Materials and methods. An anonymous questionnaire, based on the AARC (2010) guidelines and the article of Pedersen, Rosendahl-Nielsen, Hjermind and Egerod (2009), handed out to nurses of 16 ICUs of 11 hospitals. The questionnaire examines if the years of experience of nurses in their professional activity and also in IC units impact on the extent of their knowledge, and if the education of nurses varies from one IC unit to the other.
Results: The questionnaire was distributed to a total of 379 nurses with a percentage of feedbacks equal to 65%, which implies that the total number of correct answers is at 58%, with none of the participants completely filling in the entire questionnaire without errors. To be noted is that only 2.5% (n=6) of the nurses answered correctly 9 out of 10 questions. It can be presumed, therefore, that the years of experience as professional nurses, and those spent in ICUs and operating units to which each nurse belonged, influenced his/her capacity to correctly answer the questionnaire. **Conclusion.** We need to create stimulating environments for continual refresher courses that may update nurses on scientific studies and widen the nurses' knowledge and skills, thus improving care of patients.

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9:15 - 9:30

CPAP headgear for post-surgery heart patients. Comparison between patients treated and records of non-treated patients.

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Introduction. As demonstrated by Squadrone et.al in the 2005 study published on Jama regarding the application of CPAP in patients subjected to major abdominal surgery, the application of the device decreases the incidence of post-surgical hypoxemia and severe complications. It would thus be correct to presume that analogous benefits may be found in applying the CPAP through the mask also to post cardiac surgery patients.
Materials and Methods. The study included all the post cardiac surgery patients admitted to our IC unit during the April-May 2011 period and who were subjected to mechanical ventilation for less than 24 hours. Two patients were excluded due to mask intolerance and claustrophobia. None of the cases evidenced significant complications. The study protocol provided for the immediate placement of the CPAP headgear (Castar AC, Starmed) after extubation. The patient thus alternated with four hours of the headgear (PEEP 8 and FiO_2 0.5) and two Venturi masks with FiO_2 0.5 up to their discharge from the Cardiac Surgery ICU.
The parameters registered included the patient's personal data, description and timetables of the heart surgery and the hemogasanalysis values with the following timing: FiO_2 and PaO_2 five minutes before extubation, FiO_2 and PaO_2 15 minutes after extubation and FiO_2 and PaO_2 upon discharge from the ICU (at least two hours after the removal of the

Parameters studied	*Patients treated withCPAP*	*Patients' records*	*P value*
Number of patiens	27	147	
age	69 ± 5,7	68 ± 10	n.s.
Euroscore	4 ± 2	6 ± 2	n.s.
PaO_2/FiO_2 pre-extubation	350 ± 89	309 ± 95	p = 0.04
PaO_2/FiO_2 post-extubation	353 ± 143	232 ± 71	p < 0.01
Delta PaO_2/FiO_2 pre-post extubation	+3 ± 102	- 75 ± 73	p < 0.001
PaO_2/FiO_2 discharge from Heart Surgery ICU	260 ± 84	221 ± 67	p = 0.019
Need for re-intubation	0	3	n.s.
Hours of mechanical ventilation	16 ± 12	16 ± 21	n.s.
Duration of Heart surgery	263 ± 68	278 ± 61	n.s.
CEC time	98 ± 27	120 ± 46	p = 0.045
Aortic clamping time	76 ± 20	86 ± 30	n.s.

headgear). The data was compared with the patients' records (obtained with the Chart Assist software) related to the first semester 2010, who were cared for after extubation with Venturi masks with FiO_2 0.5.

Results. This preliminary study shows that the PaO_2/FiO_2 ratio remains substantially stable after extubation in patients treated with CPAP compared to those treated only with the Venturi mask.

Conclusions. In light of these still preliminary results, there are reasonable grounds to undertake an in-depth study integrating the data studied with other information (e.g. serial valuation of the chest x-ray) and extending the observation period also to the observation period in the sub- intensive cardiac surgery unit and the recovery wards so as to assess whether the respiratory benefits are maintained in the succeeding days after CPAP has terminated or just limited to the PEEP application period.

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9:30 - 9:45

Analysis of critical factors perceived by the person subjected to NIV. Description of the targeted correct measures to improve therapy effectiveness and quality of services rendered.

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Introduction. Noninvasive Mechanical Ventilation (NIV) applied through CPAP (continuous positive airway pressure) and bi–level CPAP is a substantial therapeutic option in the management of acute and chronic respiratory failure in and outside the hospital. Literature is full of information containing indications/limits regarding NIV treatments, correlated complications, ways of using the device and equipment, monitoring systems; on the other hand there is scarce investigation on the experience and compliance of the person subjected to NIV, an indispensable condition for the effectiveness of the therapy.

Objective The study which aimed to identify the critical factors perceived by the person undergoing NIV, laid out specific corrective actions and made a close assessment of the interventions adopted.

Materials and methods. A nursing research project launched in 2010 (observational study) structured in two phases:

1. A multidisciplinary group drafted a survey on vital statistics, main pathologies and concurrent therapies taken up, duration of therapies, and critical factors perceived and assessed with the Likert score. Validation was done with the Cronbach index (0.89) and pilot test. Trained nurses distributed survey questionnaire to a sample of 100 patients subjected to NIV in the A&E departments. Analysis of data was performed and targeted interventions were planned to enhance comfort and improve compliance to treatment and quality of services rendered.
2. Distribution, after two years, of the interview to a sample with the same characteristics. Evaluation of the effectiveness of the interventions performed.

Conclusions. The data that emerged from the first interview corresponded to that given in literature. It reported an 83% for the main critical factor being the lack of information regarding the treatment, 48% for disturbances due to noise, and 42% for claustrophobia, 47% for thirst, 42% for difficulty in communicating with relatives and 30% as relating with the staff. Corrective actions were implemented to improve communications and relationships, comfort, use of devices and equipment, diet and

water balance. Analysis of data from the second interview is still ongoing and will assess the efficacy of interventions adopted.

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9:45 - 10:00

Correlation between the nursing activity score (NAS) and the clinical gravity index in evaluating quality care of multi-trauma patients in the ICU.

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Introduction. The multi-trauma patient admitted to the ICU needs a good deal of nursing and clinical care. The gravity of his/her clinical conditions are gauged by the indices used at medical levels. At nursing levels, over the last years the Nursing Activity Score (Miranda et al) was widely used and aimed at measuring the load of nursing care needed for patients in the ICU. This score calculated the percentage of time a nurse directly dedicates to a patient and is the indirect expression of the quality of care offered to patients in the ICU.

Materials and methods. An observational study was performed to analyze the clinical and care complexity required by multi-trauma patients in the ICU. Data collection was performed over a period of six months (2011) on all the multi-trauma patients admitted to the Anesthesia and Resuscitation departments of the General Hospital of Udine. This data was saved, inserted into an electronic database, and then elaborated through statistical analyses.

Objectives. *1) Assess the nursing assistance score (NAS).*
2) Calculate the clinical severity scores.
3) Correlate clinical severity to the NAS score.

Results. The multi-trauma patients we examined evidenced a high NAS score with a mean value of 63.1. The correlation analysis demonstrated positive findings with the clinical gravity scores considered, particularly with the SOFA score. In a particular way the positive correlation with the ISS implies that the assistance work load is directly proportional to the gravity and the number of bodily areas involved.

Conclusions. The preliminary results of the study seem to show that the NAS score is a valid tool in determining the nursing workload assisting multi-trauma patients and allows for improved quality of care, optimizing the distribution of nursing resources.

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10:00 - 10:15

A tool for the evaluation of quality of life and nursing workloads in the Cardiac Surgery ICU: the "CRPO score."

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Introduction. The Cardiac Surgery Department (UCICT) of the Niguarda – Ca' Granda Hospital receives neonatal, pediatric and adult patients, admitted for a very broad range of clinical diagnoses. Due to the particularity of this facility, the nursing "*scores*" currently in use are not able to give a correct picture of the Cardiac Surgery ICU, thus making it difficult to quantify the nursing workloads.

Aim. To achieve a tool which, in the form of a *"score,"* could draw an instantaneous picture of the patients and their needs for assistance, and also set a numerical score to identify not only the facility's daily nursing loads but also the quality of life of patients, and forecast morbidity subsequent to transfers to other departments.

Materials and Methods. In the first phase, a strict review of literature was performed regarding the existing nursing "*scores,*" focusing on those related to intensive care units and specifically, cardiac surgery departments.

In a second phase, a "*CRPO (Cardiac Resuscitation and Post-Surgery) Score*" was drafted, consisting of a tool for data collection, analysis and assessment of nursing assistance workloads for patients in the

Cardiac Surgery ICU. To test its solidity a five-month longitudinal prospective study was conducted on a sample of 427 patients, with mean age of 57.5 years, mean duration of 4 days of hospitalization, admitted according to emergency/elective protocols and admittance diagnosis pertaining to the cardiac/cardiac surgery departments.

Results and Conclusions. The results obtained seemed to show how the *CRPO* Mean *Score* for every single patient may be considered as an indicator for increased nursing workloads; moreover, the *CRPO Score* indexed on the hospitalization days may likewise evidence variation of the quality of life of the patient, up to the point of being able to forecast the quality of life in the short term.

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10:15 - 10:30

Analgo-sedation and delirium in the ICU: a quantitative, analytical and retrospective study, following the general ICU in-house protocols of the IRCCS of San Raffaele Hospital.

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Objectives. To calculate the percentage of nursing staff's compliance with the in-house analgo-sedation protocols and the data measurement chart; to calculate the gap percentage from the given CPOT and RASS Target; and to calculate the number of delirium episodes registered and their possible correlation with inadequate CPOT and/or RASS levels.

Materials and Methods. A monocentric, quantitative and analytical study carried out from April to September 2011. The data analyzed was taken from the measurement charts in the clinical records of patients. Filling in of the charts entailed an assessment every two hours of the pain score (CPOT), and sedation (RASS) underway. This data was recorded again in a specific chart which also indicated: time and date of admission to the Operating Unit, time and date of discharge from the defined CPOT and RASS targets, and delirium episodes recorded. The compilation of the forms under examination were done only by the nursing staff, since they are generally more in contact with the patients and are in the position to have more chances of noting the typical alterations of delirium in the ICU.

Results. A total of 56 patients were enrolled in the study, of which 35 (62.50%) were males and 21 (37.50%) were females, with age bracket between 18 and 80 (mean 60.23), regardless of the pathology for admission to the Operating Unit. The compilation of the data measurement chart evidence nursing compliance of 41.38% ; during the months April-May, 49.28%; in the month of June-July37.47% ; in the months of August-September, 37.41%; The mean values taken through the pain assessment score (CPOT score) and the related percentage gaps from the target were: 0.36 (0.05% gap) in April-May, 0.42 (0.03%) in June-July and 0.38 (0.09%) in August-September. The mean values taken through the sedation assessment score (RASS scale) and the related percentage gaps from the target were: -3.02 (0.54% gap) in April – May, -2.56 (0,49%) in June-July, and -3.81 (0.67%) in August-September. The mean values taken in the semester analyzed were at 0.38 (0.05 % gap from the range) for analgesia, compared to the -3.13 (0.38%) related to sedation. A total number of 15 delirium cases was recorded for only nine patients (16.07 % compared to the total number of patients enrolled in the study). Out of these nine patients, four patients (44.4%) had RASS and CPOT values within the limits of the preset targets, whereas five (55.5%) had inadequate analgesia and/or sedation values. Out of this last five patients, 1 (20%) had an inadequate analgesia level (CPOT > 2), four (80%) had inadequate sedation levels (RASS < -3).

Conclusions. The results obtained confirm the data given in scientific literature. For both the compliance of nursing staff and the incidence of delirium and sedation recorded in the ward, this study showed a difference between the management of analgesia and

sedation of patients. Separating the data for sedation from those for the adequacy of pain control, we noted that the development of delirium was greater in patients with inadequate sedation levels. What was greatly highlighted by our data is how much the problem of delirium is not recognized and underestimated. We believe that educational interventions need to be established to support and extend the knowledge of nurses on these issues, so as to integrate assessment of delirium into daily nursing practice.

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Quality Assistance II

11:00-11:15

Monitoring the bispectral index to reduce the sedated person's distress and *awareness* during hygiene care procedures.

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Introduction. It is most often difficult to ensure the comfort of patients admitted to the ICU when they are undergoing hygiene care since the maneuvers often are a source of stress. The conscious patients are able to interact and speak up and can identify what movements cause discomfort and cooperate with the nurse on the best ways to reduce it. On the contrary, the sedated patient who is unable to express himself/herself, is erroneously considered "asleep and unconscious of pain."

Objective. To evaluate the BIS system and improve the quality of life of the sedated patient, optimizing the sedation levels during hygiene care and reducing the unexpressed perception of discomfort or pain.

Materials and Methods. We carried out hygiene care in a standardized manner and gathered the related data of the vital signs and BIS during the single interventions (cleaning of the oral cavity, sponge bathing, changing of bed sheets of both conscious patients under mechanical ventilation and controlled, sedated patients.

Results. The patients sedated under controlled ventilation may more easily develop important alterations in vital signs and this happens more frequently when the sedation level drops and sensitivity to stimulus increases, or on the contrary, when sedation is excessive and surpasses the real need. The use of the sedation practice bundle before the maneuvers does not cover the entire duration of the hygiene care procedures and often subjects the person to stress when rolled over for the changing of linen.

Conclusions. Using the BIS system may help nurses to maintain an excellent and constant sedation system to prevent discomfort/pain a patient may feel but is not able to express.

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1:15 - 11:30

Follow-up of patients hospitalized in ICUs a year after dismissal.

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Angela Pedruzzi, Veronica Pirola, Cardiac Surgery IC, Riuniti Hospital, Bergamo
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Introduction. Admission to the ICU may be a destabilizing event for a person, from both the physical and psycho-social viewpoints. The sequence of follow-up events may occur for a long period after discharge, and bring about changes in the quality of the person's life.

Objective. To study the quality of life of patients a year

after discharge from intensive care.
Materials and methods. Telephone interview with patients who were hospitalized for more than 24 hours, a year after the event. Out of the 197 candidates, 78 questionnaires were filled up. To draft the questionnaire we used the reference tool EuroQol-5D (EQ), with particular attention on issues like self-care, mobility and unusual activities.
Results. A year after they had been discharged, 25% of patients were independent enough for self-care, about 33% could walk independently and 47% had not resumed work. Furthermore, 51% remembered painful procedures, the most cited of which were, the headgear and bronchial aspiration. The survey sample was classified according to age, hospitalization and intensity of care. The persons who had been hospitalized for more than five days and those who needed assistance consisting in a nurse/patient ratio of more than one or two, were exposed to the risk of developing greater complications compared to the rest of the population surveyed.
Conclusions. We should institutionalize the follow-up of patients hospitalized in order to identify those with greater risks and activate preventive measures that can ensure continuity of assistance even at home.

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11:30 - 11:45

Psychological and behavioral impact after admission to the ICU: the importance of a post-IC follow up service.

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Introduction. The prevalence of Post Traumatic Stress Disorder (PTSD) and associated clinical features is at 5-64% of those who survived intensive care; 25-50% suffered from depression and 4-41% from anxiety in those who survived the ALI/ARDS. This data highlights the importance of the immediate recognition of the signs and symptoms associated with such pathologies, the suitable assessment and treatment. This study aimed to evaluate the incidence of such psycho-pathologies in patients admitted to the ICU of the A&E Dept. of the University-Hospital of Careggi in Florence, which is classified as a 24-hour ICU, with open access to relatives.
Materials and methods. The survey involved 133 patients hospitalized for more than 72 hours, at 3, 6 and 12 months after their discharge from the ICU in the period between January 2009 and December 2011. These patients were subjected to the Hospital Anxiety and Depression Scale –HADS tests - for the assessment of symptoms referring to anxiety and/or depression, and the Impact Event Scale revised-IESr - for PTSD, ICU Memory Tool for the assessment of the memories they had regarding hospitalization.
Results. Analysis of the HADS questionnaire evidenced significant features indicating anxiety and depression in 39% of the cases. Analysis of the compiled IES-r evidenced that 50% presented signs and symptoms related to PTSD. The answers given to the ICU Memory Tool showed that 57.2% of patients clearly remembered that they had been hospitalized, whereas 48,6% did not remember the period prior to admission to the ICU which instead 60.7% remembered. An 80% did not clearly remember their entire hospitalization period. Lastly, 53% remembered their transfer from the ICU to the ward. A 94.7% of patients remembered invasive maneuvers, while 56.8% remembered their relatives and 41.7% remembered the lighting system.
Conclusions. The results of the study seem to confirm the data given in literature with respect to the risk of developing more or less serious psycho-pathological scenarios. The presence of relatives 24 hours around the clock appeared to be a positive factor as demonstrated by the 50% of the patients who recalled this fact.

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11:45 - 12:00

Anxiety-depression levels upon admission and after

72 hours in patients interned at the Cardiac ICU for acute coronary syndromes.

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Aims. The cases of Acute Coronary syndrome (ACS) are not only burdened by a significant morbidity and mortality but impact on the psychological conditions of the patients and may jeopardize the succeeding post-discharge recovery. Rapid recognition of the symptoms of anxiety (A) or depression (D) is useful in optimizing the levels of quality assistance. The aim of this prospective study was to assess the incidence of A and D symptoms and their correlations with the clinical profile of patients with ACS.

Method. The patients were subjected to a complete clinical and diagnostics examination upon admission. The A and D levels were measured upon admission and after 72 hours in patients interned for ACS through the Hospital Anxiety and Depression Scale (HADS), composed of two subscale (HADS_A and HADS_D) with seven items each. Exclusion criteria were that of age $\geq$ 65 and the presence of mental confusion. The rating scale was taken on admission and after 72 hours.

Results. The preliminary data regarded a number of 115 consecutive patients aged $\leq$ 65 years hospitalized for ACS at the UTIC dept. (mean age 51.28 ± 9.07 years; 87.8% males; 67.5% with STEMI and 32.5% NSTEMI). Important levels of A (score HADS_A ≥8) were found in 43% of the patients upon admission and in 36% after 72 hours, whereas the D symptom (HADS_D ≥8) were found in 36% and 46%, respectively. The A levels after 72 hours were significantly greater in the females (mean of 9.084.5 vs. 5.963.8, p 0.031); I D levels after 72 hours showed a similar trend though without reaching important values (mean of 83.2 vs. 6.612.7, p 0.09). The baseline D levels after 72 hours were significantly greater in patients who lived alone (baseline of 9.442.6 vs. 6.692.7, p 0.004, after 72 hours 93.3 vs. 6.582.7, p 0.013). The D levels after 72 hours were significantly greater in patients with unstable angina (8.83 vs. 6.572.7, p 0.016). The A levels after 72 hours were significantly greater in patients who were widows (11.52.18, p 0.03).

Conclusion. The preliminary results of the following prospective study indicated that:

a) ACS patients have elevated A and D levels;
b) the A levels tend to diminish whereas the D levels tend to increase after 72 hours, regardless of the main demographic and clinical variables;
c) the SCA STEMI seem to have a greater impact on the A and D levels;
d) the high incidence of A and D may influence negatively the succeeding recovery path and require the implementation of targeted interventions for assistance.

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12:00 - 12:15

Implantable cardiac defibrillator (ICD): psychological aspects and nursing care.

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Introduction. It has been evidenced that patients with ICDs are highly prone to developing psychological symptoms of anxiety and depression and a reduced quality of life correlated to the fear of possible and sudden, potentially fatal arrhythmia.

This places the patient in a precarious condition, leading him/her to change his daily habits in the hope of gaining control of the situation and avoiding all those conditions that may increase the risk of the occurrence of arrhythmia.

Objectives.

1. To analyze the psychological implications that may arise subsequent to the implantation of an ICD;
2. To identify the elements that lead to anxiety and depression;
3. To analyze the nursing care areas aimed at reducing the clinical features and improving the quality of life of patients and their families.

Materials and methods. Literature review: 22 specific articles of index-linked journals, that study the quality of life with general rating scales but also concerned

with the ICD implant issues.

Results. Administrating shock through the machine is associated to high levels of anxiety and depression. All patients with ICD should be considered at risk of developing a psychopathology, and this calls for the adoption of preventive measures such as: adequate education, more information for patients and their families before the implantation; use of communication techniques (counseling, individual meetings and with the patients' close relatives); and assessment follow-ups.

A comparison of various types of quality of life rating scales were compared regarding the ICD patients and their families, and what emerged from the surveys was the great improvement of the quality of life after the delivery of specific educational campaigns, and also how few studies adopt specific rating scales for patients with chronic cardiovascular pathologies.

Discussion. The most effective interventions that help ICD patients and their families, are the conveying of instructions and information, the use of therapeutic communication techniques, assessment follow-ups after discharge and personalized psychological support. Even if the patients and their families cannot be informed of every single event, they can be sustained through preventive guidance, focused on problem solving. Nurses must stand by the patients and their families also during follow-ups, and furthermore should test also the cost-effectiveness and validity of the interventions to increasingly improve the results. We have to underline moreover the importance of teamwork to ensure long-term outcomes.

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November 15, 2012 - Morning - Green Conference Room

Continuity and integration for quality of life

9:00 - 9:15

Intensive care at home: our scenario.

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Introduction. The World Health Organization retains that continuity of care is a highly sensitive criterion in evaluating the efficiency of a Healthcare Service which targets the objective of matching the traditional concept of healthcare with that of home care in the assistance network between the region and the hospital.

For about three years now, the Area Vasta 5 Hospital of San Benedetto del Tronto has entrusted de-hospitalization of patients affected by chronic respiratory failure in invasive mechanical ventilation at home, to the Medical and Nursing staff of the Recovery Unit. The Home Care Team for Tracheostomized Ventilation (ARDT) was instituted to meet the care demands of tracheostomized patients and/or those subjected to home ventilation, who do not find adequate responses in the regional healthcare facilities because of their very complex needs.

Aims. The possibility of having expert nurses or resuscitation technicians to render their services at home, ensures top quality and safety of the ARDT's programs. The complex maneuvers for the periodical replacement of tracheostomy tubes generally performed in hospitals have been entrusted to home-care teams also thanks to the presence of resuscitation nurses and experts.

Materials and Methods. The staff takes charge of assessing the suitability of the home, training the caregivers, giving resuscitation care during discharge and continual home assistance for the relevant specialized monitoring activities, diagnosis and tracheostomy therapies, tracheostomy tubes, mechanical ventilation at home, and critical situations in collaboration with the departments of Pneumology, General Medicine, Pediatrics, and staff of the Local Healthcare Units.

Results and Conclusions. Maximum hospital-district integration, safeguard of patients' security, improvement of the quality of life, maximum continuity of daily life and social activities, great benefits in cost-efficiency, reduction of the number of hospital admissions, rapid hospital stays and immediate detection of airway infections.

9:15 - 9:30

Protected discharge of the tracheostomized and PEG patient.

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Introduction. Therapy education is vital for a chronically ill patient who has to acquire the competences and practices necessary to live, reduce his/her dependence and delay the complications that may arise from his/her disease.

Chronic respiratory failure is the last phase of many diseases involving the respiratory system. The main clinical problem in handling respiratory failure is due to the repetitive relapses that often occur in resuscitation treatments with the need to turn to mechanical ventilation periods. The UTIR also handles the mechanical ventilation weaning processes of patients with tracheal cannulas and their return to spontaneous breathing or, whenever possible, the identification and training of their caregivers to resume home care. The Regional-National Agreement of April 29, 2010, provided for the implementation of a therapeutic educational path with precise standards, for tracheostomized mechanical-ventilation-assisted patients with chronic respiratory problems, and their caregivers.

Aim. Organization of a discharge path by which case managers handle the activation of regional services and therapy education for caregivers, to allow the programming of home-care treatments.

Materials and Methods. Use of the therapy education phases for the training of caregivers and the activation of all the services within the Region, according to the *mapping* of care schedules.

Results and Conclusions. Implementation of this protocol started eight months ago and saw the training of 25 caregivers for 12 patients. The outcome indicators used were:

1. Re-hospitalization within 30 days: all the patients were discharged more than 30 days earlier.
2. Re-hospitalization within 3 months: 7 patients were discharged more than 90 days earlier.

3. Admission to a protected facility: none were admitted.
4. Death 30 days after discharge: momentarily none of the discharged patients died.

Protected and planned discharge within a protocol where the regional services were activated simultaneously and therapy education could be the strategy to be used to improve the quality of life of both patients and caregivers.

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9:30 - 9:45

Mechanical ventilation at home. A project design for continuative nursing care.

Roberto Vacchi, 118 Helicopter Ambulance, Bologna

9:45 - 10:00

052 Therapy education and continuative assistance in the ER

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Introduction. Effective implementation of therapy education in the ER is not easy due to the "time" factor and the altered *compliance* of users who are unable to cope.

The current organization foresees that a patient diagnosed with a vertebral fracture to be treated with bed rest and is supposed to be discharged, brings about enormous distress for the patient and also for the caregiver, due to the lack of knowledge on how acute events are to be handled at home. Another critical point of the current organization is seen in the administrative steps needed to be able to make use of the welfare-healthcare services.

Study design. Upon consulting the major international databases, we saw that there were no documents for prospective cohort studies on therapy education, according to the P&PI(C)O methodology. *Problem*: ineffective therapy education and overloading of administrative pathways for requesting possible medical aids. *Population*: patients with conservative vertebral fractures; *Intervention*: illustrated handbook and GARSIA IT platform; *Main Outcome*: reduced complications related to bedridden conditions. *Secondary Outcomes*: support from administrative protocols correlated with requests for bed-sore prevention tools. Improvement of the quality of life of citizens.

Materials and methods. An illustrated information handbook, given upon discharge from the ER, to be used as an educational tool to help caregivers in handling acute situations at home.

Braden Scale: to identify the ER patients who are at risk of developing pressure sores. GARSIA IT platform: ensure Continual Assistance between the Hospital and Regional Services. When necessary, helps to signal out the patient to the Regional Nursing Service and to prescribe anti-pressure medical aids for sores when the patient is already in the ER.

Telephone interview with the patient and/or the caregiver, to evaluate after ten days, the validity of the project.

Expected results. Reduction of complications and improvement of the quality of life through therapy education and continuative assistance in the ER.

Conclusions. Therapy education in the ER and guaranteeing continuous assistance may greatly help in improving home treatments of patients suffering from non-surgical vertebral fractures which would otherwise be difficult to treat due to inadequate knowledge of the pathology and its treatment, hindered also by a complex bureaucratic procedure.

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Observational study on the professional culture of nurses and doctors regarding end-of-life situations (EOL) in some Resuscitation and ICUs in Italy.

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Introduction. End-of-life options are some of the most demanding and complex aspects of the Resuscitation and IC units. In the "grey zone between life and death" the very few intensive care therapies are scarcely effective in dealing with the gravity of diseases and bring us face to face with clinical and ethical doubts on the suitability and acceptability of maintaining treatments and vital support.

Aim. The paper does not aim to examine the

susceptibility of the treatment, but to understand what criteria healthcare practitioners should use to guide the dying person during his/her end-of-life experience.
Materials and Methods. The tool used to gather data was an anonymous questionnaire given to professional Nurses and Anesthetists (not trainees) of the IC and Resuscitation Units in northern-central Italy. The questions covered the educational, organizational/managerial, deontological and emotional fields.
Results. The results of the analyzed data show the lack of support documentation for nurses in their concrete care routines and the scarcity of medical documentation and/or implementation; there is also an insufficient level of sharing in the doctor-nurse team in order to acquire professionalism and specific skills.
Nurses and doctors have to pursue global care paths, where the sick person is placed at the center of the attention of healthcare professionals who are supposed to help him/her, each with his own role and skills; and team work should be a lifestyle, an itinerary of growth as individuals and as a group, and also as development path towards independence in sharing a common project for the benefit of the sick.

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Open ICUs for quality of life

11.00-11.15

Open ICUs: a review of literature aimed at finding better evidences of effective implementation of open access to the ICUs.

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Background. The Intensive Care Units have always been governed by limited access policies to protect patients from infections and from increased stress. Today these "restrictive" reasons appear to be groundless and evidence gathered highly favors the opening of ICUs to visitors.
Aim. After a three-year experience of an open ICU we decided to undertake an analysis of pertinent literature to study the reasons why many ICUs adopt a policy that limits the presence of relatives and visitors in the ICU.
Materials and methods: A bibliographic research was done through the main databases: Cinahl, Pubmed, Cochrane Library, from which we analyzed 244 articles and selected 60 for our study.
Results. A survey of 2010, which analyzed the main causes of infection in 5,916 patients in the ICU evidenced how the transmission of infections between patients may be reduced through preventive measures for the healthcare practitioners, while there was no mention of risks of infections associated to visitors.
Italian survey instead, demonstrated how the practice of protected access to intensive care units is widespread: (in the north-east 85% of the ICUs require some form of protection whereas 24% provide for a set of complete protective devices (gowns, shoe covers, masks, caps).
In the surveys where the outcomes of restrictive policies are compared to more liberal policies, the septic complications evidenced seem to resemble those of the samples observed.
Some studies sustained that the continual visits could be the source of problems between family members and the healthcare staff. Others claimed that the support of relatives facilitated communication between patients and nurses, thus improving the care procedures and increasing the satisfaction of patients.
Conclusions. The review of literature did not produce any proof that could justify the "closed" ICUs and that preventive measures effected by staff through simple procedures such as hand washes, was more effective than the "isolation" of the ICUs. Due to this, informing relatives of this procedure as undertaken by one of the surveys, highlighted that only 41% of the ICUs required visitors to wash their hands.
As to the humanization of care, the presence of relatives, when well instructed on the best behavior, improved the recovery process, even if this may generate an increase of care procedures.

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11.15-11.30

Friendly hospitals: open visits to the ICU. The experience of the Perugia General Hospital.

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Introduction. The greater number of ICUs in Italy restrict the visiting hours of patients' relatives and friends. Recent studies instead have stressed the benefits associated to the implementation of increased visiting hours of relatives, on the part of patients and also the staff, and sustained the importance of nurse-patient-relative relations. Furthermore, literature did not present scientific studies that demonstrated the correlation between the presence of visitors in the ICU and the care-related infections.
Aims. Within the scope of "The Friendly Hospital" project, the General Hospital of Perugia adopted the instructions given by the WHO on the humanization of hospitals, founded on the definition of the promotion of health contained in the Ottawa Charter of 1986, and in light of this vision launched an experimentation path for the opening of the ICUs.
Materials and Methods. In order to deepen our knowledge of the opinions on the opening of ICUs to visitors and study the various demands and expectations, we developed ad hoc semi-structured questionnaires that were distributed to three groups: relatives, nurses and doctors. Simultaneously we planned the training of all the staff of the unit and created tutors within the ICUs with the aim of:
- Welcoming the sick and their families upon their arrival in the hospital;
- Continuously relaying information to relatives on the designed therapies;
- Acting as mediators between the patients and relatives and the doctors and nursing staff, with a continuative explanation of the diagnoses, and results of tests effected during hospital stays;

Handling the protected discharge procedure.
The adoption of the project also included changes in internal organizational and care activities.
Results and Conclusions The General Hospital of Perugia initiated its journey towards becoming a "Friendly Hospital" and the opening of the ICUs. The change towards becoming a more open facility was perceived as a concrete need of the different parties involved. Structural and organizational changes necessarily call for a corresponding change in relationships. Interpersonal relations in fact, presume greater maturity on the part of the operators, good knowledge of oneself, and awareness of one's own reactions in diverse situations and the value of the person.

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11.30 - 11.45

Humanizing healthcare: operators' perceptions on the effects of the open visiting hours policy in the ER.
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Introduction. The A&E Dept. of the G. Bosco Hospital designed a project for the implementation of free visiting hours, in order to combine continuative care with "open" intensive care policies, in an effort to humanize healthcare. The enforcement of this project was subjected to the concurrence and incentives of the staff.
Objective. To study the convictions and attitudes of ward staff towards a policy of open visiting hours.
Materials and Methods. An observational, descriptive study was carried out involving all the staff of the Emergency Medicine units (19 nurses, 9 physicians, 8 public health operators) who were given the BAVIQ questionnaire (beliefs and attitude toward open visiting hours in the ICU) that surveyed the opinions on and attitudes towards an open ICU policy.
Results. The study analyzed 29 questionnaires. On the whole the respondents agreed on the beneficial effects of visits to the patients under confinement and highlighted how this situation could help the patient's recovery path and reduce the anxiety of their families.
Conclusions: The survey underpinned the tendency of survey respondents to agree to open visiting hours policies. However, because of the low rate of response from the public health operators and their tendency to disagree with free visiting hours, together with the high frequency of neutral responses to negative valence items, it was presumed that the project could push through after further consent and specific training.

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11.45 - 12.00

Survey on the factors at the base of trust relationships established at the onset, between nurses and relatives of patients in an open ICU.

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Introduction. Confinement in the ICU is a critical event which involves the patient and his/her family nucleus. Mutual trust is fundamental in relationships between practitioners and families of patients. Understanding the factors at the base of such relationships will guide the activities of intensive care operators.
Objective. To identify and describe the basic factors of trust relationships between nurses and families at the onset in the intensive care setting.
Materials and Methods. We undertook a qualitative family satisfaction survey following the phenomenological method. Eighteen, non-structured, free response interviews were conducted on relatives of patients confined in intensive care. They were asked to describe their experience and the impact the ICU had on them. The data was analyzed with the Van Kaam method.
Results. Analysis of the texts highlighted 32 preliminary structural elements, summarized in five essential items. All evidenced the importance of relationships based on trust: response to the need of information in a direct and realistic manner, easily comprehensible information bulletins given in real time by practitioners. To be present in the same room with the staff will allow visitors to perceive the elements of organization and professionalism, and come into intact with reality. The professional behavior of staff will uphold the basics in care such as respect for the individual, involvement, an open environment which helps reduce the impression of solitude, and immediate interventions when needed. All these factors may be extended to other settings.
Conclusions. The study allowed us to underline some basic factors in creating relationships of mutual trust in open ICUs. The positive components of communication and sharing of facilities and time are essential to the experience lived, creating mutual trust relationships. It led operators to deeply reflect on the ways of interpreting their roles and building therapeutic alliances, and how the viewpoints of others can regulate their daily patient-centered behavior.

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12.00 - 12.15

Open ICUs. An Aniarti Project.

Silvia Scelsi, Aniarti Vice-president

Introduction. Even in Italy today, very few facilities favor the changing of the restrictive logic behind intensive care units, despite the fact that opening the ICUs would be a radical, cultural turning point for the Italian healthcare system and all the operators since it would reinforce the concept of empowerment and active participation of patients and their families in the process of care and social assistance.
Objective. To campaign with the congress participants on this issue, to foster improvement in the quality of life and work in Italian ICUs.
Materials and methods. Analysis of a year's activities in Anitarti's "Open ICU" ongoing educational project, discussion of the move for passing of the bill regarding issues for "Open ICU Provisions" and illustration of the joint stance taken by Aniarti/Ipasvi.
Results. The courses held in one year were attended by a great number of participants. An initial analysis highlighted great interest in this issue but also opposition to the opening of ICUs essentially bound to cultural and organizational factors. The importance of this theme for Italian healthcare is undoubtedly and strongly stressed by the joint favorable attitude of Aniarti/Ipasvi and the bill itself.
Conclusions. Needless to say, an open debate between Italian operators through educational courses, and actions to disseminate the bill are certainly very useful.

November 15, 2012 - Morning - White Conference Room

Children and quality of life

9:00 - 9:15

The communication "weft" in the ICU and rebuilding the identities of child patients and interaction with their families.

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Introduction. More than 200 children are operated yearly in the "Centro Gallucci" for congenital heart diseases. After surgery, these little patients spend a few days under observation at the ICU, where they can be visited by their parents only for a limited time set by the established visiting hours. We asked ourselves: can a non-medical factor encourage the opening of the ICU to parents and contact with their children in intensive care facilities?

Aim. The study aimed at assessing the impact of the hand-colored "blanket "placed over the child's bed immediately after surgery.

Materials and Methods. The project that involved 50 children (n = 50) operated for congenital cardiopathy from January to September 2012, was structured in two phases:

Phase I: during the visit of the child's parents to the ICU on the evening of the first post-surgical day, Day 1) a hand-colored blanket was placed on the child's bed, bearing the tiny patient's name.

Phase II**:** the day after, during the parents' visit, the blanket was removed. On this occasion the parents were given a semi-structured questionnaire to study and observe their reactions and impressions.

Results. A preliminary analysis of the data (more than 100 questionnaires were gathered) underlined that the "blanket" was regarded by parents as a "useful" and "not an ordinary" element, one that was "comforting," helped to give "solace" and was "soothing," and appeared like a "meeting point" that could facilitate communication with healthcare practitioners and favor the re-interpretation of care routines that are perceived as less technical and impersonal, thus improving their impression of the nurses' quality and professional care.

Conclusions. We could preliminarily conclude that the presence of a personalized identification of the patient in the ICU consisting of colored, artistic items, is perceived by parents as an important sign of personalized care, that contributes to enhancing excellence and quality of care rendered, and establishing a global "acceptance of responsibility" on the part of the team involved.

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9:15 - 9:30

Implementing Pet Therapy in the pediatric intensive care.

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Introduction. During hospital stays, the time dimension differs from that perceived in normal life. Reduced daily activities and relationships offer more time to dwell on one's illness and one's body and thoughts, and this amplifies the suffering which is nothing less than the process of a mental interpretation of the disease.

To break this loop and change the rhythm of the day, starting January 2012 Pet Therapy was introduced in the ICU, especially for children affected by chronic/degenerative diseases and who were subjected to repeated, and at times, long hospital stays.

Pet Therapy is already acknowledged for its effects in the recovery of neuromuscular skeletal functions and of interpersonal relationships, and is also ideal for the recovery of mental, sensorial functions of pain and suffering. Bibliographical research furthermore demonstrated that the introduction of Pet Therapy does not increase the number or types of hospital infections.

Aim. The aim of a first observation carried out during the first five months of activity, was to evaluate the impact of Pet Therapy on the operators and parents of patients hospitalized, retaining this as a fundamental aspect in enhancing relationships

between dogs and children and the continuation of the project.

Materials and Methods. Distribution of semi-structured questionnaires handed out to parents and operators before and after the visit of the dogs in the wards.

Results. The results were extremely positive, and demonstrated that while the children were fearful and distrustful of the animals, they were able to overcome this with the help of the adult caregivers, and had beneficial effects on the child's experience with his illness and hospitalization. Information given out beforehand to the parents regarding possible infections, hygiene problems, etc., also completely cancelled their perplexities on these issues.

Conclusions. Seeing the feasibility of the project, the second observation phase was launched with the aim of assessing the psycho-behavioral reactions of patients (relationships, serenity, pain…). The presence of animals in the ICU changes the ward's features, allowing patients and their parents to live an unusual and unexpected experience. The dogs bring joyfulness, readiness to listen and dialog, drawing the patient's attention away from his illness, and enhance empathy of relationships and communication and the patient's hospital stay experience.

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9:30 - 9:45

Palliative pediatric Care delivered in the hospital and at home, and vice versa.

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Introduction. Palliative Pediatric Care (PPC): addresses above all, children affected by incurable diseases but with rather long life expectations and whose pathologies may range from metabolic or genetic to neuromuscular pathologies (less than a third of which are terminal/oncologic cases).

These patients need both hospital and regional multidisciplinary support, most often intensive-care type of services, in order to exploit the residual capacities and sustain their vital functions.

They would, however, have to be ensured the best quality of life by reducing hospital stays. Those who need respiratory support, also of the invasive and continuative type (tracheostomized/24 hrs. ventilation), have to be handled at home and not be forced to live in IC wards, by training their families to take care of them, thus allowing them to live their lives as normally as possible, frequent their friends and also go to school.

Since 2010 the Buzzi Hospital has become the reference point for PPC in the province of Lombardia. The experience matured when the hospital took charge of the care and assistance for about 80 patients, a circumstance that initiated the development of a protocol which provided: admission of patients to the acute phase or their transfer to other hospitals also outside the city/region; assessment of the respiratory conditions and identification of the type of support needed (aspiration, NIV, tracheostomy…); identification and adaptation of the equipment and interfaces for each child; education of parents on child management, and use of equipment and home care.

The program guaranteed telephone assistance 24 hours all year round, to be able to: answer the doubts/problems; allow the partnership of the pediatric doctor and local assistance teams for the joint management of the child (clinical/educational support) conduct visits and admissions to facilities in cases of acute pathologies, with periodical reassessment within intensive care also when the need arises to change the treatment paths; and plan the paths and limits of the treatments with the family/pediatric doctor/home care assistants.

To further reduce the stress associated with hospital admission a special home-like room was created within the intensive care unit, which thus had a lighter impact, and ensured the presence of parents 24 hours around the clock. Furthermore, nurses and doctors were specifically trained to handle these care aspects (with particular attention to the educational objectives).

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- Law 38/2010

9:45 - 10:00

Parents and operators in a joint effort to improve quality of life.

Sabrina Iacuzzi, Patrizia Giacomini, Neonatology, General University Hospital of Udine

Introduction. Over the last decades, the remarkable progress achieved in the field of care and assistance for premature babies has led to a significant reduction in the mortality of babies with very low gestational

weight and age. Along with the evolution of diagnostic-therapeutic aspects, greater importance has been given to the adoption of care models that focus on the extreme fragility and complexity of these newborns. The care targeted for these little patients is the fruit of attentive observation of their needs, resulting in reduced stressful experiences of admission to the Neonatal Intensive Care Unit (NICU). In a period of great developments of the central nervous system, and therefore of elevated plasticity, the care procedures play a prominent role in determining the newborn's central nervous system behavioral and relational development.

Aim. Precisely in view of promoting psycho-motorial development, the NICU operator has the task of bringing parents closer to their child, by reducing the impressions of barriers created by the highly technological environment and encouraging them to progressively participate in the rendering of care.

Materials and Methods. We conducted a literature review with the aim of underlining the importance of the active participation and presence of parents during the child's stay in the NICU, in terms of improved neonatal outcomes.

Results. Results were seen on two fronts. On one hand, better outcomes were achieved in the short and long-term regarding the growth and development of these patients, and on the other, there was a reduction of the operators' stress due to the therapeutic cooperation built with their parents.

Conclusions. The building of therapeutic alliances between parents and operators improves the clinical-care conditions of neonatal patients.

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10:00 - 10:15

Quality of life in the Neonatal ICU.

Federica Moro, Anna Casalotti, Metella Deana, Elena Sigalotti, Elena Gratton, Silvia Di Bernardo, Valeria Chiandotto, Neonatal Pathology Dept., University General Hospital, Udine
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Introduction. Preterm birth drastically breaks the mother-child bond at a crucial moment of the child's psycho-motorial and behavioral development. Prolonged stay in an over-stimulating environment such as that of the Neonatal ICU, produces changes that impact on the long-term prognosis of development.

Aim. To create organizational models that focus on facilitating the building of the fundamental biological rhythms of the newborn that equally take into consideration the resources available, in terms of structure and staff, and families' needs.

Materials and Methods. The post-acute hospitalization periods were examined (stability of cardiorespiratory conditions, discrete nutritional independence): care models were integrated since only standardized behavior among operators (nurses, doctors and physiotherapists) can ensure a certain degree of success. Furthermore, operating in harmony produces a positive cultural exchange which endures in time.

Results. The implementation of set organizational models has made operators more aware of their daily tasks, and enabled greater cooperation with family members resulting in facilitated and faster discharge from the ICU.

Conclusions. The quality of life of the premature infant or those with clinical problems also depends on the length of their stay in the Unit. Due to this, the various ICUs should implement protocols that focus above all, on the future of these little patients.

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10:15 - 13:00

Experience of an Open Neonatal ICU

Carmelina Stabile, Neonatal ICU, Benevento

…Preparing oneself at best

11:00 - 11:15

New feedback systems in real time to achieve quality in cardiopulmonary ICU.

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Introduction. The quality of external thoracic compressions (ETC) during cardiopulmonary resuscitation (CPR) is associated to increased survival rates of victims. Thanks to the development of innovative technologies, various tools are currently available and can help operators to carry out high performing ETCs (1).

Aim. To describe the main feedback tools in real time during CPR and their reasonable usage, in both real clinical or simulated contexts during educational activities organized by the Maggiore Hospital of Bologna.

Materials and Methods. ETC performances were evaluated during simulation settings implemented by critical care practitioners and non-specialists without feedback systems, using different types of tools: MRX-Qcpr (Philips Medical Systems®), iCPR (iPhone applications) and the Mini VREM (Mini Virtual Reality Enhanced Mannequin) prototype that uses a commercial Kinect sensor (Microsoft® co.), together with a software specifically developed to assess the depth and frequency of ETCs.

Results. The use of feedback systems in real time during CPR can result in the achievement of better performances in terms of both frequency and depth of the ETCs, compared to the indications of the recent ERC 2010 guidelines. The Mini-VREM system demonstrated an increased performance of the ETCs in simulations using the Kinect sensor, jointly used with the videogame X-BOX consoles.

Conclusions. Real time feedback tools used during CPR, together with more complex systems used in the applications marketed for Smartphones, were seen to significantly improve the quality of the ETCs in both clinical settings and simulations during educational programs, and their usage may probably imply increased survival rates for victims of cardiocirculatory arrest. Moreover, the Mini-VREM system has opened out new perspectives within the educational setting, particularly for the development of self-education or distance-learning programs in view of the population's increasing use of CPR.

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11:15 - 11:30

Evaluating nurses' skills in the ICU.

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Introduction. What are the competences of nurses in the ICU?

Starting off from this question, we prepared an anonymous questionnaire for a self-evaluation of competences based on those cited in international scientific literature and in the tools used by international employment agencies to screen nurses upon their employment.

Aim. Our study aimed at assessing the competences of the nursing staff in view of bridging the educational gap and to better plan their training.

Materials and Methods. Anonymous, self-appraisal questionnaires using the Likert 1 – 4 scale. Before it was distributed, the questionnaire was elaborated by three experts of the sector. The sample was the nursing staff of the ICU department of the Healthcare Units of Florence (Hospitals of San Giovanni di Dio, Santa Maria Nuova, Santa Maria Annunziata, Borgo San Lorenzo), selected for convenience criteria (staff on duty during the survey period).

Study period: April– May 2011. The data was analyzed through the Epi - Info® program.

Results. Out of a total of 102 questionnaires distributed, 77 (75%) were filled out. The results evidenced a rather comparable level of skills among IC nurses. Elevated competences were found in the management of drugs, the respiratory sector, and in the basic interpretation of ECGs, cardiac monitoring and that of vital signs.

The main deficiencies were seen in sectors where clinical records were limited: ECMO and patients with transplants (not present in the two hospitals), cardiac tamponade and management of IABP, and burns.

The main differences evidenced among the ICUs can be associated to the disciplines practiced in the Hospital: the only ICU which rated a high score of 3 – 4 (71.6%) in the vascular field was that of San Giovanni di Dio Hospital, the only one with a vascular surgery department.

Conclusions. The survey helped in the creation of a corporate educational plan for intensive care, aimed at bridging the gaps that emerged, thus optimizing the educational resources. The next step we intend to take is to correlate the competences to the quality of care given.

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11:30 - 11:45

From simulation settings to reality. Reducing the risks of a complex procedure: out-of-hospital transfers of patients with extracorporeal membrane (ECMO). The experience of the ICU of Cuneo.

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Introduction. In our facility, the positioning of an ECMO support as a "bridge" to transplants provides for the transfer of a patient to the referral Transplant Center (Molinette Hospital of Turin). The limited clinical records make this an ever "new" event and not free from critical factors related to the limited experience and complexity of this procedure.

Aim. To reduce the risks for the patient with extracorporeal (ECMO) supports during transfers to the referral transplant center.

Materials and Methods. Review of the first transfer effected without procedural simulations, identification and analysis of the critical factors encountered. Literature research on the topic.

Simulation of all the phases in the procedure:

1. Outfitting of material and preparing the patient.
2. Taking charge of the patient on the stretcher.
3. Installing the ECMO circuit on the stretcher.
4. Itinerary from the ward to the A&E department.
5. Loading of stretcher onto the ambulance.

The simulation sessions made use of a dummy, a complete ECMO circuit, a pulse counter, an infusion monitor and pump. The staff involved were: the Anesthetist, Nurse, Perfusionist, welfare-healthcare operator, ambulance driver.

Results. In reviewing the first transfer effected, we noted the presence of critical factors related to the safety of the patient, especially when getting on the ambulance and the schedules related to transfer from the ward to the A&E dept.

The simulation sessions allowed us to:

1. Determine a safe and rapid procedure, also thanks to the instrumental installation of a specifically designed structure on the stretcher to improve the housing of the console and the circuit;
2. Rationalize the human resources used;
3. Successfully implement the procedures to a real transfer of patients.

Conclusions. As was seen in literature, many studies demonstrated the effectiveness of simulation sessions in teaching the operators about procedural skills and team work. Simulation courses helped us to study the best way to carry out the procedure, and standardize maneuvers and methods so as to avoid unprepared or hurried proceedings.

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11:45 - 12:00

Quality in hospital triage: pursuit of the best applications; experience of a group of triage educators in Tuscany.

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Introduction. The Healthcare Service of the Tuscan Region makes use of an intra-hospital triage system consisting of five priority levels which, in a decreasing order, go from red to yellow, green, blue and white (DGRT no. 736/2001). Comparison of data regarding the consumers of this service in the Tuscan ERs in 2004 had evidenced a strongly non-standardized way of assigning the color code among the various facilities, certainly not only due to the different types of case mix of patients that showed up in the hospitals, but probably also because of the decision-making algorithms worked out by each facility, the inconsistent attitudes taken towards triage methodologies, the different types of triage cards from

the standpoint of IT applications, and those that did not comply with triage methods implemented during staff training. This inconsistency was addressed mainly by the adoption of regional decision-making algorithms for the 19 widely-diffused symptoms, through the use of a basic systematic training program and a retraining in ER triage, and adoption of a uniform and regionally diffused software. It was then possible to insert oneself within the system to guide the decision-making process of triage algorithms according to the contents of the decision-making steps drafted by the Group of Regional Triage Educators, which limited the possibility of human errors and favored the systematic gathering of data in order to carry out audits and draw up descriptive statistics and correlations.

Aim. The study aimed to improve, in the main regional ERs, the distribution of apparent symptoms according to the five priority levels while paying attention to the reduction of the item "other symptoms and disorders" covered by the minor codes, and to adopt more suitable methods of assigning the red code.

Materials and Methods. The Regional Group of Triage Educators worked together in defining the method each Educator applied in his/her own A&E dept., with a first meeting for discussion and brainstorming, and handing out of information to colleagues. This was preceded by a data collection on the levels of color codes, both as a whole and for every nursing account, and lastly, the classification of the red codes assigned in Triage, correlated to the outcome, both as a whole and for each account. During this first meeting each nurse was given his/her own report/performance on Triage activities in 2011 and the trends of the first quarter 2012, prior to the meeting. Each Educator in his own group, after analyzing/giving his/her opinion on the general data, set the margin for improvement in terms of percentage which he/she was determined to reach and would submit to an audit.

In September, a new specific audit - after 3-4 months – at each of the A&E Depts. – would be carried out by each Educator with a new gathering of data on the same topics, with the same characteristics, and that will act as a "case check" to verify the achievement of the pre-set goals.

Discussions and Conclusions. In reality the work performed by each Educator in the various regional A&E Depts. was not simple at all due to the difficulty in obtaining the data from each application despite the updates performed till then. As to the distribution of the minor codes, this was affected mostly by the different types of organizations each regional A&E dept. adopted (fast-track, see and treat, etc), whereas with regard to the distribution of the clinical cases, there was a strong reduction of the item, "other symptoms and disorders." The results reported by each Triage Educator in the last meeting will relay how much the overall yearly activities of the Tuscan Triage Group have contributed to reaching the objectives set.

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12:00 - 12:15

The use of nursing narration laboratories in teaching critical care and bioethics: a 3rd Year Nursing Science Degree experience .

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Introduction. Narration in the nursing university curricula is effective in the acquisition of new competences and facilitates changes in psycho-relational attitudes. In order to change the educational process of nurses we need to intervene on the informal dimension of education and comprehend the hidden aspects of apprenticeship that convey equally hidden but powerful values to such a point as to impact on the building of professional identity. This awareness brought about the Nursing Narration Laboratory.

Aim. To develop narrative skills, and listening, observational and relational abilities. To create awareness of narratology to decipher how the critically sick or terminal patients and their families experience their illnesses and suffering.

Materials and Methods. Literary citations, films and paintings with themes on the critical factors of the sick, or the terminal phases of treatments in order to comprehend all the aspects of illness and suffering and educating professionals on the management of emotions. The list of literature offered created a strict methodological formula for the learning and accomplishment of relational abilities.

Results. The students learned how to: acknowledge that listening to others is a fundamental element of mutual knowledge; carefully observe attitudes and behaviors through their knowledge of verbal,

nonverbal and paraverbal communication; and analyze literary, pictorial works and films to interpret the metamessages.
The students showed their interest and participation. The accomplished laboratory assessment questionnaires evidenced highly positive results.
Conclusions. Narrative skills consolidated ethical competences, also related to critical care. The experiment on analysis skills from the clinical and narrative viewpoint gave the students the chance to build up a more complete professional competence and made them aware that illnesses can be externalized, and pass from a cultural concept of passivity to that of activity, via narration.

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November 15, 2012 - Morning - Yellow Conference Room

Working and living in the quest for quality

9:00 - 9:15

040 "Living with a left ventricular assist device (LVAD).

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Introduction. Left ventricular assist devices (LVAD) are currently used as *destination therapy* (DT) in class NYHA 4 patients whose conditions make them unsuitable for heart transplants (Franzier, et al. 2003). It has been proven that a year after the implant, these patients spend most of their time at home and have a good quality of life. (Allen et al., 2010).

Objective. To describe and comprehend the life experiences of LVAD-implanted patients living at home.

Materials and Methods. Qualitative phenomenological study, through a semi-structured interview with LVAD patients under destination therapy carried out at home, a year after hospital discharge. The audio interviews were recorded and transcribed and were elaborated through content analysis. (LoBiondo – Wood & Haber, 2004).

Results. Analysis of the data highlight four main themes: "accepting the implant," "adapting to a new lifestyle." "impact on the quality of life," and "metaphor: what living with an LVAD means." After accepting the implanting of the device, the patient adapts to a new lifestyle that implies also difficulties, limitations and the need for a caregiver's help. Furthermore, the device is well accepted since living with an LVAD means to continue living and maintaining or even improving the quality of one's life.

Conclusions. People with LVAD manage to adapt to the new lifestyle and accept the device as an integral part of their bodies, maintaining a good quality of life. The study evidenced some critical factors in living daily with an LVAD that could be an issue to be studied further so as to offer concrete and increasingly appropriate care.

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9:15 - 9:30

Transversal observational study on the burnout syndrome in practitioners working in the adult anesthesia and reanimation units.

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Introduction. The progress of medicine over the last years has been characterized by the lengthening of the age of patients. This has led to an increase of concomitant pathologies, together with more complexities and difficulties in rendering personalized care, revolutionizing man's traditional relationship with life, not to mention the aspect regarding psycho-physical energies the staff needs to be able to assist terminal patients and their families: all this may lead to work stress situations with consequential emotional breakdowns and reduced sense of fulfillment which in time, may lead to the burnout syndrome.

Aim. To verify the prevalence of burnout among nurses, physiotherapists, support and coordination staff of the Adult Reanimation/IC units assisting patients in critical conditions. To determine the burnout levels and assess the main sources of stress, degree of work satisfaction, and presence/absence of clinical psychological disorders.

Materials and Methods. The participants were given some self-assessment questionnaires:

1. Maslach Burnout Inventory (MBI) to assess the presence of the burnout syndrome;
2. Coping Orientations to Problem Experienced (COPE) to assess the procedures needed to face psychologically stressful situations;
3. Participants were given the chance to participate in an optional psychological-clinical interview to assess psychological stress.

Results. The data analysis highlighted that the sample, composed of 190 persons out of which 67 were males and 123 were females (mean age of 37.28 years), tended to be mainly subjected to depersonalization and also the other rating scales

furnished data that came close to the threshold levels: emotional breakdown of 19.76, reduced personal fulfillment of 35.46.
Conclusions. The data reported leads us to reflect on the fact that adequate educational paths and support systems aimed at empowering the adaptive coping strategies could contribute to lowering the levels of some rating scores that characterize the burnout syndrome.

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9:30 - 9:45

Quality of life and psycho-physical wellbeing of staff in the Alto Adige Emergency Service.

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Introduction. Work satisfaction and the psycho-physical wellbeing of healthcare operators play an important role in the quality of services furnished. These issues are becoming increasingly relevant within healthcare settings where the "health" of nurses can be gauged through a methodology consisting in active listening sessions that reveal the growing importance given to the practitioners' awareness of their working experience. Through a survey on the psycho-physical health of practitioners in the Alto Adige Emergency Department, we made an analysis that allowed us to define the strategies for action and self-action on the basis of the indications and suggestions of the staff members themselves.
Objective. The objective of the study was to evaluate the quality of life and the presence of eventual symptoms such as anxiety, depression, insomnia, restlessness, tension, and lack of appetite that may indicate the presence of the burnout syndrome, as well as work satisfaction levels and possible reduction of quality of services rendered by staff operating in the emergency department in Alto Adige.
Materials and Methods. We used an anonymous, self-compiled questionnaire, handed out to the entire nursing staff (n =80).
The tool consisted of the Maslach Burnout Inventory (MBI), the General Health Questionnaire (GHQ-12), the QUISO and the SF 36.
The data obtained was analyzed for multiple logistic regression to identify the predictive variables of burnout and states of anxiety and depression. All the staff filled in the questionnaire.
Results. The entire staff answered the questionnaire (35nurses). A first concise analysis underlined that the staff members are very much concerned about burnout issues within the working environment and are also aware of being "unprepared" to face, recognize and familiarize with the problem. What emerged was their request to be able to acquire the fundamentals for recognizing the onset of the symptoms, and expressed the wish to know the strategies to help them face these problems. The analysis of the answers to the questions regarding the single aspects of satisfaction aimed to single out the major areas of work stress that may lead to burnout, and through tools such as the staff supervision sessions, undertake implementable actions that may diminish the stress-triggering factors, and consequently achieve increased quality of life, psycho-physical wellbeing and last but not least, enhance quality of services rendered.

9:45 - 10:00

Nurses' quality of life and organizational stability: a transversal explorative study in the ER and ICUs of the Integrated University-Hospital of Verona.

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Introduction. Attracting nursing staff and making sure they continue working in one's healthcare facility has always been focused on by healthcare organizations of various countries and one of the most significant experiences to this end, was that of the Magnet Hospital. The study conducted up to today on this type of hospital, documents the high rates of working satisfaction among the nursing staff, with a low staff turnover rates and greater quality of care rendered and better quality of life for the nurses.
Objective. The study aimed at assessing, on the basis of the empirical model called the Magnet Recognition Program, the quality of life of nurses perceived in the emergency and intensive care departments.
Materials and Methods. The transversal explorative

study with samples of nurses working in two polyvalent ICUS and two A&E departments of the Integrated University-Hospital of Verona.
Data collection was done with the *Mueller-McCloskey Satisfaction Scale*.
Results. The questionnaire was distributed to 224 nurses; there were 172 compiled submissions and a participation rate of 77%. The female workers were the majority at 75 %, whereas the males made up 25%, and the greater age bracket, from 26 to 35 years was 54.1%. For 75% there was no stress at work, whereas stress associated to work was seen in a substantial 83.1% with important repercussions on the quality of life and wellbeing in the workplace and in the organizational climate, obviously without foregoing the impact on services rendered to patients.
Conclusions. The participants involved in the study designed a complex situation in accordance with international literature and also described areas that could potentially improve. Other studies will have to be undertaken in order to identify the specific "factors of magnetism" in various contexts to be able to validate a hospital magnet model that can be adapted to the Italian scenario.

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10:00 - 10:15

Fact-finding survey on the experiences of relatives of patients subjected to cardiac surgery while awaiting information on the results of the operation.

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Introduction. Admission to the ICU is surely a stressful and anxiety-generating event for the patient and his family, given that this is always considered a critical and dramatic situation which occurs most often without giving people the time to comprehend the gravity of the pathology. **Objective**. To learn about the experiences and the satisfaction levels of relatives of patients admitted to the Cardiac Surgery ICU of the S. Orsola Polyclinic - Malpighi of Bologna, while waiting for news on the results of the operation, in order to verify whether improvements can be made.
Materials and methods. Explorative study on relatives of hospitalized patients through questionnaires consisting of 21 questions with multiple choice answers. The questionnaire was anonymous and sequential, without needing prior informed consent.
Enrolment for the study consisted of a sample of 50 questionnaires and the sole criteria of exclusion for those who did not speak Italian and some types of surgery such as heart transplants and surgery on pediatric patients.
Results. The families declared that on the whole, they were satisfied and acknowledged the ability and expertise of the nursing and medical teams, and the need for the "restrictions" adopted by the ICU. On the contrary, they expressed their dissatisfaction regarding the atmosphere in the waiting room, the need for psycho-social support, the emotions they felt and difficulty in comprehending some terms used.
Discussion. To respond in a holistic manner to the changing needs of relatives, we have to add counseling skills as among the other necessary skills. An erroneous initial approach may most often condition the developmental procedure represented by the pathology and the environment but especially the psychological state of the patient and his relatives. It is not easy to satisfy all these factors, above all when added to stress and the daily routine of operators.
Conclusions. This issue certainly calls for further in-depth studies, but already this initial data will bring up considerable improvements. One of these will be hopefully implemented soon and consists in the opening of the ICU to more extensive visiting hours and the insertion of the questionnaire in the Diagnostic Path for Rehabilitative Therapeutic Assistance (DPRTATA) of the cardiac surgery patient.

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Quality of life during emergencies

11:00 - 11:15

Therapeutic hypothermia after cardio-circulatory arrest: pre-hospital management in the ICU.

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Introduction. In victims of cardio-circulatory arrest with the return of circulation, post anoxic damage in the brain is the main cause of morbidity and mortality. After circulation has resumed it is most common to note a period of hypothermia, and various studies demonstrate an association between cardiac arrest and unfavorable prognosis. The introduction of the light-moderate hypothermia technique has been confirmed to be an excellent strategy for the neurological outcome and survival of many. The doubt remains, however, as to "When should it start?" and "should this be done in pre-hospital settings or upon the patient's arrival in the ICU?" and "if done in pre-hospital settings, how should it start?"
Objective. To analyze and identify the critical care points, which a person may have to face during therapeutic hypothermia, and determine the correct timing and methodology in starting the hypothermia therapy..
Materials and Methods. An analysis of present-day literature using the main data bases (Pub Med, Cochrane Library, CINAHL). Key words used: Heart arrest; induced Hypothermia; Cardiac Arrest; Nursing Role; Cardiopulmonary resuscitation(CPR); Out of hospital CPR.
Results and Conclusions. Literature does not highlight any doubts on the importance of therapeutic hypothermia, but underlines the timing and methodology for successful induced hypothermia therapies. This was useful in identifying the vital critical care transitions that led to changes in nursing care procedures. The key point stresses the importance of "cooling time" phases and the earlier started, the greater the chances of improving neurological outcomes and improving the quality of life.

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11:15 - 11:30

Acute vascular cerebropathy: qualitative aspects of out-of-hospital nursing care.

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Objective. Ischemic brain stroke is a time-dependent pathology. In the Polesine region an out-of-hospital protocol is being used to reduce the time between its onset and treatment, , which singles out patients for thrombolysis and early brain reperfusion. Those who call the emergency 118 and refer to symptoms associated to strokes are given the Cincinnati Test (CPSS, Cincinnati Pre-hospital Stroke Scale). The test score is systematically recorded on the call's register. First aid is generally handled by dispatching an MSB (ambulance with onboard nurse). On the target the nurse administers CPSS once again, and if a positivity is really confirmed requests the 118 Operations Center to activate a Stroke Protocol. This retrospective study verified the effectiveness of Nurses operating in the telephone dispatch center and in assisting out of hospital stroke cases.
Materials and Methods. From 15/11/2010 to 15/6/2011, we analyzed the calls that were triaged with the "neurological yellow code." The sample was divided into 3 groups: a) True positives (stroke on call, stroke on target) b) False negatives (no stroke on call, stroke on target) c) False positives (stroke on call, no stroke on target).
Results. The data available confirmed that the nurse-dispatchers of the 118 of Rovigo, who delivered CPSS on the phone, obtained an elevated specificity (84.4%) and a discreet sensitivity (67.4%) in furnishing an adequate path for the patient suffering from a suspected stroke. The delivery of the CPSS to 58% of patients with suspected neurological pathology of any type and the other triage criteria, allowed for the activation of only MSB in 61.71% of the cases, and saved on resources.
Conclusions. Most of out-of-hospital assistance for strokes is performed exclusively by nurses with the telephonic supervision of the Center's doctor. Only in 3% of all the neurological codes is the onsite visit

required. The Stroke protocol allows the nurses to carry out independently the various tasks foreseen by the deontological code, to deliver immediate brain reperfusion to the patient afflicted by a stroke, thus improving the outcomes.

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11:30 - 11:45

Early treatment of acute pain in the ER

Sofia Soccorsa, Valeria Berti, Francesca Raggi, Nicoletta Marchesini, Lorenzo Marsigli, Dario Sbano, Andrea Magelli, Angela Cazzoli, Maurizio Ongari, Marco Giuliani, Tamara Russo, Barbara Neri, Elisabetta Vignoli, Carlo Descovich, Emergency Room, Appropriate Clinical and Technological Assessment, Regional Emergency, LHU of Bologna
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Introduction. In the ER, pain is habitually underestimated and undertreated due to a series of factors such as:

1. Religious/philosophical backgrounds (where 'pain is considered as an existentially necessary trial, as a cathartic experience);
2. Professional convictions that seem to have been overcome today (where the "abolition of pain takes away clinical elements that may be useful for the diagnosis");
3. The habit of concentrating efforts on the discovery of the cause of the pain rather than that of taking into account the patient's suffering;
4. Lack of specific education on analgesia;
5. Lack of practical Guidelines (LG).

This causes a useless prolonging of the patient's suffering and impacts negatively on his trust relationship with the facility and its healthcare staff.

Materials and Methods. In 2007 the A&E Dept. of the LHU in Bologna constituted a multidisciplinary workgroup to draw up an improvement project for the assistance of patients suffering from pain in the ER facilities, based on the awareness campaign carried out by operators on this topic, the drafting of a proper pain assessment tool and treatment of pain by the nursing staff at the reception area before the medical visit takes place. The workgroup used the Audit Framework method:

1. Introduction of pain among the vital parameters to be measured upon the arrival of the patient in the ER (triage phase);
2. Introduction of the NRS numerical scale to the initial assessment instruments (triage phase);
3. Local adoption of an International Guideline for pain treatment in the ER;
4. Training of ER operators, doctors and nurses on the issues and scopes of the project, medical-legal aspects and expected results.

Results expected. Overall improvement of the approach to pain in our emergency facilities, through reduced waiting times for treatment, and prompt prescriptions for pain-killing therapies at home. Assessment indicators: increase in the number of patients suffering from pain assessed with the proper NRS rating scale; reduced time intervals from the moment of arrival in the ER to the administering of painkillers: reduced pain scores after therapy; increased number of painkiller prescriptions: improved prescription for appropriate pain relief.

Discussion and Conclusions. The experience is a significant one in Italy, with regard to content, setting (big ERs) and esteem of the nursing profession.

11:45 - 12:00

Evaluating quality in triage processes.

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Objective. To perform a critical audit of activities and strong points through a systematic assessment of quality triage services.

Materials and Methods. The retrospective study took into consideration the number of admissions to the General A&E dept. in 2011, with the creation of a multidisciplinary workgroup. The 450 registration cards were sampled according to the color coding distribution rates and the required number in the triage (at least 20 registration cards for each operator). A list of indicators was defined which consisted of the main symptom, color code assigned, clinical/instrumental reassessment, measurement of parameters, color code changes, and admission times from triage to the clinical examination. The main referral systems used in defining the quality indicators were the guidelines

of the Lombardia Region and Triage Training Group, the Australasian Triage Scale, the Canadian Triage and Acuity Scale, and the actual procedure in use.

Results. A good part of the data that emerged from the review was seen to be in line with literature. The color codes were correctly assigned in 89% of the cases, the timing and revaluation modes and admission to clinical check were complied to, and 14 (3.6%) code changes were effected. The complete measurement of parameters registered a growth trend of about 85% in December 2011, with ulterior improvement in 2012. The privacy norm was not observed, the number of discharges from triage proved to be beyond the standard and some informative deficits were highlighted. Particularly critical was the overcrowding phenomenon and especially "boarding" that interfered heavily with care procedures, quality perceived and the staff's satisfaction levels.

Conclusions. The underestimations did not impact negatively on patient outcomes, corrective actions were laid for controls (systematic analyses, monitoring of sentinel events, clinical audits, and refresher retraining). Interventions were adopted for overcrowding management (diagnostic profiles at the triage and bed management programs) and improvement of the information system.

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12:00 - 12:15

An organized ER facility for intensive care: the Parma model.

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The new ER in Parma, a modern and avant-garde facility, is the expression of advanced technology that combines space and materials, and has led to innovative architecture at the service of patients. A care zone of 3,900 sq. m is formed by three "macro zones" that respond to the utmost demands of care. There are 18 stations for the average intensity codes, eight single stations for high intensity admissions, and an ambulatory area dedicated to low complex pathologies, which completes the picture of this new facility where the true novelty is the patient-centered approach with respect to the service. The architectonic model has thus become the expression of a clinical organization based on the intensity of care where the sectors themselves are equipped with a central control zone with stations for the treatment of patients arranged in rays so as to allow a visual control and improved operator effectiveness and efficiency. This model signifies for the patient, less transfers and the almost total completion of the care and diagnostic procedures within the same facility. The transition of the organizational model for ambulatories of the old ERs compared to the new organizational model based on urgency of care areas, reinforced the new organizational approach to care, based on the criteria of flexibility and integrated use of resources and competences. Parma was thus launched into a new method of rendering healthcare services because of the improved way of taking charge of care levels according to the new organizational and structural settings in the ER, assurance in terms of rational use of resources, an integrated model for the management of healthcare personnel, value given to commitment, and the acquired skills of the practitioners themselves.

15 November 2012 - Afternoon - Red Conference Room

Special session 1

Round table: Quality of life at its limits: taking on a new responsibility.

14:30 - 14:50

Nursing routine with end-of-life realities.

Giusti Gian Domenico, ICU of the Perugia General Hospital

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Introduction. The ICU, thanks to the use of advanced technologies and professionals, like all high critical care departments (H-CARE), gives the common citizen an impression of "immortality." This conviction, often rooted also in healthcare practitioners, clashes with the ethical dilemmas which professionals encounter daily. The end-of life (EOL) issue is a topic faced in different ways by the nursing sector which is influenced by education, cultural and religious beliefs.

Materials and Methods. A literature review was done by using the terms "Critical Care"[Mesh] and "Nurses"[Mesh]) and "Terminal Care"[Mesh] in the data bases of PubMed, Cinahl, ProQuest and Google Scholar, and articles referring to the last 10 years were gathered.

Discussion. Discussions on EOL treatments have been going on for some years among various professionals, but what emerged from literature was the need to relay clear, correct and coherent information not only to the families of EOL patients but to all healthcare practitioners. Often there are set standards for therapeutic pathways and this creates confusion especially among nurses who have to carry out key roles in rendering quality also in EOL care.

Conclusions. In order to face the critical aspects of EOL care, nurses should meet and discuss with other practitioners, institutions and hospital organizations to be able to lay down standards that may embrace the traditions and culture of the specific social environment they work in.

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14:50 - 15:10

The nursing community and end-of-life care.

Anna Maria Marzi, Head of the Training Center for palliative care "Caring for oneself and the others" Madonna dell'Uliveto di Albinea, Reggio Emilia

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The viewpoint on professional responsibility regards the current and future management of end-of-life (EOL) processes.

Professionals could/should contribute to the development of society's attitudes towards awareness of the end-of-life reality which is most often mystified and misunderstood.

15:10 - 15:30

Health practitioners face to face with the end-of-life reality: time for new synergies.

Davide Mazzon, Director of the Anesthesia and Reanimation Dept. San Martino Hospital, Belluno

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How to overcome the vision of "sole decision-maker" attributed to doctors, with regard to the concrete end-of-life reality.

Significance and benefits of a decision-making process widely shared and founded not only on abstract medical-scientific factors.

Possible pathways for new decision-making that includes all the professionals potentially involved, to hopefully find better solutions. The example of the "Recommendation for the limitations of intensive care and end-of-life care management in the ICU" now being used at the ICU of the Belluno Hospital.

15:30 - 15:50

What is at stake for patients/family

Valentina Borgogni, President of the "Gabriele Borgogni" Nonprofit Association, Florence
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The importance of perceiving problems to be encountered and solved at the end-of-life phase. Elements that could improve operator/citizen relationships at the end-of-life stages.
Suggestions for the review of healthcare protocols to handle EOL phases that meet the current demands.

15:50 - 16:10

Evolution of the human experience and possible pathways to be shared regarding EOL in this technological era.

Gabriella Caramore, Essayist, Rai Radio 3
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The new concepts of life, death, health and the value attributed to dignity and self-determination of people. Factors seen in the objective impossibility of not intervening in life processes of people in today's healthcare systems.
A philosophical reflection on the end-of-life phase which is however influenced by technology applied to healthcare and the different cultural views of society today.
The need to assume collective and individual responsibility in handling and making decisions with regard to the end-of-life events. Pathways leading to the composition of, at times, contrasting cultural and ethical viewpoints. What humanity can learn from this new responsibility.
Quality of life at its limits (a new dimension of evolved lifestyles the community has to undertake). Whatever decisions are made, also the presumed nonintervention is a responsibility assumed on behalf of others: a reality which cannot be avoided.

Special Session 2

International Critical Care Guidelines: the novelties for 2012

16:45 - 16:55

Guidelines, from scientific literature to clinical practice.

Elisa Mattiussi, 2nd Intensive Care dept., University Hospital of Udine
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The Guidelines (GL) are defined as "recommendations for clinical behavior, laid forth through the opinion of experts following a systematic process of reviewing literature with the aim of helping clinicians and patients to decide the more suitable care paths to undertake in each specific situation. The objectives of the GL is to ensure the utmost suitability of interventions, reducing variability of clinical decisions to the minimum, as related to the lack of knowledge and subjectivity in defining healthcare strategies.
Fundamental characteristics of evidence-based Guidelines:

1. Systematic review: should be built through the best scientific evidence available based on systematic reviews or guideline updates on the basis of proven effectiveness already produced by other groups or agencies.
2. Evidence grading: must declare the quality of information used (level of evidence) and the importance/significance/feasibility/priority of their implementation (degree of recommendations).
3. Multidisciplinary features: must be produced through a multidisciplinary process until guidelines are improved and adopted in clinical practice.
4. Support in decision-making: should explain the alternative treatments and their effects on outcomes.
5. Flexibility: they have to be flexible and adaptable to the variable local conditions.
6. Assessment criteria: the possible useful monitoring indicators should be explained so as to assess their effective application.
7. Updates: Guidelines should be updated regularly so they will not be outdated.
8. Clarity and user-friendliness: they should be clear, simply structured and expressed in comprehensive terms which explain in an irrevocable way all the indefinite areas and points considered fundamental.

GRADING METHOD: *Grades of Recommendation, Assessment, Development, and Evaluation* help to define the level of the facts and determine the strong points of the guideline recommendations. To critically assess the methodological quality of the GL the **AGREE** tool can be used (*Appraisal of Guidelines for Research and Evaluation*) to evaluate the methodological accuracy with which the GL was developed. It will not allow the assessment of the clinical contents of the GLs and the quality of the facts they are based on.

Sitegraph

- www.snlg-iss.it
- www.nice.org.uk
- www.sign.ac.uk

- www.tripdatabase.com
- www.gradeworkinggroup.org
- www.agreecollaboration.org
- www.evidencebasednursing.it
- www.guideline.gov
- www.nzgg.org.nz

16:55 - 17:05

Cardiopulmonary resuscitation: really the most remarkable?

Silvia Scelsi, Aniarti Vice-President
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In 2010, an audit on the recommendations regarding cardiopulmonary resuscitation highlighted some facts in the handling of cardiac arrest patients and underlined the fundamental importance of early external thoracic compressions and their correct management in depth and timing rhythms.
Survival has been shown to be directly correlated to the quality of thoracic compressions. This led the biggest scientific companies to publish management protocols for patients suffering from cardiocirculatory arrest (CCA) inconsistent in the initial approach. ERC maintains the action protocol according to the ABCs whereas the American Heart Association changes it to CABC. Ventilation has to have a reduced volume not greater than 500 ml per insufflation. As to defibrillation, identifying the defibrillable rhythm maintains the priority, but it is recommendable to interrupt compressions for the shortest time possible.
The percentage of rhythms at the start of the CCA is estimated in a smaller percentage compared to the previous recommendations (about 50%), but what still holds is the importance of administering shock if necessary, since it is surely effective therapy.

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17:05 - 17:15

Head in place: guidelines for traumatic head injuries.

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Serious head injuries are one of the injuries that most often cause serious disabilities, and as a result, huge economic and social consequences. Brain damage is not only limited to the moment of collision (primary damage) but evolves in the succeeding hours and days (secondary damage). The main principle in treating a head injury is the prevention of secondary brain damage, achievable through adequate oxygenation and maintaining of a systemic pressure that is able to ensure brain perfusion.
The outcome of these patients is dramatically influenced by the quality of treatment given during the first hours after the trauma, and especially by the most frequent combination of systemic factors of the worsening conditions such as arterial hypotension and hypoxia, besides the delay in the diagnostics of surgical damages. It is precisely in the prevention of secondary damage that nursing assistance plays a fundamental role, to achieve better outcomes for the patients.
The objective of this intervention is to supply nursing staff handling head trauma patients, with some important guidelines in assisting these types of patients, keeping in mind that the final objective must also be that of achieving the best outcomes for the patients.
The American Association of Neuroscience Nurses (ANN) published in 2008 (last reviewed in 2011) in its series of Clinical Practice Guidelines, a document on "Nursing Management of Adults with Severe Traumatic Brain Injury" with the objective of proposing evidence-based suggestions for the nurses who assist patients with severe traumatic head injuries.
Severe brain trauma is defined as brain damage caused by a trauma, with a GCS point lower or equal to 8.
The documents suggest which nursing interventions should be focused on to maintain the following objectives:

1. Maintain adequate intracranial pressure (ICP).
2. Treatment of intracranial hypertension (HICP).
3. Maintain adequate pressure for cerebral perfusion (CPP).
4. Types of ICP monitoring methods.
5. Prevention of deep venous thrombosis.
6. Maintain adequate nutritional intake.
7. Control of glycemia
8. Prevention of epilepsy.

17:15 - 17:25

Ventilation with less infection: said and done!

Matteo Manici, Elena Martella, Services for Anesthesia, Reanimation and Antalgic Therapy , Parma

Introduction. The onset of infections in the ICU is one of

the main causes of death and increases morbidity, resulting in increased healthcare and social costs. Furthermore, it is an important indicator of quality assistance. Among these infections, VAP (Ventilation Associated Pneumonia) is one of the most frequent in intensive care (1).
The American Thoracic Society (2005) defines Ventilator-Associated Pneumonia (VAP) as pneumonia that starts after 48-72 hours from the moment of intubation (2). The most important pathogenic mechanism comes about from aspiration or inhalation of oropharynx mircoorganisms in the distal bronchi.
Aim. To illustrate the pathway undertaken by the Intensive Care Unit 2 of Parma, starting off from the possible causes for the increase of VAP incidents up to the implementation of an improvement project based on the recommendations of the 2009 and 2010 guidelines implemented through the GiViTI procedures. The main steps are presented later.
Materials and Methods. Identification of the originating causes of VAP infections: the technical and healthcare staff were involved in brainstorming sessions which highlighted the possible causes of the increase of VAP associated to the methods, materials, manpower, and machines. The brainstorming sessions did not produce a thorough classification of the problems, subsequently completed thanks to the study of referral literature and guidelines.
Critical assessment of literature: the guidelines subsequent to those adopted (ATS, 2005) were systematically researched using the databases, Mesh of Pubmed, Tripdatabase and Cochrane Library, and other research materials. Seven documents were gathered and subjected to quality assessment with the AGREE II tool. The reading of the Guidelines highlighted an irregular picture. Compared to the methodological accuracy and illustrative clarity, all the Guidelines, except two, obtained satisfactory scores. Not all revealed to be easily implemented and above all, not all the Guidelines demonstrated the recommended editing independence. Because of this, we decided not to use for the succeeding synopsis of recommendations 2 and 7 of the guidelines, that is, no.2 (SHEA/IDSA, 2008) and no.4 (NICE, 2008).
Comparison between the originating causes and recommendations at the level of evidence and recommendations for VAP prevention: in applying the recommendations it is important to refer to the level of evidence and recommendation to comprehend their "strong points." In some cases they clash given that they are issued by different agencies, each of which has elaborated its own evidence and *grading* levels, and at times absolutely cannot be compared.
Promoting an improvement project: the improvement project, following the logic of onsite training, was carried out and performed by the nursing staff from October 2011 to February 2012. The future study will assess the "grey" practices to be focused on. A clinical audit will be done and will target the EBM/EBN guidelines which in healthcare practice will need three basic elements:

1. Careful analysis of the context/environment;
2. Identification of the main obstacles correlated to structural resources, recommended processes and procedures;
3. Planning and assessment of improvement interventions that require distinct competences, resources, involvement and experience-sharing between operators who will be willing to help and modify their own practice methods, especially when the culture and/or work environment are not oriented towards change.

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17:25 - 17:35

Broncoaspiration "recommended" to improve breathing.

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Endotracheal aspiration is one of the most common procedures patients with invasive ventilation are subjected to. In 2010, the American Association for Respiratory Care (AARC) published the Guidelines (GLs) for "Endotracheal Suctioning of Mechanically Ventilated Patients with Artificial Airways" and formed a scientific committee composed of a doctor and two respiratory therapists. This was an update of the previous GLs dated 2003.
Summary of the recommendations and implications for daily clinical practice: the recommendations are preceded by complete information, assimilated with a narrative review of literature on the indications, execution of the procedure, and complications of bronco-aspiration maneuvers. The recommendations

can be summarized as follows (GRADE):

1. Endotracheal aspiration should be performed only in the presence of non-routine bronchial secretions (preset schedules). (1C)
2. Preoxygenation should be considered if the patient clinically manifests reduced hypoxia induced by bronco-aspiration maneuvers. (2B)
3. It is advisable to execute the maneuver without disconnecting the patient from the ventilator (closed system). (2B)
4. Superficial aspiration (within the endotracheal tube) compared to deep aspiration (beyond the tracheal hull) is advisable in neonatal and pediatric patients. (2B)
5. Instilling of saline solutions should not be performed. (2C)
6. The closed system is suggested for patients with elevated FiO2, elevated PEEP or at risk of derecruitment in adults (2B) and newborns (2C).
7. Tracheal aspiration without disconnection is suggested for newborns (2B).
8. Avoiding disconnection from the ventilator and the use of recruiting maneuvers are the strategies to implement in patients with acute hypoxemic breathing failure.
9. It is advisable that the diameter of the aspirating probe be less than 50% of the diameter of the tracheal tube/cannula in adults and at 70% in newborns (2C).
10. The recommended maximum time for every aspiration passage is lower than 15 seconds (2C).

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17:35-17:45

Capnometry and capnography: going with the tide … for more accurate monitoring.

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Introduction. The monitoring of end-tidal carbon dioxide ($ETCO_2$) is a noninvasive measurement of the rate of carbon dioxide (CO_2) present in the air exhaled and is very useful if applied directly with patient care. "Capnometry" refers to the measurement and viewing of CO_2 concentration exhaled as a percentage (%) or as a partial pressure in mercury millimeters (mmHg). If the measuring device of the gas also includes the visual recording of the wave form of CO_2 concentrations, we are referring to capnography.

Presentation of the Guidelines. The American Association for Respiratory Care (AARC) is the American scientific association of respiratory therapists who in 2011 published the guideline GL) "Capnography/Capnometry during Mechanical Ventilation: 2011". The guidelines were laid down with the GRADE method.

Quality of the GL methodology. The overall quality of the GL is low: a critical assessment through the AGREE II tool evidenced positive scores for the method performance, declaration of conflict of interests and clarity of the recommendations, whereas the context and scope of the GL were below par, and involvement of the parties, and accuracy in development and applicability were extremely inadequate.

Guideline summary. Inferences for daily clinical practice: the guidelines are preceded with complete information and a narrative review of literature with regard to instructions, settings, complications and limitations of the use of capnometry or in the interpretation of data. The guidelines can be summarized as follows.

1. Continuous monitoring of the capnography added to clinical assessment is the most reliable method to be used in confirming and correcting the monitoring of the endotracheal tube's position. (1A)
2. If capnography is not available, capnometry alone, added to clinical assessment is suggested as an initial method to confirm the correct positioning of the tube in a heart-failure patient. (2B)
3. Monitoring of the partial pressure of the $ETCO_2$ is advised as a method of ventilator management. (2B)
4. Continuous capnometry is advisable when transporting a patient subjected to mechanical ventilation. (2B)
5. Capnography is suggested as a method to identify anomalies in the flow of exhaled air. (2B)
6. Volumetric capnography is suggested as a method to assess the elimination of CO_2 and the relationship between dead space and current volume to optimized mechanical ventilation.

(2B)

7. Quantitative analysis of the wave form of the capnograph is advisable for intubated patients so as to monitor the quality of Cardiopulmonary Resuscitation, optimize thoracic compressions and measure the return of spontaneous circulation during thoracic compressions or in the presence of an organized ECG rhythm. (2C)

With respect to the extremely wide range of instructions, the guidelines seem to be very limited. The GLs do not take into consideration the barriers to implementation and costs arising from the wide scale use of this technology.

Conclusions. Monitoring of $ETCO_2$ is useful and may certainly be used on a wide scale to monitor perfusion and ventilation, and for early recognition of complications. Many agree on the fact that $ETCO_2$ monitoring should be considered a basic procedure and consequently calls for adequate training levels to ensure the correct implementation of the monitoring interpretation system which should be a basic skill for critical care nurses.

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17:45 - 17:55

Managing infusions in line with literature.

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Introduction. Correct management of infusion lines as a strategy for the prevention of infections associated to catheters (CRBSI) has been examined in many case-control and meta-analysis studies. These evidenced safety in set changes not earlier than 72-96 hours and for more than two days if used together with antiseptic-soaked catheters or if not used for fluids that favor bacterial growth (hemoderivatives, lipid emulsions).

Presentation of Guidelines. The *Center for Disease Control and Prevention* (CDC) in 2010 published the Guidelines (GLs) "*Guidelines for the Prevention of Intravascular Catheter-Related Infections 2011,"* updating the Guidelines of 2002.

The GRADE method was used for the grading of the guidelines. The quality of Guideline methodology refers to the dimensions and items of the AGREE II document.

Summary of guidelines and implications for daily clinical practice:

1. In patients who have not been administered blood, hemoderivatives and lipid emulsions, replacement of the continually used sets is to be done not earlier than 96 hours but within seven days. (Category IA)
2. None of the guidelines can be followed with regard to frequency of changing the infusion sets used for extemporaneous drugs (Unsolved problem)
3. None of the guidelines can be followed with regard to frequency of changing the needleless components in the implantable catheters. (Unsolved problems)
4. Substitute the inlet tube used to administer blood, hemoderivatives and lipid emulsions within 24 hours from the start of use (Category IB).
5. Replace the inlet tube used to administer Propofol every 6-12 hours or according to the advice of the pharmaceutical company (Category IA).
6. None of the guidelines can be followed with regard to the time in which a needle used to access an implantable catheter can remain on-site. (Unresolved problem)
7. Change the needleless component every time the infusion systems are changed. There are no benefits in changing them more frequently than every 72 hours. (Category II)
8. Change needleless component not more frequently than 72 hours or according to the advice of the pharmaceutical company in order to reduce the risk of disconnection or breakdown of the system. (Category II)
9. Ensure that all the components of the system are compatible with one another so as to reduce the risk of disconnection and breakdown of the system. (Category II)
10. Minimize the risk of contamination by disinfecting the entrance site of the needleless component with a suitable antiseptic (chlorhexidine, iodine

povidone or alcohol at 70%). (Category IA)
11. Use a needleless component for every type of lumen for intravascular catheter. (Category IC)
12. When a needleless component is used, it would be advisable to use a split septum valve rather than a mechanical valve so as to reduce the risk of infections. (Category II).

Conclusions. Besides applying the guidelines, to reduce CRBSI infections and correlated costs you need to give basic and continuous training to the staff and create a team dedicated to the diffusion of the Guidelines.

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16 November 2012 - Morning - Red Conference Room

Congress Adjournment

Moderator: Elio Drigo/Fabrizio Moggia

9:00 - 9.50

The strength to drive the change - where does it lie? Quality of life as an opportune*, concrete utopia.*

Massimo Campedelli, Consortium Mario Negri Sud, Santa Maria Imbaro (Chieti)

On what historical experiences and what principles can we base, in today's society, the choice to support our incessant pursuit of quality of life (also in view of continual reminders of the scarce resources)?
Which are the referral points? Who/what could motivate the actors to achieve indispensible change?
What roles could healthcare professionals play to catalyze more specific changes in society? How important is it to have a project, a vision, a utopia to look up to in order to make society evolve, particularly in organizing its healthcare functions?

9.50 - 10:40

Resources and quality of life. Incompatibility or a myth to debunk?

Beatrice Costa , Action Aid (International NGO Organization), Milan

Evident and hidden resources or those not valued in creating quality of life.
Are resources only used to ensure quality of life or are they also a result of the quest for quality of life?
Are resources always and absolutely indispensable for the pursuit of quality of life?
What type of resources are indispensable to achieve it, and how do they change quality of life?

10:40 - 11:30

Social alliances and quality of life in healthcare settings.

Nicoletta Teodosi, Coordinator, District Planning Office RM G5 (Programming, monitoring and evaluation of social actions), Rome

Concretely, the role of dialog is necessary/ indispensable among citizens. The free organizations and operators need it to be able to achieve the best quality of life possible in healthcare. The procedures and fields in dialog.
Positive and negative examples: the effects of quality and non-quality. Persisting situations of quality to be improved and proposals to be drawn up to concretize feasible changes.

11:30 - 12:15

Nurses working for quality of life in society and culture: experiencing the future.

Edoardo Manzoni, General Director, Palazzolo Institute, Teacher of History and Philosophy of Nursing Care, Milano Bicocca University
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How critical care highlights the daily difficulties in achieving and maintaining quality of life. The experiences and experimentations to ensure quality of life at times in extreme conditions..
The indispensable role of nurses in disseminating in society "profound" information on life experience in critical care and of the complexities/difficulties in ensuring quality of life.
Indications for a feasible action path to relay to society not a sugarcoated or miraculous reality of life in critical situations.
Venturing into the field of positive cultural and social development for a more conscious and responsible community compared to the healthcare reality (in extreme situations) arising from an "advanced" healthcare system.

Poster Book

Pediatric palliative care: the experience of the pediatric ICU of the "V. Buzzi" Milan Hospital in the home management of children with respiratory support systems. *Elena Monti, L. Stabilini, A. Cacciola,* Pediatrica ICU, "V. Buzzi" Children's Hospital, Istituti Clinici di Perfezionamen Institute, Milan
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Pediatric Palliative Care (PPC) not only deals with oncologic end-of-life care. More than two-thirds addresses patients with incurable pathologies but with life expectations from a few months to some years. Since 2010 the Buzzi hospital has been the region's PPC referral center. Up to the present, it has taken charge of about a hundred children of the Milan/Lombardia area and also from all over Italy.
The PPC's objective is to support the vital functions and implement multidisciplinary interventions including intensive care, to improve the quality of life of children. These interventions must also include home care, thus avoiding long hospital stays, also when they are subjected to mechanical ventilation.
Throughout 2011 about 80 children were taken care of, prevalently affected by neuromuscular diseases. Different levels of ventilation support: from managing secretions (aspirator / incentivator coughing), to invasive and noninvasive ventilation through tracheotomy. These were combined with nutritional support (gavage /PEG), orthopedic….
All the parents were trained to independently use all the devices at home, with the help of the Home Care team and local facilities (22 new patients assigned to homecare).
The department ensures the possibility for parents to have telephone consultations with doctors/ nurses round the clock (365 phone calls) to clear doubts, problems, request advice and consult with pediatricians (7 cases).
This unit handles contacts with Hospitals for prescriptions and supplies for auxiliary aids (286 phone calls/fax, over 50 dossiers drafted for children charged to home care), and support to parents in handling their problems. Also included were ambulatory assessment and reassessment (14) and scheduled short hospital stays (41) in intensive care, home medical visits (1) and nursing care (2), hospital consultation (13 medical and 19 nursing care), 19 emergency hospitalizations, and 16 triaged in the ER.
Another PPC objective is to manage terminal cases at home: 6 of the 9 deceased children died at home. The home-care children live with their family, siblings and friends, and go to school even with their respirators.

Open ICUs?... Couldn't be more open!
Gabriella Pieri, R. Zaccaria, G. Ronchetti, Pediatric ICU, "V. Buzzi" Children's hospital, Clinici di Perfezionamento Institute, Milan
gabriella.pieri@icp.mi.it

In the "Buzzi" Children's Hospital in Milan, a photo gallery is being set up, accompanied by reflections and bibliographic references, regarding both the psychological and infectivological aspects of pet therapy carried out at the Pediatric ICU, thanks to the commitment of the department's operators, the intervention of vets and specifically trained animals, and the support of Gioia Manuli who allowed the first months of activity to be carried out.
Pet therapy involves animals that are specifically trained to move around in delicate environments like the intensive care unit, and mainly addressed children hospitalized for chronic diseases and most often subjected to long hospital stays Also included were children hospitalized in the other wards.
This therapy offers many benefits. First of all the child's attention is distracted and is not focused on his illness, and the surprise elements contribute to making the children and their relatives change their perception of the intensive care ward, improving their hospital experience. Furthermore, the presence of the dogs impact positively on the perception of pain and also on children's communication/ interaction with the operators. Negative aspects are limited, given that literature has also demonstrated that the presence of dogs has not increased infections in the wards.
The Buzzi hospital's experience in the month of January is very much appreciated by the patients, their parents and the healthcare staff, and the remarks the little patients make confirm the positive effects of the therapy on their hospital experience.

Specialized nurses and technology: conflict of interests?

Fabiola Sanna, Cardiology Dept., Cardiology ICU, University Hospital "Maggiore della Carità" Novara
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What criteria are to be followed by healthcare professionals in order to identify their own field of independence/responsibility?
The legal Code of Ethics (Art 8 and 13) gives some indications on the issues that bio-ethical discussions have mainly focused on over the last years.
The critical nurse operates in a reality where the highly technological aspects of care create multiple areas of interdependence between the various professional figures It is thus important to identify one's own fields of competence and responsibilities according to legislative indications, continual training, and certification of skills acquired. Hopefully, in complex settings such as that of Critical Care, the qualified, skilled nurses and experts will take charge of the training and advisorship of personnel to be inserted and the students who are there to learn so as to widen the knowledge acquired with field experience.
"When the patient is not able to manifest his own will, the nurse will take into consideration what he has clearly expressed and documented with regard also to the quality of life …."(Art. 36 and 37).
The incredible progress of biomedical sciences has raised issues at ethical-care levels so as to determine a true and proper consideration regarding:

1. excessive medicalization of all the phases of life, and the increased diagnostic-therapeutic possibilities which at the same time have to come to terms with limited resources.
2. Greater attention paid to the more vulnerable individuals.
3. Socio-cultural framework on the significance of illness-health.

Nurses have to possess ethical awareness based on the value of the human person's dignity and uniqueness.
The nursing profession may become that of "soft technology" able to combine empathic nursing with competence and scientific know-how. It is an obligation to make an attentive analysis of the impact technology may have on nursing care and the therapeutic relationship with quality of life of the patient, by initiating nursing research themes on identifying the best technological solutions for specific nursing care issues.

Is there a way to conserve the wellbeing of nurses working in children's critical care areas?

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Nursing activities in the field of critical care for children is particularly complex due to the technical expertise needed and the relational and empathic capabilities required of the operators, all of which may trigger the burnout phenomenon. The research aimed at analyzing the effective presence of distress in the two pediatric and neonatal intensive care units.

The analysis was performed through questionnaires distributed to the nursing staff, and contained questions based on the Maslach Burnout Inventory, Coping Inventory for Stressful Situation-2 and Health Survey Questionnaire, with the objective of identifying the presence of particular burnout elements, and the strategies implemented to cope with the stress situations and health conditions perceived.
This revealed high emotional break-down levels in both wards, correlated to medium-low levels of depersonalization and rather high personal-fulfillment levels.
This is a sign of the absence of burnout but indicates a dissatisfaction also seen in the data related to health conditions perceived, which are slightly lower than the national mean expected for mental health, whereas physical health data was stable in conformity with the expected mean. In almost all the samples, the strategies used for coping revealed the tendency towards action, that is, the attempt to change the situation that causes stress.
The analysis confirmed the existence of dissatisfaction in two wards without, however, indicating any burnout phenomena. As a consequence the need arose to organize discussions and sharing sessions regarding the situations that provoked dissatisfaction, to help in laying out strategies and solutions together.

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Competence and responsibility of nurses in identifying the potential donors of organs and tissues.
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Identifying the potential organ donor (POD) is the initial phase of the process and is probably the most difficult to standardize, since this entails knowledge of a series of factors on behalf of the nursing Coordination Staff.
With regard to awareness of the work setting, the Coordination Staff make use of the so-called POD Identification Channels:

1. Care channel (daily visit by the Coordination Staff to the so-called special wards: ICU, ER, Stroke Unit, Neurosurgery Operating Theater)
2. Administrative channel (viewing the list of patients hospitalized with neurological pathologies).

The Center-South Transplants Organization (OCST), covered by the Lazio Regional Coordination, makes use of two IT systems:

- GIPSE (Information Management of the ER and A&E Dept.).
- GEDON (Management of ER hospitalization of patients with Brain Damages).

Through these systems, the Coordination staff monitors the patients affected by brain hemorrhage, brain trauma, and brain ischemia with Glasgow Coma Score lower than 8, stroke with NIH Stroke Scale greater than20.
This helps in the creation of a quality-care path for immediate identification of the potential donors.

Quality of life in critical care: study of a cardiothoracic intensive care unit.
Gabriella Dal Canto, Gina Satiro, Heart Surgery, University Hospital of Siena
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Defining the concept of quality may be a rather difficult task, even more if this concept is applied to the intensive care setting. We would then realize that each of us tends to consider very personal and subjective aspects altogether, which invade and condition also very heavily the physical, psychological and affective sphere of all those who for various reasons are the patients, operators, family or friends who find themselves in an ICU.
The various meanings every individual attributes to words commonly used in these environments, such as pain, fear, healing, safety, feeling welcomed, etc. jeopardize communication and the consequential relationships between these figures, and inevitably impact also on their activities.
Before applying any type of intervention aimed at enhancing improvement, we need to know how quality can be described and the diverse meanings that can be attributed to the various elements, by all those involved in care procedures.
A lot of effort has been exercised over the years, together with the assessment of the quality of care as a warranty for good performances which includes evidence-based medical care, wherein there has been a growing perception of quality in care rendered, even though users seem to be passive in expressing their impressions since information is often gathered through questionnaires or interviews done in these very same healthcare facilities. Currently attention is being shifted towards the active participation of the people involved, and medical and nursing narrations are opening out to a totally new scenario in designing and implementing care procedures, giving rise to the need of examining the needs and expectations of all.

Prevention and management of aggressive events in the psychiatric ward *Capozzi, Sara Loletti, Nora Marinelli, Roberto Quartesan,* Psychiatric Hospitalization Services, Hospital of Perugia,
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Introduction. The psychiatric hospitalization service is a new experience for the Perugia General Hospital since the preexisting historical facility fell under the only Healthcare dept. operating in the new service in support of the hospital. The service was created due to a priority logistical need to create a new organization that would function in compliance to norms and integrate with all the other hospital services, especially those regarding emergencies.
The establishment of the new Psychiatric Hospitalization Service called for the reformulation of all the operating protocols and regulations, while also referring to the experience and work already accomplished. The study was part of this need for a clinical reorganization.
Aim. To furnish a useful tool in the prevention of aggressive acts towards oneself and others, and simultaneously create an operating protocol for handling such events.
Materials and methods. The procedure mainly entailed the reexamination of all the preexisting

documentation and a review of literature, after which there was the integration of important information that emerged. This was furthermore followed by the drafting of a new risk assessment tool to handle the development of "aggressive events."

Results and conclusions. The first and most important result was seen in the success achieved in gathering the various experiences in the different disciplines which brought about a valuable combination of useful historical experiences and scientific ones, which will hopefully be very useful in the future. All the work achieved as of now will form the base for the works in progress in developing solutions and responding in the best way possible to the needs of the sick, and satisfying the operators' needs for information and training.

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Opinion of families on end-of life (EOL) care in the ICUs.

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Introduction. With regard to humanization of care, the nursing team undertook to uphold the relational aspect with the families accompanying their loved ones during the terminal phases of their lives. With this objective, a Working Group of Nurses was formed so as to offer a channel for the exchange of experiences with the families who had gone through the death of a relative hospitalized in the ICU.

Objectives. The study aimed at gathering the impressions of the families regarding the care services seen during their relatives' experience of illness and mourning for their death.

Materials and methods. A month after the group was formed, the families were offered the chance to meet the nursing team. During the interviews aimed at listening and gathering their impressions, the relatives were asked to give their assessment on the quality of care their relatives had received during the illness and the EOL phase. The areas discussed through semi-structured questionnaires regarded satisfaction of the relatives and were then summarized by the interviewer who assigned a fully satisfied, partially satisfied or not at all satisfied score.

Results. From May 2006 to December 2010, 87 meetings with relatives were held. Participation in these meetings progressively increased with time, from 31% (8/26) in 2006 to 58% in 2010 (31/58).

The conversations highlighted an elevated and constant degree of satisfaction with respect to care and relational aspects. Over the years furthermore, there was an improvement in attention and sensitivity of care during the EOL phases and support given to relatives who expressed a high satisfaction score of 50% (4/8) in 2006, which increased to 96% (29/30) in 2010.

Conclusions. The positive outcomes of relatives and the progress evidenced confirmed the adequacy of the strategies adopted by the care team that took charge of the patients during the end-of-life phases, the importance of which was acknowledged even if in a specialized setting with elevated technological support. The initiative of conducting meetings with the families was highly appreciated due to its originality and was perceived as an ulterior sign of attention and help in the personal elaboration of the mourning experience.

Subjective method for the measurement of pressure in the orotracheal tube cuffs. Research protocol for the study with a dummy.

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Introduction. The pressure of cuffs in OroTracheal Tubes (OTT) used in orotracheal intubation (OTI), must be kept within a reference range to avoid the onset of complications due to hyper-insufflation or hypo-insufflation. Assessment through finger palpation was seen to be still one of the methods most used by healthcare operators to evaluate the correct pressure of the cuffs.

Aim. The study aims to investigate whether the IOT cuffs could give a correct assessment through finger palpation or whether this may be influenced by the operator's experience.

Materials and methods. Through the use of a IOT simulator (Laerdal SimMan™) a sample of 50 nurses will be asked to identify three different pressure levels (low, correct, high) on three OTT devices of different materials (silicone, PVC, PVC armature).

Results and conclusions. The analysis will be effected through STATA 10.0 (StataCorp LP, Texas, USA); we

shall observe the differences in terms of sensitivity, specificity through various tubes, keeping in mind the difference in terms of tube characteristics and variability of the observer.

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Upgrades in pre-hospital emergency services and response to the maxi-emergency situation in Lebanon. Experience of the Cooperation between the nurses of ARES 118 and CISP.

Rosita Di Gregorio, Grazia Marcianesi Casadei, Silvia Scelsi, Luca Tesone., ARES 118 Lazio Region
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The project was launched in 2011, and conducted by the International Committee for the Development of Peoples (CISP- Italian NGO) in cooperation with the Regional Healthcare Emergency Service (ARES) 118, to support the Lebanon Red Cross (RCL). The presence of ARES 118 Nurses ensured the implementation of the training phase of the project, consultation on the development of a management software for the Lebanese Central Operations Center as well as the restructuring of a protocol for the handling of the maxi-emergency situation in Lebanon.
The expected results of the project are:

1. Ensured efficiency of the Lebanese Red Cross's management system for the coordination of emergencies and first aid services throughout the country, in compliance with common and standardized procedures and protocols.
2. Ensured adoption by the Lebanese Red Cross of the standardized protocols and procedures in handling and rendering healthcare services during maxi-emergency situations, according to internationally recognized standards.

The National Management of LRC, and in particular the four Central Operations Centers, the 43 First Aid Centers and the 2,600 operators of the LRC disseminated throughout the country will be the project's beneficiaries. The Lebanese population (about 3,600,000) that addresses the LREC during healthcare emergencies will instead be able to benefit indirectly from the project.
The main activities planned: technical assistance, supply of vehicles, equipment and instruments to the Central Operating centers, development of standardized protocols and procedures for the management of emergency calls and aid missions, elaboration of a software to handle emergency calls, training of educators and operators on the correct management of emergency and maxi-emergency situations, and training sessions in Italy at the facilities of the Regional Center for healthcare Emergencies of the Lazio Region's ARES 118 organization.

Research protocol for the counseling method as a tool for the management of panic attacks in the triage dept.

Francesco Dottori, *Elena Lucconi,* Perugia General Hospital.

Introduction. The steady increase over the last few years of patients with anxiety disorders, panic attacks and correlated syndromes in the A&E of Perugia, stressed the need to check whether the counseling methodology in the triage dept. is able to reduce or eliminate the symptoms associated to states of anxiety.
Objective. The objective was to evaluate the counseling performed in the triage dept., as an instrument that can help patients suffering from panic attacks and correlated syndromes, demonstrating how correct help-relationship can bring about improvements in subjective sensations of patients and their vital parameters.
Materials and Methods. A panic attack is an episode of intense fear and distress. The 13 signs that one is occurring, identified in the DSM-IV TR (*Diagnostic and Statistical Manual of Mental Disorders Text revision IV edition),* suddenly develop and reach their peak in about 10 minutes. Some of these signs are tachycardia, sweating, tremors, dyspnea, sense of asphyxia, and paresthesia. The aforementioned clinical signs cannot be correlated to any organic origin except stress, and the only solution offered to improve the symptoms is therefore the patient's confiding his feelings during personal conversations aimed at helping the patient's self-awareness. Counseling is also targeted as a method for the effective management of these personal talks that tend to guide, support and develop

the person's potentials, thus encouraging active, proactive attitudes and stimulating the capabilities to make a choice.
The working hypothesis entailed the laying down of data sheets that could detect the presence/absence of the 13 symptoms identified for the diagnosis of "panic attacks." The data sheet aimed at measuring in an objective manner, the clinical situation of the patient upon his/her admission to the facility, after 10/20 minutes. Some patients are not treated and act as the control group, and the others will undergo the counseling session. Two teams of triage nurses who are communication experts will adopt the counseling communication methods to reduce the persons' uneasiness and succeedingly check the efficacy of their intervention.
Conclusions. The aim of the studio was to assess the implementation of the figure of the counselor, whenever the data confirmed the drop in states of anxiety in the triage dept.
Keywords: Counseling, Triage, Anxiety, Panic attacks

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Implementing *clinical governance* tools (CG): activation of a nursing protocol for the "Treatment of altered consciousness states due to hypoglycemia" in the ARES 118 facility of the Lazio region and the designing of a PDTA.

Grazia Marcianesi Casadei Cristina Girardet, Silvia Scelsi, ARES 118 Lazio Region
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The aim of this current work was to highlight how the approach based on the CGs in the implementation of an operating protocol, determined standardized care based on quality processes. In 2008 ARES 118 started a clinical-care improvement project through the introduction of protocols involving nurses of the Emergency response teams. Patients that were given first aid by the ARES 118 teams received standardized treatment, in conformity with international guidelines. The application of the protocol "Treatments for altered states of consciousness due to hypoglycemia" involved a group of patients (22,543 records gathered) whose data were then analyzed and their standard epidemiologic characteristics defined. The data for 2010 covered the entire Lazio Region. From a sample of an urban district in the province of Rome (Fiumicino municipality), the 2010 and 2011 data were compared and analyzed with the software EPIINFO and statistically validated.
The points to be underlined were:
1. The appropriateness of the clinical treatment given by the nurses in emergency regimes;
2. The suitability of the care management also in orientating patients towards higher care levels (non-admission to the A&E Dept. was indicated for 40% of the patients treated);
3. The healthcare education and training carried out by nurses;
4. The possibility to create clinical care pathways in accordance with norms in force, with priority given to the territory to allow these patients to be monitored by specific and specialized nurse teams.

The application of the CG approach has changed the behavior of nurses, created a standardized procedure in such a heterogeneous region, and ensured the whole population of integrated clinical care that conforms to elevated care standards.

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Project of the Local Health Unit - ASL9 of Grosseto: educating caregivers in tracheotomy management.

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In accordance with Art. 4 of Regional-State Agreement, n°281 of 28/08/97 and with the Upper Healthcare Council's approval of March 25, 2009, the Tuscan Region underlined the importance of training care givers who render tracheal aspiration services to patients at home, and highlighted the need

for caregivers at the bedside of patients who have undergone tracheostomy.
As authorized by the LHU a work group was formed, and which drafted an information leaflet of the tracheostomized patients along with the information sheet of the independent caregiver.
The group was composed of the four district zones selected during the "Assistance h12" preparatory course; the aim of the project was to identify, instruct and above all involve caregivers in the management of tracheostomy and broncho-aspiration at home. Drafting of the documentation took about four months and the form adopted was the one containing the nominal dichotomic assessment, whereas the information leaflet was composed of general hygiene norms, anatomy, tracheostomy management materials, and procedure training accompanied by simple but thorough images.
Currently the documentation is at the approval phase, and is targeted to be launched in a hospital-regional experimental phase for six months, in order to identify eventual critical factors of the program, which will be reviewed and corrected.
The important aspect to be underlined is that the identification and training of caregivers will start the moment the patient is admitted to the hospital, in order to ensure true and proper continuity of assistance at home.

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Controlling external trauma hemorrhage in out-of-hospital settings.

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Hemorrhage, especially of the non-compressible type, is the main cause of death in trauma patients. It has been extensively demonstrated that adequate management of external Arterial-Venous bleeding in pre-hospital settings, guarantees better outcomes for patients.
Our interest in this issue arose from a comparison with regard to cases in which the practitioners had referred to their difficulty in controlling external bleeding due to traumas: analyzing the data at hand we noted that from 01/01/2005 to 31/12/2011 the database of the hospital contained records of patients who suffered severe external bleeding upon admission to the ER.
The medical devices currently at the disposition of personnel working in the ambulances and the ER, all function through mechanical compression, demonstrating furthermore their inefficacy and inapplicability in non-compressible areas of the body.
The aim of our bibliographical research was to find medical devices that could control bleeding and avoid complications arising from the application of prolonged compression, ensuring moreover, user-friendly procedures for operators, rapid execution of the hemostasis maneuver and safety of the patient. The numerous articles found in literature demonstrated the efficacy of powders of mineral and/or biological origin, that have been used for long in military and civilian settings in the United States, England, Europe and Israel, and that when applied to arterial-venous wounds, acted as topical procoagulants and guaranteed practically rapid hemostasis.

Mechanical ventilation at home and quality of life: the opinions of the patients' families.

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Introduction. Chronic respiratory failure, especially when associated to serious motorial deficits and continual treatments with mechanical ventilation (MV), imply at times such an altered quality of life as to impact heavily on the quality of life of the entire family and particularly on the care giver.
Materials and Methods. A transversal observational study on a probabilistic sample carried out at patients' homes in June 2012. The patients were stable in clinical terms, and were treated with invasive and noninvasive mechanical ventilation (NIV) for more than 14/24 hours. They and their families agreed to participate and filled in the Italian version of the Psychological General Well-Being Index (PGWBI) questionnaire.
The tool offered data results in six fields: anxiety, depression, positive outcomes and wellbeing, self-control, general health conditions and vitality. Furthermore, it furnished a global index that quantified the psychological-emotive state of wellbeing. It also offered the possibility for those who have been undergoing this daily experience for many years now

to express their impressions freely.
Results. Sample: 11 individuals out of which were five sick persons (three with 24 hour-MV and two with about 15 hour-NIV over 24 hours of ventilation), with mean age of 65 years (range 44-90). The mean of those subjected to MV was 6.8. The mean age of the six care givers was 56.
Global mean index PGWBI: sick=52.0, standard deviation ±,16.48, care giver =66.5± 13.49.
Comparison with the mean Italian population (global index 78.0 ±17.89) showed the presence of severe distress among patients and moderate distress among the care givers.
Discussion and Conclusions. Home management of chronic illnesses with elevated life expectations include the verification of the patients' quality of life and sustainability of care loads weighing on their families. This issue also calls for consideration on the ethical aspects, the number of resources and which of these can be dedicated to this type of patients and the quality of care rendered.
Given the small sample, the results obtained could not be considered particularly important to call attention to those individuals who daily have to bear such emotively and physically difficult situations.

The TIME principles and tracheostomy management in pediatric patients.

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Introduction. Tracheostomy care is one of the most important aspects of care for children with chronic respiratory pathologies in terms of prevention of infectious complications and peristomal skin conditions. Most often we have to treat secondary cutaneous wounds related to tracheostomy, the assessment and treatment of which are not always uniform and documented in scientific literature.
Aims. Drafting and application of a strategic "bundle" for the evaluation and management of secondary complications following tracheostomy.
Materials and methods. Perspective analysis of two cases treated respectively for short-term wounds (dehiscence of suture points) and long-term wounds (peristomal granulation), both secondary outcomes of tracheostomal surgery.
Results. The two cases of wounds led to the drafting of two different flowcharts to manage short- and long-term complications that included the evaluation of wounds through the TIME (Tissue, Infection or inflammation, Moisture imbalance, Epidermal margin) assessment and the consequent treatment with advanced medications which led to the fast healing of both patients.
Conclusions. The application of TIME and the eventual management with advanced medication of the secondary tracheotstoma wounds may be a valid care "bundle" for tracheostomy. The training in and dissemination of wound care knowledge in terms of assessment and treatment in tracheostomy may reduce complications associated to the integrity of peristomal skin.

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Critical patients under mechanical ventilation: care strategies for the prevention of infections.

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Introduction. The critically-ill patient more than others, has a higher risk of developing healthcare-associated infections (HAIs) due to both the conditions and the invasiveness of the diagnostic-therapeutic procedures needed. Because of the presence of antibiotic-resistant germs and the lack of effective preventive strategies, healthcare-associated infections are particularly serious problems, especially ventilator-associated pneumonia (VAP). Clinicians need a good care "bundle" to contrast VAP and ensure good quality care standards. VAP is the most serious infectious complication (1/4 of all infections) in ICU patients, with a high mortality rate and greater costs for the National Health Service.
Aims. To find the necessary evidences in literature of a

care bundle that could apply to the local setting.
Material and methods. Literature research in the last five years, pertaining to the field of nursing and gathered from biomedical databases (Cocrane Library, Pubmed, Embase) and government sites (CDC, Ministry of Health Guidelines).
Results. The 21 articles chosen for the study regarded oral hygiene, and the placement and handling of medical devices. Various studies pointed to the personnel's scarce observance of preventive measures, and highlighted the need for more surveillance. Oral hygiene is indicated but not all agree on the use of Chlorexidine-gluconate solution (of various concentrations) or distilled water. The half-seated position was recommended (at least 30°) but reported interesting data also on the use of revolving beds. There seemed to be no great differences on the incidence of VAP with respect to the use of open or closed circuits.
Conclusions. The care package was submitted to the Facility's Management for the study of necessary validation and authorization procedures. At the end of this process, the operating instructions composing the package will become part of the Hospital's manual of operating instructions.

Quality Care: Patients and operators have their say.

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Introduction. During the period of April 24 to May 24, 2012 a study was carried out on the quality of care perceived by both patients and healthcare practitioners in the Cardiology Dept. of the University Hospital in Siena.
Quality as delineated by ISO 9000 is the set of tenets and characteristics of an organization which confers it with the capacity to satisfy implicit and explicit demands.
Aim. To identify the strong points and eventual critical factors within a ward.
Materials and Methods. The cognitive survey was done through the distribution of two structured and anonymous questionnaires composed of 14 and 9 questions, respectively.
Results. The questionnaire addressing patients resulted in positive opinions, but the manner in which it was administered is to be taken into consideration, since it was evidently not intended to negatively judge the wards where the chronically ill patients were, given that these patients most often had to be readmitted to our Operating Units. We will certainly have to improve some aspects of our daily work, for example, in the information given on the hospitalization and organization of the ward, and concentrate more on relating with the patients, considering that they have their own backgrounds and life experiences and need personalized care.
On re-elaborating the questionnaire answered by care operators, some critical factors emerged with regard to general organization of the ward (managerial and structural) which subsequently impacted on the direct care given to patients. There were many suggestions for the adoption of a team model with more cooperation between the various clinicians so as to enhance mutual clinical care involvement and ensure personalized care.

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Can the taking over of assigned beds enhance nursing staff empowerment?

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The methodology of taking charge of bedridden patients is an almost inexistent practice in Italy whereas at international levels this has been practiced and discussed for more than 40 years as has been demonstrated in a wide range of publications. Over the last years, there seems to have been an increase in publications on this topic together with the issue of clinical risk.
The Cardiology ward / Cardiology ICU of the Reggio Emilia General Hospital has 11 beds in the ICU and 22 beds in the ward.
A focus group drafted a questionnaire with open and closed questions. In the anonymous survey, 36 out of 39 colleagues filled out the questionnaire.
Some aspects of the taking charge phase were assessed positively by a majority. Generally the answers, however, attested to a widespread dissatisfaction with regard to the very stressful aspect of taking charge of up to 11 patients in the Cardiology ICU, frequent interruptions during the assignment, danger of errors, subjective contents, and desire to receive

the assignments from the colleague who effectively monitored the patient and his relatives. Some doubts that came up with regard to the issue of privacy had to be deepened and discussed with the team.
Of the nurses who submitted the questionnaire, 86% agreed to combine the assignment of beds in the Cardiology ICU with the division of patients among the nurses; 78% considered the taking over of beds as feasible. The first step to be taken in the assignment of CICU beds will be to focus on the awareness of each nurse regarding the responsibility during daily work. The nurses will have to divide their tasks, with three nurses taking charge of a certain number of beds and taking care mainly of assigned patients. The nurses have to personally pass the assignment personally to the nurses on the next shift.
Fundamental importance is given to the nursing management's support.

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Research protocol and Comparative Study: Infusion and depth filters - operating tests (user-friendliness, safety, reduced care time) of the Intrafix® Safeset infusion device.

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Introduction. Administering drugs via intravenous lines is one of the most frequent interventions (*Medication Administration: Intravenous (IV) #2314 NIC*) that are part of a nurses' daily tasks. Innovation and research in the field of Medical & Surgical devices (MSDs) dedicated to intravenous therapy offers ever new products to healthcare facilities and professionals, and infusion devices have undergone enhancements under the aspect of performance and safety.
Aim: The study aimed to test the new medical-surgical *Intrafix® Safe Set* device produced by the BBraun company, consisting of a no-leak and air-stop infusion device with depth filter membrane ensuring Airstop safety in case of emptied fluid container, through a comparative study with the standard infusion devices provided in various hospital settings (general ER, medical wards, surgical wards) with respect to: user-friendliness, safety, and reduced correlated care time.
Materials and Methods. A convenience sampling enrolled 100 nurses of the critical care department, ER, Internal Medicine and Surgical Depts. The supervisors/facilitators of the testers furnished the nurses/testers with the MSDs and related information/instructions leaflets and comparative charts. This was divided into two parts, the first regarding the personal/professional data of the tester (through a coded system that guarantees anonymity), and the second composed of the comparative evaluations. It consisted of 14 items with the three-points Likert rating scale. The chart examined: perforation capacity, filling phase, connection/link up to the case of emptied fluid container and the Final Evaluation.
Results and Conclusions. The testing of the MSDs and data collection started from mid-October to November 2012. Data analysis was completed within the first week of December while the final report for the results obtained was drafted by the end of December 2012. The statistical analysis of the descriptive type was done with the EXCEL (Microsoft®) program. The analysis will consider the differences in terms of user-friendliness, safety, reduced care time correlated and disaggregated according to the department and the users.

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Wellbeing at work: going towards a global approach to violence in the ER

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Introduction. In the ER, nurses are the health practitioners most exposed to acts of violence at work. For some time now, many international studies have focused on this phenomena and have presented solutions. Italy has only recently started to highlight the phenomenon, and our research group is developing a global operating approach to the problem of violence towards healthcare operators in the ER, and particularly during triage activities, based on a theoretical model obtained from studies on this

issue, and from our experiences achieved in the field and research activities.

Aim. This study aimed at presenting the first step in delineating the layout of a "Global Approach to Violence in the ER," to enhance the professional wellbeing of nurses in the ER, especially during triage activities.

Materials and Methods. Through studies of the databases, PubMed and CINAHL, we identified 36 studies on *Workplace Violence* in the ER that analyzed the risk factors, triggering causes, strategies and the corrective actions and interventions.

Results and Conclusions. A synoptic interpretation of the selected studies pointed out 30 factors. These were grouped according to the nurse's viewpoints into four fields: external, internal, environmental/contextual, and organizational.

The complexity of the phenomenon and the strong interrelation between various factors suggested that the problem of violence in the ER could be effectively faced only with a "multi-dimensional" analysis of the operating ambiences and interventions that had a "multi-directional" target.

The laying down of the "Global Approach to Violence in the ER" will act as the base for the construction of a specific risk rating scale, to assess the phenomenon of aggressions.

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Care Technology: gauging, transmitting and recording vital signs n the ER. Wireless connections between the vital parameters, CVSM 6500 WELCH-ALLYN and software, FISTAID DEDALUS.

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Introduction. Measuring and monitoring vital signs is surely the most implemented nursing task (*Vital Signs Monitoring #6680*, in the NIC classification) in all the ER settings: triage, visiting room, emergency room, and brief intensive observation rooms. Many studies underline how the complete measurement of vital parameters may greatly reduce the risk of giving rise to under-triage situations, in the same way as precision, rapidity and accuracy of measurements play a fundamental role in many issues regarding cooperation of nurses with the ER doctor.

Aim. This work aimed at presenting the Perugia Hospital's recent experience in the integration of *Information Technology* with ER nursing care and the research project of a comparative study between traditional measurement and recording methods and the use of vital parameters' measuring device CVSM 6500 connected with the clinical First Aid database in wireless mode, a bar code identification.

Materials and Methods. Through a comparative measurement chart the measuring times and data recording, as well as accuracy of transcriptions of a convenience sample equivalent to 30 units (ER nurse experts).

Results and Conclusions. The initial experience related to the use of integrated advance technologies for the measurement and recording of vital signs was extremely positive. The results of the comparative study gave useful data in verifying the clinical efficacy with respect to the direct uploading of data to the patient's clinical records; the reduction of errors and risks related to the manual transcription of data, increased productivity and time-saving documental management.

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Study on the psychological experiences of healthcare operators involved in "adverse events"

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Introduction. "Aiutiamo chi Aiuta" is a nonprofit association created by healthcare professionals (occupational psychologists, psychiatrists, nurses, work doctors, medico-legal professionals, etc.) who share their awareness of the many difficulties

healthcare professionals encounter within their work settings in order to continue giving the best of themselves in their professions.
The aim of the Association is to comprehend the situations professionals undergo the minute they are involved in medical liability cases, and subsequent to such adverse events (uncompromising and unavoidable), feel insecure and lose their faith in their professional abilities.
When the event is followed also by a lawsuit, the professional is inevitably under pressure and his professional capacities may be temporarily, and at times, definitively jeopardized. The study was launched, and the target was to delineate a quantification of the phenomenon.
Materials and Methods. The Association, "Aiutiamo chi Aiuta" promoted to the nursing staff, its study on the psychological and professional impact such adverse events may have on the practitioner involved. The instrument was a questionnaire on the self-perception of "work accidents" during one's clinical activities (so-called medical liability/ malpractices), and was distributed to a sample of the personnel, possibly in the work areas that are more exposed to these issues.
The few studies found on this topic highlighted that the professionals more exposed to this psychological risk are those who face the experiences arising from medical-liability cases without having the proper tools to analyze the events and/or who have decided to face this delicate moment of their professional lives alone.
Expected results. The study aimed to assess the gravity, extent and frequency of adverse events within healthcare practices, in order to create targeted listening, *counseling* and support sessions offered to the staff. The study aimed to cover the work areas of various institutions.
Conclusions. The results will help develop our association's objectives:

1. To supply psychological support to operators who are victims of medical liability/malpractice claims and who live in fear of lawsuits or have already been involved in them.
2. To carry out an in-depth study of the psychological consequences of involvement in medical-liability proceedings.
3. To furnish those involved with the useful objective information to better help in facing the situation.
4. To validate measurement tools for biological damages.

We chose the structure of a Social Promotion Association because this allows us to act as third parties with respect to every other Institution and be able to stipulate agreements with Hospitals, Institutions and Organizations that work in the field of Healthcare.

Wellbeing in the Workplace and critical relational factors in the triage department: results of a 16-month monitoring period.

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Introduction. Today in the emergency services worldwide, there are increasing acts of violence and aggression towards ER nurses, and particularly, those involved in triage activities. But the rare tendency of nurses to denounce the violent episodes is a great hindrance to understanding this phenomenon in all its implications. Recently, some studies have been initiated to address this problem in Italy.
Aim. The target of this work was to present the results of the recording of violent episodes over a period of 16 months (*Workplace Violence*) in Triage, monitored by the SC in the ER of the Perugia General Hospital.
Materials and Methods. Following the awareness campaign on the theme of aggression and the policy of "no tolerance" for abuses launched in May 2009, among the various initiatives was also the monitoring of critical relationships in the Triage sector, and an Aggressions Data Chart composed of 16 items.
Results. From 28/05/2010 to 29/09/2012 a number of 19 violent episodes were registered (equivalent to 1.2 episodes/month) by 8 nurses out of 34 (23.5%). In 67% of the cases the aggressor was the patient, and in the remaining 33% it was the person accompanying the patient. The violence was 95% verbal and 5% physical. The most "dangerous" days were Saturday and Sunday – days in which the user/operator relationship is greater. There was a reverse relation between priority code and "aggressiveness" – in 58% of episodes that occurred the assigned code was White, for 37% it was Green, for 5% it was Yellow, and none were coded Red. On the contrary, no linear correlation was evidenced with regard to waiting times in the triage area. The effect on those in the waiting room was prevalently one of disapproval in 50% of the cases, no reaction in 44% and reactions in

6%. Lastly, the final resolution showed a dichotomic trend inasmuch as in 42% of the cases, the event was resolved by the triage nurse himself, in 42% the law enforcers were called to intervene, whereas the intervention of the coordinating nurse or a colleague assigned to "mediation" tasks (8%) and recourse to the in-house peacekeeping team (8%) were the less utilized solutions.

Conclusions. The data on violent episodes offer numerous points for analysis and reflection. The low number of cases on one hand signaled out the failure to denounce, as underlined in literature (estimated to be around 80%), but on the other hand makes us hope that it may also signify the efficacy of multi-directional interventions implemented in the Perugia Hospital's ER.

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ECMO Team for intra-hospital transfers of patients with ARDS: report after seven years from the start of the program.

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Aim. To ensure the safe transfer of ECMO patients-candidates to and from hospitals. In September 2004, our team instituted and implemented a program for the application of ECMO in other hospitals and the transfer to our facility.

Materials and Methods. The program initially identified a Mobile Resuscitation Center that possessed the following characteristics: presence of a main inverter of 1800 W plus a spare inverter with power of 1000 W, Oxygen tank of 4 bar greater than 6500 liters, and presence of medical compressed air of 4 bar. The vehicle identified was furnished by the White Cross of Carugate.

To transfer all the patients, our group created a castle system, which had structured fixtures for all the equipment.

The ECMO used were of the PLS and HLS types (cardiohelp systems) of the Maquet company.

For the fixture and transfer of material and equipment, various bacpacks with compartments were created. The basic composition of the Ecmo Team was: three anesthetists-reanimation practitioner, one general ICU nurse and a perfusion service nurse for cardiovascular perfusion.

For distance greater than 600 km, the help of military aeronautics was requested to transport the vehicle inside a C 130 aircraft.

Results. From September 2004 to October 2012, 45 missions were completed with a mean time of 8 hours (SD ± 3.35) and a mean distance equivalent to 117 Km (SD ± 177). Table 1 and 2 summarize the missions accomplished and the decision-making and operational roles of the professionals involved.

Centralization of trauma patients

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The idea that sparked the creation of this poster was an article published in 2009 in "Scenario" (2009;26 (4): 6 – 14), the official magazine of Aniarti (National Association of Critical Care Nurses) regarding a study by the A&E Dept. of the "Careggi" University-Hospital of Florence, regarding the centralization of major trauma patients, according to the mechanism of "dynamic" criteria of wounds. The study was based on the perception of A&E nurses who noted the presence of a great number of centralized trauma cases that were treated as red codes according to the dynamic criteria (ISS>15). The research studied 1,041 patients admitted to the ER for major trauma. Out of the total number of patients enrolled, 38% (380) were centralized for the physiological or anatomical criteria and 0.7% (7) for particular conditions.

Our objective was to compare the data gathered in the studio with literature reports, in order to verify where only the dynamic criteria is a reliable criteria in determining the centralization of trauma victims.

Nursing care for patients affected by coarctation of the aorta: analysis of two pediatric cases.

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Introduction. The study consisted in the analysis of

two pediatric cases of patients affected by coarctation of the aorta (CoA). Even if this pathology is considered simply as a cardiopathy, it may imply serious complications with different development paths and complex methods in nursing care.
Aim. To examine the difference in the CoA cases leading to complex nursing care paths.
Materials and Methods. The data related to the two patients (one with simple CoA and the other with complex CoA) was analyzed and compared through the assessment of the clinical recordings during the pre- and post-surgical stages, with regard to the tests, problems, outcomes, operations (on the children and their parents) and the final results.
Results. The comparative study of the two cases, demonstrated important differences with regard to the management of the ventilation problems. The child with complex CoA compared to the one affected by simple CoA, was intubated the day prior to surgery. Furthermore, during synchronized ventilation and after extubation, the saturation values differed for the two subjects. The mechanical ventilation weaning time also differed and were strictly linked to the type of sedation given to the two patients.
Conclusions. The analysis of these two cases underlined the responsibility of the nurses in:

1. Ensuring standard post-cardiac surgery care, as is offered to any type of pediatric patient subjected to heart surgery, regardless of the type and complexity of the pathology;
2. Adapting the nursing care to the state of the child, the symptomatology present and the therapies prescribed.

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A special network for special patients

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In 2007, the Emergency Service of 118 Bologna (EMS) instituted a special response team for rare pathologies. As of today, 17 names with an equal number of particular clinical/aid paths have been inserted in the Operating Center's database for particular emergency cases.
The "Patients at risk" procedure entails the alert signal given by regular Pediatricians and/or Hospital Dismissal Depts.
The user is placed under the charge of the 118 Emergency Doctor and a nurse of the central operations center, who contact the relatives to have further information. Then a dual care path follows. On one hand this information will be of use to those assisting the patient, and on the other, through an IT platform that contains the data of the patient, a particular ALERT signal serves to indicate to the operator responding to the emergency call, of the existence of additional dedicated records.
Moreover the nurse of the Central Operations Center, together with a driver, conducts on-site inspections in order to have a more detailed and the fastest route to reach the patient's home or places he/she frequents.
Lastly, the parents, together with the operators of the Bologna 118 Emergency Service, assign a key word in order to distinguish the "normal" types of emergencies that may strike any person, from those who are "special" patients. The protocol is not activated for all cases but only for those that have been assigned the key word during the data gathering process.
As of today, there has not been any referral outcomes with respect to this specific network created around these very special patients.

Pediatric Day Surgery: managing pain of home patients through an evidence-based care path.

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Introduction. The need to rationalize healthcare resources targeted the Day Surgery as a strategic field in order to make a more efficient use of finances of the NHS within the field of surgery. The surgical path has to be assessed and accredited, and to be able to do so, quality indicators are used to underline the validity of these paths.
Aim. To evaluate the post-surgery recovery at home, of pediatric patients operated under Day Surgery regimes.
Materials and Methods. The Hospital created an anonymous questionnaire which was distributed to

operators and parents, a week after the operation. The population studied consisted of males (aged 0 to16 years), dismissed in the morning of the surgery programmed for groin channels, testicles and penis and who were dismissed in the evening or the next morning.

Results. During the first semester of 2011, the Santa Maria Hospital of the Perugia Misericordia carried out 375 interventions. Out of these, 183 (48.8%) were Day Surgery operations. A population equivalent to 52.5% of general Day Surgery were asked to fill in the questionnaire.

Only 6.25% defined the pain as "STRONG," whereas 67.7% described it as "SLIGHT." The question regarding instructions given upon discharge gave a favorable percentage (92.7%); 8.33% had to turn to the therapies of the regular pediatricians. The percentage of those who had to return to hospital dropped further (4.2%). More than 91% of the sample responded that their children did not incur complications.

Conclusions. Assessment of the post-surgery recovery at home was positive inasmuch as there had been no cases of readmissions to hospital, whether due to complications or for insufficient post-surgery pain treatment; this lead to a greater satisfaction of the user besides eliminating additional costs, and underscored the functionality of the Day Surgery care model.

Nursing care for terminally-ill children: a pediatric Onco-Hematology nurse's experience.

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Introduction. Terminal illness is the condition in which there is no longer any chance of changing the course of an illness with proper and effective therapies, and the patient is treated only with palliative and pain therapies. The task consists in helping the child live through the illness and the final phase of this stage which is an extremely difficult stage from an emotional and practical viewpoint. The entire process is conditioned by personal, philosophical, cultural and religious values of the family and the entire healthcare staff.

Aim. To create a hospitalization system for children undergoing the terminal stages of their illness.

Materials and Methods. A multi-disciplinary team at the Pediatric Onco-Hematology Dept. of the Perugia Gen. Hospital was formed in 2007 when almost all of the healthcare staff in the facility was changed, and which also brought about changes in the therapeutic and care objectives. The team, under supervision, was made up of doctors, nurses, physiotherapists, social workers, religious assistants, psychologist, music-therapists, and teachers and parents of the children.

Each day started off with the review of the daily agenda attended by ward doctors, nurses, support operators of the shifts, the Ward Chief and Hospital Director. Every Friday morning a meeting was held with a representative group of doctors, nurses, physiotherapists and psychologists who discussed special cases according to the particular moments (relapses, urgent needs, new cases, particular therapies, particular psycho-social problems). The last Thursday of the month was dedicated to what the group considered to be the most important case.

Discussion. The work procedure, in multidisciplinary teams, helped the team to lay down action strategies for the EOL children and their families with concrete relational interventions of the care team.

The artificial heart: a human approach beyond technical competence.

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Introduction. Heart implantations are decisive solutions for terminal heart cases. Unfortunately in Italy, the number of organs for heart transplants is insufficient to meet the needs, and in fact, patients often die while waiting for a donor. The *CardioWest* total, a temporary artificial heart (TAH-t), may be used as a temporary transplantation therapy while awaiting a heart transplant.

Aim. To share a nurse group's experience in handling increasingly complicated cases that require, besides elevated technical skills, also the capacity to observe and listen to the patient.

Method. The patient had been subjected to the implantation of the TAH-t in March 2012 and was discharged from hospital in September. We focused our attention on prevention of infections, since initially the stern was kept open with the encrusted skin and

the abdominal *drivelines*. Despite the initial mobility restrictions, there had been no onset of skin wounds. As days passed we proceeded with the gradual recovery of mobilization up to the total recovery of independent ambulation. *Weaning* from respiratory devices was easy and required only some noninvasive ventilation cycles. The patient did not show any signs of neurological deficits and we observed a rapid and well-tolerated recovery of natural feeding procedures. The long hospitalization and changes of the image the patient had of himself, led him to totally reorganize his family and professional life. In order to ensure valid support when he needed it, we started up a psychological support service to help the patient and his family.

Results. A peculiarity observed was the absence of electrographic tracings caused by the removal of the nonfunctioning physiological ventricles, replaced by two artificial chambers of the TAH-t. An almost excessive *Cardiac Output* may occur at times, inasmuch as when completely at rest, the patients sometimes have elevated systemic pressures. Actually the patient had recovered a good part of his functions and was able to carry out many activities independently. This was the result of a long process, based also on the humanization of care, which we built by working in such a way as to take into account the various problems that came up: the psychological as well as social problems also called for attention in the same way as the healthcare ones. Our commitment included activities that were not only strictly technical but that targeted the recovery of the various abilities, such as the motor ability, to help the patients accept the new image of their own selves, by accepting the difficult situation they found themselves in.

Conclusion. Managing this type of patient had immediately appeared to be a complex issue, given the dual responsibility of the nursing staff towards the patient and the machine. In addition, there was the relational aspect established between the family members, and between patient and operators. The overall results depended on the way we offered help and support in the evident difficulties in accepting the device, and how this device was managed, including the alarming situations in learning to live with the noise created by the machine. The way we interpreted our role was of great importance in managing to help the patient in various activities, like going for a walk which helped to give a sense of normality to the patient and change the image of the hospital from that of a hellish machine created and used by those working in it, to a service at the disposition of those in need of care.

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Induced moderate hypothermia after cardiac arrest: experience of the Local Health Unit 4 of Chiavari

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Introduction. Induced mild-to-moderate hypothermia therapy after cardiac arrest improves neurological outcomes and reduces mortality.

Aim. To reduce mortality. Dosage of the "neuron-specific" enolase (NSE) in all cardiac arrest patients resuscitated after 24 to 48 hours.

Materials and Methods. The clinical study involved 16 patients from the A&E Dept. of Lavagna, who had suffered a cardiac arrest after being treated in out-of-hospital settings from January to December 2010. All the patients were subjected to therapeutic hypothermia for 24 hours via cold crystalloids, maintaining hypothermia with conduction systems, neuroprotection of the brain with Propofol or Midazolam and Remifentanil, and curarization with Cisatracurium for 32 hours.

Results. We analyzed the outcome of patients on their discharge from the ICU through the Pittsburg Outcome Scale – Cerebral Performance Category (CPC), using the data of the archive Margherita 2 version 4.4 of the GIVITI. Four patients (29%) were discharged from the ICU with positive outcomes (CPC 1) without neurological deficits; Two patients(14%) had a moderate disability that did not depend on the ventilation supports and hemodynamics (CPC 2); Two patients (14%) had a negative neurological outcome with severe neurologic deficits (CPC 3) and two patients (14%) were totally dependent or in a vegetative state (CPC 4). A total of six patients died (43%) (CPC 5).

Conclusions. In December 2009, we introduced neuron-specific enolase (NSE), a tumor marker that increased in the cases of anoxic brain (cut-off

33ng/ml), and started the treatment with moderate hypothermia. On comparing the data with those of 2007-08, we saw that in patients under a 24-hour dosage, there was a strict correlation between the enolase dosage and the patient's outcome.

Case Report of an adolescent affected by pneumococcal sepsis.

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A 29-year-old woman was brought to the ICU for sepsis-inducted Purpura Fulminans from Streptococcus Pneumoniae. On arrival she was soporous, with tachycardia, hypotensioned and desaturated. Due to the worsening of the clinical profile, with anuria, cyanosis of the fingers and toes, of the face, especially of the nose and the trunk, the decision was made to transfer her to our ward.

She was awake and alert when she reached the ICU and was apyretic, with Heart Rate of 140 bpm, and Arterial Blood Pressure (ABP) 140/90 mmHg. During spontaneous breathing with Oxygen, given the dyspnea and the hemogasanalytical values (pH 7,42, pCO_2 35, pO_2 64, HCO_3 22,2, BE -1,8, Lac 9, $SatO_2$ 91), she was first placed under Noninvasive Ventilation with cascade and then, after sedation, proceded to orotracheal intubation. A perineural catheter was bilaterally positioned in the brachial plexus via the armpit and was placed under infusion at low dosages of a local anesthetic in order to achieve vasodilation of the arterial circulation of her hands. Then hemofiltration started, with weight drop, with an Oxiris filter to remove the pro-inflammatory cytokines. A transthoracic cardiac ultrasound was performed which evidenced marked damage in the kinetics of the left. The right sections were regular, with non-assessable left lung arterial pressure due to a slight tricuspid regurgitation. There were poor gas exchanges, stationary lactates, and petechial skin profile was in slight progression. On the 7th day the symptomatology improved. Sedation was suspended, and the patient appeared to be conscious, awake and able to collaborate. Ventilation was done with orotracheal intubation and in SIM mode, and with gradual weaning vascular murmurs were conserved bilaterally. The patient's hemodynamics was stable, PAS 140 mmHg, FC ca 85 bpm. Anuric conditions remained, and in continual dialysis with a drop of 150 ml/h. On the 12th day she was transferred to the general medicine ward. On the20th day she was alert, conscious, oriented in time and space, and cooperating. She was spontaneously breathing room air and maintaining good respiratory exchanges. Diuresis was contracted. Treatable abdomen was not aching upon palpation, evidencing?? presence of peristalsis. She was nurtured by mouth with a non-fatty diet. There were Diminishing Phlogosis indices and she was apyretic. She was then transferred to the nephrology ward.

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Correlation between satisfaction and stress in the workplace: an observational study of the A&E Dept. and ICU of the Verona Integrated University-Hospital.

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The staff turnover phenomenon, correlated especially to the lack of personnel, is particularly felt by nurses involved in clinical practice, due to the strong emotive and stress-causing component to which they are subjected, as well as the typical factors found in healthcare organizations such as interdependence, differentiation and discretion.

In particular, studies on the recruitment and employment of nurses evidenced various strategic measures, often implemented through policies comparable to those adopted in the employment world, and which precisely seem to be in contrast with the values of the nursing profession. These measures have determined a rather vicious cycle of employment modes, dissatisfaction for the disregarded basic values of the nursing profession, and the drain of professionals resulting in loss in terms of professionalism and knowhow. Using the Mueller-McClosey Satisfaction Scale, 224 questionnaires were distributed, with a response of 172 equivalent to a participation of 77%. The total sample did not take into account the sick leaves, ward transfers or

changes regarding the teams of the various operating departments. The overall satisfaction level was highly correlated to the age of the nurses (r=0.268; p = 0.008) and significantly and negatively correlated to the stress levels attributable to working conditions (r=-0.419; p< 0.000). Recoding this in a dichotomy variable, the Likert scale of scores for stress related to and not correlated to work, aimed at obtaining positive and negative values, demonstrated that the stress not related to work was not seen in 75% of the individuals, whereas work-related stress appeared in a substantial 83.1% with important repercussions on wellbeing and organizational climate.

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The CRPO Score: quality of life in the ICU.

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The CRPO Score is one of the instruments that furnishes an instantaneous image of the trend of inpatients admitted to the Cardiac Surgery Intensive Care, not only with regard to the jeopardizing of care to meet their needs and the nursing work load, but also in relation to the quality of life of patients, up to the postulation of a forecast of morbidity subsequent to transfers to other areas.
On working out the Score, we did a detailed analysis of the main validated scales used to assess the nursing workloads available in literature (NEMS, NAS, TISS, TOSS, RUG). From each of these scales, more pertinent elements were drawn to achieve an evaluation of our situation and in a second phase, reference was made to *clinical practice* so as to integrate what was still lacking.
This resulted in the creation of the CRPO Score, an assessment tool that entailed 14 macro areas which traced, as a baseline, the care needs formulated by Marisa Cantarelli.
Each of these macro areas contained specific items which were attributed different scores according to the degree of jeopardy of the need for care and the work load effectively required. The total CRPO Score was gathered from the sum of scores obtained in the single macro areas.
With this structure, the CRPO Score was used to carry out a daily gathering of data of all patients admitted to the Cardiac Surgery ICU. To do this, a template was created composed of 13 lines, equivalent to the number of beds in the ward, and 19 columns, of which 14 related to the macro areas, four were used to gather information about the single patient and the last contained the total points scored.

Nurses' notes as a risk management tool: experience of the LHU (ASL) 4 of Chiavari

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The nurses' notes which are part of integrated clinical documentation are compiled by all the professionals for their various competences intervening in the patient's care path, are written reports of all the actions carried out by the nurses in relation to a determined person.
They are necessary support tools that guarantee the suitability, continuity and adequacy of the care process, and testifies to the services rendered to the patient. Being assigned to a public service, nurses have to respect the principles decreed by the norms in force with regard to the correct compilation of the clinical records.
The use of a concise tool but which is able to contain all the necessary elements help the nurses to carry out their work and be more precise in filling it out, avoiding possible errors.
The formal and qualitative respect of the documentation allows the magistrate to appreciate not only the respect for the substantial factors required, but also the professionalism expressed by the nurses.
In the beginning, the adoption of a new nurses' notes in Intensive Care drafted by a work group and introduced in our facility, created some difficulties but with time brought about remarkable benefits in terms of accuracy and amount of information contained, besides the less time needed to compile it.

New developments for the training of nurses involved in aeromedical evacuation.

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Flight Nurses carry out their practice in civil and military aeromedical flights. This Anglo-Saxon figure was created to implement nursing care skills in the world of air transportation. The need for staff who are qualified and trained to work in a dynamic environment such as during air transport, is not easy as regards rendering medical care.. This environment in fact is characterized by a set of aerophysiological factors and demanding work conditions which have to ensure out-of-hospital healthcare. Besides possessing good clinical practice, the nurse has to be an integral part of the flight crew and know the norms and correct behavior in the world of aeronautics. We thus asked ourselves whether the training of flight nurses could be improved.

To answer this question we reviewed English language literature on the training of flight nurses, and analyzed the education and competences required for Military Aeronautics nurses with regard to aero-medical evacuation, through a specific questionnaire.

In light of the results we thought of proposing two types of post-graduate training courses. One on advanced training in aero-medical transfers and a master's in critical care with dual specialization in intensive care and aero-medical flights.

These training courses are useful in giving the notions and abilities to flight nurses and guarantee the highest levels and continuity of care. The master's, in particular. offers the know-how needed to be able to operate also in the common hospital ICUs. Subject matters include specific ones of the aero-medical sector, but also clinical and intensive care notions with particular reference obviously to aero-physiological problems.

Achievement of a university degree would not only improve care standards in air flights but would supply nurses with the practical, highly specialized flight nursing expertise.

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Conti Chest Pain assessment: how useful is it in triage?

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Introduction and aim. Using the Conti chest pain method in the ER in order to quickly select and assess the patient affected by chest pains and the correct assignment of the color code.

Materials and methods. The study was carried out from 1/07/2011 to 31/08/2011: all patients who arrived on their own at the ER were enrolled. Total number of patients in the study: 70.

Results and conclusions. Diminished risk of errors for the triage nurse since the Conti chest pain method allows for a more correct assessment of chest pains with a modest overestimation percentage (5.6%), without disturbing the ER waiting list.

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Monitoring and assessment of Acinetobacter Baumani infections subsequent to the implementation of a new environmental disinfection in the intensive care.

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Background. The Acinetobacter baumanii bacteria causes hospital-derived infection amongst inpatients, especially in the ICU. This bacteria's peculiar trait is its particular resistance to antibiotics currently available in the market. Healthcare organizations have to take all the preventive measures to prevent this risk, and

implement effective procedures and standardized environmental hygiene.

Materials and Methods. In July 2012 the "Guzzardi" hospital of Vittoria, ASP 7 Ragusa, launched a new "Environmental disinfection procedure" in the Critical Care unit in order to reduce the frequency of Acinetobacter Baumanii infections The study set in relation, in observational and perspective terms, the incidence of infection by this strain of bacteria and the assessment of infection trends in the quarterly periods of 2012.

The study enrolled 71 patients admitted to the Intensive Care, 14 of them with serology positive for Acinetobacter Baumanii, with the following outcomes: direct dismissal, transfer to regional institutes, deceased. Excluded were 75 patients who were not able to have traceability in the follow- ups for transfer to other operating units.

The data was stratified for the quarterly periods of 2012, so as to calculate the frequency of the patients with positive outcomes over the total number of those hospitalized. For the descriptive statistical analysis we used the software Excel and Epi Info.

Results. The preliminary results regarding analysis of the quarterly periods of 2012, showed a total zeroing of the positive outcomes between those exhibited, starting off from a frequency of 18.75% in the 1st quarter, 40% in the 2nd, and 0% in the third.

Conclusions. The complications of these morbose types, besides jeopardizing the final outcome of the patients, determined an increased hospitalization, provoking an expenditure of economic and professional resources, considering the particular needs of patients treated in the ICU. Standardization of the work processes, especially with regard to environmental hygiene in the ICU, produced immediate, effective and efficient results.

Key words: Acinetobacter Baumannii and ICU, hygiene and intensive care.

Emergency hemoperfusion treatments on the Polymixin B –immobilized cartridge.

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Introduction. On 09/08/12 a 57-year-old patient was admitted to the Intensive Care of our Polyclinic due to serious sepsis incurred after a colic attack in his left kidney. His clinical conditions were extremely serious, with signs of multi-organ dysfunction and development of sepsis shock (SOFA 14). Treatment began with mechanical ventilation, advanced cardio-circulatory monitoring, analgosedation, antibiotic therapy and amino acids for hemodynamic support.

Aim. With the onset of sepsis shock most likely due to Gram negative bacteria that produce endotoxines, extracorporeal cleansing on Polymyxin B cartridge (an antibiotic with anti-endotoxine action) may be effective in reducing endotoxine levels and combating the activation of cytokines. Treatment, however, has to start as soon as possible.

Materials and methods. In the afternoon, a nurse of our intensive care team carried out the treatment with the cartridge Toraymixin® (Estor) followed by a continuous veno-venous hemofiltration (CVVH) at high volumes for the removal of the cytokins.

At night, adrenalin was suspended due to imroved hemodynamics.

On 11/08 a second hemoperfusion treatment was given followed by CVVH.

Results. Subsequently: weaning from mechanical ventilation, recovery of respiratory dynamics, extubation, suspension of the CVVH, diminished analgesia-sedation, recovery of consciousness (SOFA 5).

The patient fully recovered and was dismissed on 14 /8 after undergoing a urethral catheter intervention and the placement of stents.

Conclusion. This case demonstrates that high clinical competence levels, technology and organization and the awareness of various extracorporeal depurating methods are indispensable for Nephrology nurse teams working in intensive care units. The rapid combination of drug therapies with a focused extracorporeal depuration treatment carried out early, before the onset of irreversible damages in organ functions, was the best therapeutic approach to treating an extremely serious case of sepsis shock.

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Back to the past: can the use of arteriograms reduce the costs of PICC lines?

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Introduction. The length of the PICC (Peripherally inserted central catheter) is calculated by measuring the distances between the surface artifacts or with a modified Peres formula. The position of the tip is checked through a chest radiograph and has to be guided up to the level of the tracheal carina. Another system is the guided intravascular electrographic method: the "reading" of an intravascular P wave half the width of the maximal identifies the catheter's tip placed at the atriocaval junction (gold-standard).
Aim. The primary aim was to demonstrate that the ECG technique leads to reduced costs (no radiographic control). The secondary aim was to verify the rates of thrombotic and infection complications.
Materials and methods. Retrospective observational study on a spontaneous sample: the patients who transited through the A&E intensive care with PICC implantations. Criteria of the implant: foresaw the need for vascular catheters for more than seven days, administration of PH extreme drugs with osmolarity greater than 800mOsm/liter or harmful to the endothelium, patient "without veins". Contraindications: acute or chronic kidney failure (creatinemia>3mg/dl), hemodynamic instability, need for a direct access Central Venous Catheter. The veins involved were examined before and after the implantation. The tip was checked using the "ECG" technique during placement and a chest x-ray was done at the patient's bedside.
Results and conclusions. Between 29/11/2010 and 09/10/2012 42 patients were implanted with 46 PICCs. The ECG technique was effective and 44 lines were seen to be well positioned, and for two of these cases, the succeeding x-ray checks did not reveal the tip, and one case evidenced a *loop* of the distal section. Two lines, upon ECG check revealed to be badly positioned. After various attempts to reposition them, the decision was made to effect a chest x-ray, which confirmed the bad placement. For reasons inherent to the PICC implant technique, the function of the x-ray was only to control the position of the tip: in 4.55% of the cases, there was no way of determining the positioning, and in all cases that evidenced incorrect placement of the catheter tip, it was done with the ECG technique. Not performing an x-ray control after implantation, useless in 8.9 % of the cases, would lead to a drop in costs, estimated between 13.29 and 18.69 euro for each procedure. The rates for complications in sepsis (1.9gg/catheter) and thrombosis (2.2%) were in line with the statistics of our Operating Unit.

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