Found 160 Abstracts

ABSTRACT FINAL ID: W-41;

TITLE: Respiratory Airway Management

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Airway skills are perhaps the most important skills that an emergency physician possesses. New techniques used to find the airway allow physicians to save golden time and decrease the mortality rate. In this paper we performed a systematic review on the articles that introduced these methods. METHODS: We conducted a systematic review of 10 cohort studies from Barcelona University, Alabama University, Virginia University and Singapore University that were conducted between 2003 to 2006 and the published results are existing on line in the internet. RESULTS: The findings from this systematic review indicate that before intubation we should know the case of death or near death of patients. If patient is near death we should determine that his or her airway is difficult or not. The no difficult airway leads to RSI (rapid sequence intubation) and if the case is a difficult airway the approach depends on the saturation of blood oxygen where used BMV (bag mask ventilation)- Awake technique or LMA (laryngeal mask airway) or cricothyrotomy or blind nasotracheal. For near death cases (crash airway) first BMV is recommended to use and then try to intubate. If it is not successful we would consider failed airway and use BMV and then cricothyrotomy. CONCLUSION: It is necessary for emergency physician to learn to work with this instrument because management of the airway is the first duty of emergency medicine and emergency physician should decide about personal workers management in the emergency department and using each instrument in the best way. AUTHORS/INSTITUTIONS: M.K. Meibodi, S. Bolandparvaz, A. Keshavarzi, H. Abasi, EMERGENCY, Shiraz univerity, Shiraz, SHIRAZ, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: W-14; TITLE: Hospital Disaster Planning

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Considering the importance of emergency medical practice as a therapeutic specialty both of medical and management science and taking into account our country is the fourth Asian country in regard to frequency of natural disasters, it's logical to think and plan preparation for disaster management. METHODS: First we defined a clinical crisis as a situation in which a hospital is not able to cope based on it normal daily capacity and may result in considerable number of deaths and injuries. In the current study a formerly prepared procedure used in American and European hospitals is taken as the base on which the study is conducted. The modes are then modified as dictated by climatic, cultural and clinical conditions of Iran. An aerial map of Iman Hossein Hospital is used to depict the positions of field units and command centers both when it's partially dilapidated. RESULTS: The program should prepare the immediate establishment of a crisis committee comprised of: 1) head of the hospital who should direct the operation and make contacts to other organization, 2) Paraclinic unit, 3) nursing unit (triage), 4) guarding unit, 5) dispatching and discharging unit, 6) psychiatric unit, 7) refrigeration unit, 8) emergency evacuation unit, 9) installations and maintenance unit, 10) logistics unit, 11) communication unit, 12) public relations unit, 13) reception unit, 14) bionuclear chemical unit, 15) specialized units. Each unit is headed by a director for whom 3 surrogates should be designated who would immediately take the director's place when necessary. The operation would begin by an announcement by the head of the crisis management headquarters of the university to the head of the hospital as the field commander. Instructions are then given by the latter to unit directors who then muster their staff to execute the predefined tasks. After completion of assigned tasks and receiving confirmation by higher positions in the chain of command the mission would be considered accomplished. DISCUSSION: After preparing these plans, extensive and comprehensive training and do maneuvers we hope that god willing we will reduce losses caused by natural disasters in the future.

AUTHORS/INSTITUTIONS: M.K. Meibodi, S. Bolandparvaz, A. Keshavarzi, H. Abasi, EMERGENCY, Shiraz univerity, Shiraz, SHIRAZ, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: W-08;

TITLE: The Demography of Transported Patients with Helicopter to Imam Khmeiny Hospital

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Within the past century industrialized nations underwent an epidemiologic transition and trauma became the leading cause of years of potential life lost consuming large amounts of health care resources. In Africa and some parts of Asia trauma is now a major cause of death and disability. Because there has been much less research efforts in the field of trauma than in other conditions, trauma has been termed the neglected disease of modern society. This phrase may also apply to the status of trauma in most developing nations where expenditures on published health programs and research on trauma are minuscule.

Since the beginning of the month of Khordad in 1379 air ambulance with the purpose of rapid transporting of severely injured patients has been established. Because this form of transportation involves a large budget from the government we decided to evaluate such services to patients in the hospital. We hope that this research can determines some aspects of the epidemiology of trauma and quality of urgency service; and be a basic step for more comprehensive studies. METHODS: In this study the demography of transported patients with medical helicopter to Imam Khmeiny hospital from the beginning of this service. RESULTS AND CONCLUSION: In 158 cases the male to female ratio was 2/8 and the most prevalent age of the injured was 30 yrs. 92% of the patients were injured in accidents that shows the necessity of better propagatory and executive programs in traffic field. The most prevalent injured site was extremity followed by head & neck. The most severe injuries were seen in patients with injury in head & neck & thorax. The mean of golden time standard deviation was 23.5. Most patients were treated by general surgery and orthopedic services that shows the necessity of more attentions in this services. Outcome of patients: most of the cases had left the hospital with their own will. This shows the dissatisfaction of patients about services.

AUTHORS/INSTITUTIONS: M. Kalantari meibodi, H. Abasi, S. Mohamadi, S. Bolandparvaz, emergency, Shiraz, Shiraz, Shiraz, IRAN, ISLAMIC REPUBLIC OF:

ABSTRACT FINAL ID: W-15;

TITLE: Management of Disasters and Accidents

ABSTRACT BODY:

Abstract Body: INTRODUCTION AND METHODS: With regards to the overall increase of research in the country and particularly research on accidents and disasters encouraged us to arrange for a careful study through analyzing the trend of research and finally explore the components of this process and ultimately exhibit a Framework for the National Disaster Management Research Center (NDMRC). RESULTS: Emergency cases programs in the following units must be carefully studied: transportation units, telecommunication means, critical pathways and debris excavation, fire engine and fire control, crises management, supply of the public's main needs and requirements and relief services, resources management, health and medical services, search and rescue actions, management of hazardous materials, food and agriculture, supply of energy and fuel, security, recovery and rehabilitation and mass communication media. Organizations are part of the most important cases in management of disasters. Responsibilities and subdivisions of the Research Production Administration are as follows: 1-Strategic Planning of the Center, 2-Operational Planning of the Center, 3-Discovering New Ideas (Requirements assessment and prioritization), 4-Delegating research priorities (identification and classification of research groups and inviting research priorities) 5-Implementation and monitoring research projects (delegation of projects, description of research services, supervision and monitoring indices, supervisors election criteria, using previous experiences). Responsibilities and subdivisions of Research Logistic Administration are as follows: 1-Provision of Resources (Financial, human, equipment and data/information). 2-Logistic indices (production, publication and making applicable). 3-Attracting the collaborations of public and private sectors research centers, educational centers and people. 4-Encouragement (for researchers, juries, supervisors, managers and thesis presenters). CONCLUSION: In Applied Research Administration, different levels of researches must be considered, including doctrinal, policy making, strategic and operative actions and territorial management researches.

AUTHORS/INSTITUTIONS: M. Kalantari meibodi, A. kESHAVARZI, emergency, Shiraz, Shiraz, shiraz, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: W-03;

TITLE: Assessment of Functional Manoeuver in Hospital Disaster Planning

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Iran is the tenth country in the world and the fourth country in Asia that calamities occur in; and Tehran, the capital, is the striking heart of the country disaster planning. Imam Hossain Hospital which covers the eastern area of Tehran and the cities around, is one of Tehran's strategic medical centers. METHODS: In this thesis, in addition to assessing the conclusions acquired from the classic manoeuver of the hospital, the basic design of the manoeuver, the design manner and scenario, triage protocol, several medical protocols and how to improve the executive several steps and foundations, is being concluded and discussed, and also how to improve conditions based on existing conditions is stated. RESULTS: In the ground of triage, on the basis of their education and assistance of START triage method (Simple Triage And Rapid Treatment) the nurse group separated the patients and the results were as follows: Total amount of correct triage: 64.4%; Correct amount of green triage: 62.5%; Correct amount of yellow triage: 73.3%; Correct amount of red triage: 58.3%; Correct amount of black triage: 75%. On the basis of the manoeuver, the lack of existence of a unique executive and medical protocol and the lack of correct training of the various hospital personnel, was one of the basic reasons for the errors in the background of triage, diagnosis, treatment and the official-practical operation. CONCLUSION: The result of the hospital disaster planning showed that the lack of a unique protocol in the executive and medical planning causes the confusion in different divisions and lack of the ability to make coordination between them during the force major. So it seems that providing a medical-executive protocol and training of the different sections involved in hospital disaster planning and periodical manoeuvers (to assess the strength and weakness points) effects in improvement of the operation during the disaster.

AUTHORS/INSTITUTIONS: M. Kalantari meibodi, M. Esmaliyan, emergency, Shiraz, Shiraz, Shiraz, IRAN, ISLAMIC REPUBLIC OF:

ABSTRACT FINAL ID: W-12;

TITLE: Hospital and Treatment Centers' Safety during Disaster

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Considering the importance of emergency medical practice as a therapeutic specialty both of medical sciences and management science and taking into account our country is the fourth Asian country in regard to frequency of natural disasters and 10th country in the world as regards the same, also considering that our country is located in an earthquake prone area and possesses a variety of climates and topographies and a land surface of 1648195 square kilometers, it's logical to think to increase safety of hospital the before disaster occurred and we assessed structural position and disaster management one of hospitals in Mashad. METHODS: First we defined clinical crisis as a situation in which a hospital is not able to cope based on it normal daily capacity. Such situations include incidents which are not normally expected and which may result in considerable number of deaths and injuries. Such numbers as couldn't be handled through hospitals normal procedures and may overwhelm even the normal flow of work. In the current study a formerly prepared procedure used in Tehran's hospitals is taken as the basis on which the study is conducted. RESULTS: The program should be prepared in such a way to constitute immediate establishment of a crisis committee comprised of: 1) head of the hospital who should direct the operation and make contacts to other organization such as fire department and the red crescent and 115 Emergency services, 2) Para clinic unit (including laboratory, Radiology and blood bank), 3) nursing unit (triage, coordination), 4) guarding unit and sentinels, 5) dispatching and discharging unit, 6) psychiatric and social work unit, 7) freezers and refrigeration unit, 8) emergency evacuation unit, 9) installations and maintenance unit, 10) logistics and transport unit, 11) communication unit, 12) public relations and media unit, 13) reception unit, 14) bionuclear chemical unit, 15) specialized units. DISCUSSION: A study of natural disasters in the past reveals a failure by authorities to contain such situations guide us towards more stern planning as regards reacting to unexpected crises. AUTHORS/INSTITUTIONS: H. aBASI, M. Kalantari meibodi, EMERGENCY, SHIRAZ, Shiraz, SHIRAZ, IRAN,

ISLAMIC REPUBLIC OF:

ABSTRACT FINAL ID: W-133;

TITLE: Resuscitation of a Hypothermic and Profoundly Acidotic Patient

ABSTRACT BODY:

Abstract Body: CASE REPORT: A 53 year old unresponsive woman with a history of schizophrenia and insulindependent diabetes mellitus was brought to the emergency department by ambulance. Her husband stated she refused to take prescribed medicines as she did not believe she had any illnesses. Upon presentation, the patient was obtunded and vital signs were as follows: temperature 30 degrees Celsius, blood pressure 91/60 mm Hg, pulse 91 beats per minute, respiratory rate 16 breaths per minute. Initial physical exam demonstrated an obtunded patient who would open her eyes, groan and move her extremities symmetrically to painful stimuli. She had shallow, coarse breath sounds, and an irregular heart rate. Her skin was cold to touch with delayed capillary refill. An intravenous catheter was inserted and normal saline infusion via a fast-flow fluid warmer was initiated. Initial finger stick glucose was greater than 500 mg/dL and an arterial blood gas showed the following: pH 6.778, partial pressure of carbon dioxide 10.4 mm Hg, and partial pressure of oxygen 199 mm Hg. An electrocardiogram revealed that the patient was in newonset atrial fibrillation with a controlled rate. Resuscitation of the patient continued with insertion of a femoral central venous line and warming with a forced-air blanket; however the patient became progressively hypotensive. She was started on bicarbonate, insulin and norepinephrine drips, broad spectrum antibiotics for possible sepsis, and hydrocortisone for possible adrenal insufficiency. Initial laboratory evaluation showed a white blood cell count of 27,500, a bicarbonate level of less than 5 mEq/L, an anion gap of 25 and renal insufficiency. Two hours after arrival, she was more responsive, asking for water. The patient was admitted to the intensive care unit where her status continued to improve. She was weaned from pressors and the insulin drip by hospital day three. Her mental status returned to baseline and her heart rhythm spontaneously converted to normal sinus. The patient continued to profess that she had no illnesses and court-ordered psychiatric care was recommended to the family.

AUTHORS/INSTITUTIONS: A. Bean, L. Bowen, , University of Arkansas for Medical Sciences, Little Rock, AR;

ABSTRACT FINAL ID: W-63;

TITLE: Admit or Discharge Congestive Heart Failure Patients: Use of a Severity of Illness Index

ABSTRACT BODY:

Abstract Body: OBJECTIVE: The study design was to evaluate aggressive emergency department(ED) management (mgt) of CHF patients (pts) as a strategy for limiting hospital admission and its associated costs. A severity of illness index (SII) was established to quantify the degree of CHF in pts presenting to the ED and to correlate the pt's initial presentation to mgt requirements and outcomes. METHODS: Pts in a large inner-city hospital ED determined to have a CHF exacerbation were treated with standard therapy (ST) and underwent analysis with a SII for CHF. Pts were observed in the ED prior to being discharged to home or admitted to the hospital. Pt outcome was assessed at outpt follow-up and outcome was correlated with SII and death. Disposition of study pts was compared to dispositions assigned by 12 board-certified EM physicians. RESULTS: Of 101 pts who were aggressively treated with ST in the ED for CHF and observed for 6 hours, 55 pts were considered to have stabilized for safe discharge to home and were scheduled for outpt follow-up. By judgement of ED physicians, only 13 would have been discharged to home. Pts admitted to the hospital also fared better, only 3 of 46 entered the ICU, compared to 31 of 101 pts that would be admitted to ICU under the community standard of care. CONCLUSION: After 6 hours of ED observation (OBS), where aggressive treatment for CHF was administered, fewer pts required admission to the hospital, reducing the overall cost for pt care. Pts who were admitted to the hospital after 6 hrs of ED OBS were more likely to be admitted to the floor and less likely to ICU, further reducing costs and allowing for ICU beds to be used by other pt populations. No increase in morbidity or mortality was correlated to the use of the ED OBS and the alteration in admission decisions following ED OBS in pts with CHF. Aggressive treatment of CHF in ED OBS can reduce the overall cost of treatment of pts with CHF and reduces admissions without adversely affecting pt outcome. Assessment of CHF with this SII and observing CHF pts in the ED prior to assessing disposition should become the standard of care for this pt population. AUTHORS/INSTITUTIONS: L.M. Dunbar, D.E. Sibley, Medicine/Emergency Medicine, Louisiana State University Health Sciences Center, New Orleans, LA; E.E. Dancour, E.E. Dancour, , Tulane University Medical School, New Orleans, LA;

ABSTRACT FINAL ID: W-13;

TITLE: Hospital Center Disaster Management

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Considering the importance of emergency medical practice as a therapeutic specialty both of medical sciences and management science also considering that our country is located in an earthquake prone area. Thus an emergency reaction program has been prepared and executed in one of referral hospitals in Shiraz. METHODS: First we defined a clinical crisis as a situation including incidents which are not normally expected and which may result in a considerable number of deaths and injuries. Such numbers as couldn't be handled through hospitals normal procedures and may overwhelm even the normal flow of work. In the current study a formerly prepared procedure used in American and European hospitals is taken as the basis on which the study is conducted. The modes are then modified as dictated by climatic, cultural and clinical conditions of Iran. An aerial map of Namazi hospital is used to depict the positions of field units and command centers both when it's partially dilapidated. RESULTS: The program should be prepared in such a way to constitute immediate establishment of crisis committee comprised of: 1) head of the hospital, 2) Para clinic unit, 3) nursing unit, 4) guarding unit, 5) dispatching and discharging unit, 6) psychiatric unit, 7) refrigeration unit, 8) emergency evacuation unit, 9) installations unit, 10) logistics unit, 11) communication unit, 12) media unit, 13) reception unit, 14) bionuclear chemical unit, 15) specialized units. Each unit is headed by a director for whom 3 surrogates should be designated who would immediately take the director's place if and when necessary. The operation would begin by an announcement by the head of the crisis management headquarters of the university to the head of the hospital as the field commander. Instructions are then given by the latter to unit directors who then muster their staff to execute the predefined tasks. CONCLUSION: After preparing this plan, extensive and comprehensive training should be given to hospital staff or whoever would be engaged in such reaction. Eventually the readiness of the staff should be evaluated through simulated situations and

AUTHORS/INSTITUTIONS: H. Abasi, M. Kalantari meibodi, A. Keshavarzi, M. Manani, S. Bolandparvaz, emergency, shiraz university, Shiraz, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: W-70;

TITLE: Investigation of Frequency of Different Diseases in Northern and Southern Geographical Areas of Shiraz among Patients Reported to 115 Emergency Services

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Urban society hosts many cultural, economical and social differences. Social, economic and cultural conditions in the area of dwelling of a family may be a cause of high-risk behavior and high frequency of specific diseases. Because the process of decision-making should be based on necessities created by time and region, extensive knowledge of conditions prevalent in each area could have a positive effect on the consequences of those decisions, specially the first and immediate level consequences that in this case constitute the prevention of disease. METHODS: At the beginning, emergency teams each consisting of two trained technicians and each equipped with one vehicle were used. Two of the teams were deployed to south Shiraz while the other two were deployed to the northeast. These teams were commissioned to transfer patients to the nearest hospital after receiving emergency calls. Those that received summary treatment were not included in our study. RESULTS: The only cause of emergency calls for which women were more the actuators was suicide. In both northern and southern areas, accidents and poisonings happened mostly to those between 18 and 27. By area, the frequency was higher for northern areas than for the southern. In northern areas of Shiraz, addictive drug abuse was more frequent in men while non-addictive drug abuse was more frequent in women. In southern areas of Shiraz, most incidents of poisoning and drug abuse in both sexes were of addictive type. We divided our sample in each area into age groups of 18-28, 28-37, 38-47, 48-57, 58-67 and 68-77. In both northern and southern areas, the highest rates of poisoning belonged to 18-27 yr old age groups and the most frequent cause of emergency calls related to 48-57 age groups was heart condition. CONCLUSION: Equipment at medical centers should be allocated according to causes of medical conditions and type of illnesses rife in each area. Experts in toxicologists should be employed in centers where such occurrences are to be expected to reduce the current mortality rates.

AUTHORS/INSTITUTIONS: <u>S. Esfandiyari, M. Kalantari meibodi, emergency, Shiraz, Shiraz, IRAN, ISLAMIC REPUBLIC OF;</u>

ABSTRACT FINAL ID: W-51;

TITLE: INTEGRATED HEALTH CENTERS.INITIAL APPROACH TO ACUTE CORONARY SYNDROMES **ABSTRACT BODY**:

Abstract Body: Problems associated to overcrowded emergency departments continue to be a major health problem in Spain. Different governements and health authorities have experienced a prior step to hospital Emergency Departments (ED) with the development of Integrated Health Centers (IHC).

These IHC are reducing our hospitals overcrowded ED frequentation improving the assistance in both steps. Patients with mild problems could be treated in these IHC with a accurate and reliable doctor teams with lab and radiology support. Patients do not have to be transported to a hospital far away from their villages or neighbourhoods due to problems that could be solved by IHC doctors, avoiding ambulance transportation and reducing the delay in the assistance to acute and major health pathologies at the hospitalaty EDs.

Acute hearth pathologies are mainly first treated by our IHC doctors due to the fact that the IHC are mostly downtown, the posibility of quick initial evaluation and lab and radiology test availability.

An important amount of patients complaint of cardiorespiratory problems and improving antiarrtithmic tretament is one of our goals considering that we do not have cardiology nor intensive care support on these centres and patients with acute heart diseases should be transferred to our Hospital, miles away from these IHC. We present here how an important amount of patients with heart rhythm diseases are first evaluated at our IHC.

This scheme tries to make easier to IHC doctors the initial approach to acute coronary syndromes considering and individual evaluation and an specific treatment according to all procedure protocols. Our experience have showed us that these kind of algorithms are highly valued by IHC and Primary Care profesionals, who have a non specific cardiology training and have to treat many patients from many different pathologies and acute and chronic diseases. We present hereby our self developed protocol assessing acute coronay syndromes,

AUTHORS/INSTITUTIONS: L. Manclus Montoya, <u>S. Navarro Gutierrez</u>, O. Martinez Ferris, A. Lluch Sastriques, S. Castells Juan, M. Roig Durá, Emergency Medicine, Hospital de La Ribera, Alzira, Valencia, SPAIN;

ABSTRACT FINAL ID: W-42; TITLE: Airway Respiratory Control

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Airway skills are perhaps the most important skills that an emergency physician possesses. The new techniques used to find the airway allow the physicians to save the golden time and decrease the mortality rate. In this paper we performed a systematic review of the articles that introduced these methods. METHODS: We conducted a systematic review of 10 cohort studies from Barcelona University, Alabama University, Virginia University and Singapore University conducted during 2003 to 2006 and the published results are existing on line in the internet. RESULTS: The findings from this systematic review indicate that before intubation we should know the case of death or near death of patients. If a patient is near death we should determine that his or her airway is difficult or not. The non-difficult airway leads to RSI (rapid sequence intubation) and if the case is a difficult airway the approach depends on the saturation of blood oxygen where used BMV (bag mask ventilation), awake technique or LMA (laryngeal mask airway), or cricothyrotomy, or blind nasotracheal. For near death cases (crash airway) first BMV is recommended to use and then try intubation. If it is not successful we would consider it a failed airway and use BMV and then cricothyrotomy. CONCLUSION: It is necessary for emergency physician to learn to work with this instrument because management of the airway is the first duty of emergency medicine and emergency physicians should decide about personal workers management in the emergency department and using each instrument in the best way. AUTHORS/INSTITUTIONS: H. Rahmati, K. Khosravi, Nurasing faculty, Nursing faculty, Shiraz, IRAN, ISLAMIC REPUBLIC OF;

ABSTRACT FINAL ID: W-79;

TITLE: Effect of unfamiliar devices on the defibrillation skill: A simulation study

ABSTRACT BODY:

Abstract Body: Background

Early defibrillation is essential for survival from ventricular fibrillation (VF). In Korea, clinical skills including electrical defibrillation are assessed in medical licensing examination since 2009. Although one defibrillator is used in the exam, various defibrillators are used in real. Also, there are few in research about defibrillation skill by use of unfamiliar device. We wanted to know whether unfamiliar devices may affect defibrillation skill.

Method

Our research was performed during objective structured clinical examination (OSCE) for 6th grade medical students. Three different defibrillators were used for the test; CodeMaster (M17238, Hewlett Packard, Andover, USA), LiFEGAIN (CU-HD1, CU Medical System, Korea), and HEARTSTART MRx (M3535A, Phillips Healthcare, Andover, USA). CodeMaster was the defibrillator used for education and training. In the test room, VF was simulated with use of a simulator (SimMan®, Laerdal Medical, Stavanger, Norway), and one among the three defibrillators were placed randomly. Defibrillation skill was assessed with use of the checklist where 8 items among total 13 items were for device operation. The written exam & clinical practice score of emergency medicine and defibrillation skill score were investigated. Also, each operation time of device (turn-on, charge, and shock) was calculated with review of video resources containing entire the exam process. All variables was analyzed with Kruskal-Wallis test in SPSS. Result

59 students were included for analysis among 65 students enrolled. Students were divided into CodeMaster (n=20), LiFEGAIN (n=15) and HEARTSTART MRx (n=24). There were no significant difference in the score of written exam and clinical practice among the groups. Also, the defibrillation skill scores and the time intervals were not different among the groups (Table 1).

Conclusion

Unfamiliar devices may not affect the defibrillation skill.

AUTHORS/INSTITUTIONS: J. Ko, M. Choa, K. Kim, J. Yeo, , Kwandong Univeristy College of Medicine Myongji Hospital , Goyang, Gyeonggi-do, KOREA, REPUBLIC OF;

ABSTRACT FINAL ID: W-127;

TITLE: Age Comparison of Characteristics and Linkage to Care Results of HIV-diagnosed Patients from a Multimedia HIV Testing and Counseling Program in a New York City Emergency Department

ABSTRACT BODY:

Abstract Body:

OBJECTIVE: This study compared the HIV testing and linkage to care characteristics of emergency department (ED) patients of different age groups tested through a model using integrated video counseling and computer-assisted data collection.

METHODS: A cohort analysis was conducted on ED patients recruited for HIV testing from 10/1/05 to 11/30/10 through a multimedia HIV testing and counseling model, Project BRIEF. Demographics, the number of patients tested, identified HIV infections, and rates of linkage to care were determined for patients aged 18-49 and patients aged 50 years and older. Means and medians were calculated for continuous variables and proportions for categorical variables. Group comparisons were made using Chi-Square and Student's t-tests.

RESULTS:Within this ED-based rapid HIV testing model, 45,427 patients tested were in the 18-49 age group, while 9,914 patients tested were aged 50 and above (50-99 years) (Table 1). Older patients had a higher HIV seroprevalence rate (0.47%) than younger patients (0.38%) The mean number of hospital visits prior to diagnosis for confirmed positive patients was greater for older patients than younger patients both in total (12.1 vs. 5.7, p=0.03) and in the year prior to diagnosis (2.9 vs 1.5, p=0.05) (Table 2).

CONCLUSIONS: Within an ED-based HIV testing model, confirmed positive patients aged 50 years and older made more medical visits to the hospital overall and within the past year, yet co-presented with AIDS more frequently than younger positive patients. As the average age of the world population increases, older patients comprise an increasingly significant subpopulation that demands increased efforts for HIV testing and prevention strategies that address the specific needs of older adults.

AUTHORS/INSTITUTIONS: C. Brusalis, J. Leider, E. Cowan, <u>Y. Calderon,</u>, Jacobi Medical Center, Bronx, NY; J. Leider, E. Cowan, Y. Calderon, Emergency Medicine, Albert Einstein College of Medicine, Bronx, NY;

ABSTRACT FINAL ID: W-128;

TITLE: Testing Preferences and Knowledge of Hepatitis B and Hepatitis C among a New York City Emergency Department Patient Population

ABSTRACT BODY:

Abstract Body:

BACKGROUND: This study sought to determine the acceptability of hepatitis B/C screening during an emergency department (ED) visit, and assess patients' general hepatitis knowledge.

METHODS: A prospective study was conducted on a convenience sample of ED patients at two New York City hospitals. Eligible participants completed anonymous written surveys about the acceptability of hepatitis B/C screening and a brief hepatitis knowledge measure. Means and standard deviations were calculated for continuous variables and proportions for categorical variables. Standard bivariate methods were used to compare acceptability and preferred method of hepatitis screening by race, ethnicity and gender.

RESULTS: Of 1,503 individuals approached, 1,379 agreed to participate. The study population was 47% male, 47% Hispanic and 40% African-American. Mean age was 40.3, SD ± 15.7 years. 68.7% (943/1,373) said that they would get tested for hepatitis B/C if a test were available. Of those interested in testing 57.8% (540/934) would prefer a rapid oral swab, 22.9% (214/934) a blood draw and 19.3% (180/934) a fingerprick. 67.0% (624/931) would elect to be tested for hepatitis B/C and HIV together rather than hepatitis alone. There were no differences in acceptability, testing method preference, or preference for combination hepatitis and HIV testing between racial, ethnic and gender groups. 92% (1,269/1,379) of patients had at least one incorrect answer on the hepatitis knowledge measure and 21.4% (295/1,379) patients incorrectly answered all 5 knowledge questions.

CONCLUSIONS: ED patients were receptive to hepatitis B/C screening. The findings suggest that implementing hepatitis B/C screening may be possible in the ED with high rates of testing acceptance. Most patients seeking care in an inner-city ED require educational materials to increase knowledge and awareness of hepatitis B/C prior to testing. AUTHORS/INSTITUTIONS: Y. Calderon, E. Cowan, Emergency Medicine, Albert Einstein College of Medicine, Bronx, NY; Y. Calderon, E. Cowan, C. Schramm, C. Brusalis, J. Leider, , Jacobi Medical Center, Bronx, NY; C. Schramm, J. Leider, , Albert Einstein College of Medicine, Bronx, NY; S. Stern, , State University of New York- Downstate College of Medicine, Brooklyn, NY;

ABSTRACT FINAL ID: W-139; TITLE: Polyunsaturated Fatty Acids

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Certain fatty acids(FA) are required to prevent a syndrome of impaired growth, infertility, skin lesions and kidney necrosis. FA of the linoleic (LA)(ω 6) and α -linolenic (LeA)(ω 3) series, the "essential fatty acids"(EFAs), are able to prevent this syndrome. All animal tissues above protozoa are unable to introduce double bonds in the 6,9 positions, thus require parent acids in the diet. Without EFAs, unsaturated acids synthesized de novo from acetate become dominant. Results using mammalian cell lines in tissue culture showed selective loss of the ability to desaturate (dsat) LA under conditions where dihomo-γ-linolenic (DgL) was dsatd. 2 separate desaturases for the δ-5 and δ-6 position must exist. The metabolism of LA, DgL, LeA and Oleic acid (OA) is compared in a number of normal and transformed cell lines to further delineate the mechanisms of biosynthesis of polyunsaturates. One question was if the same enzymes metabolize various families of acids. METHODS: Metabolism in 17 cell lines, human diploid and transformed cells were studied by addition of 1-14C acids to culture medium -'standard' or lipid-free. After incubation, cells were harvested and total radioactive uptake measured. After lipid extraction, methyl esters were prepared and mass and radioactive composition were measured by GLC. Relative amounts of each FA were calculated based on peak areas of mass and radioactivity tracings.

Results: All diploid cell lines and transformed cell lines were found to have both δ -5 and δ -6 desaturases whereas EAC, L-2071 MBIII and L-929 failed to show δ -6 desaturation (dsatn). When the radioactive preformed metabolite of δ -6 dsatn was added to cell cultures, all cell lines except EAC had the ability to dsat the δ -5 position. The latter yielded only elongation products. CONCLUSIONS: It was found that if a cell failed to dsat LA, parallel loss in activity for LeA and OA was exhibited. This indicates the δ -6 dsatn step for each of these families is mediated by the same enzyme. When the preformed intermediate was presented, parallel activity was demonstrated for the δ -5 desaturase. The same desaturases are involved in metabolism of each position of the various families of FA.

AUTHORS/INSTITUTIONS: L.M. Dunbar, Medicine/Emergency Medicine, Louisiana State University Health Sciences Center, New Orleans, LA;

ABSTRACT FINAL ID: W-80;

TITLE: Nuisance or Useful? The Role of a Medical Student within the Emergency Department

ABSTRACT BODY: Abstract Body: Aim:

The purpose of this study is to evaluate patients' perceptions on medical students and their role within the emergency department (ED). We looked patients' preferences having medical students perform procedures on them as part of their clinical training.

Methods:

22 members of the public who had previously visited an emergency department of 25 approached (88% participation rate) completed our questionnaire. We examined patients' views on staff grading and how many basic clinical procedures a medical student should have attempted before the participant would allowing the student to perform that procedure on them.

Results:

Less than half of participants (45.45%) could correctly rank medical staff in ascending seniority from medical student to consultant. Patients were willing to allow medical students to take blood pressure and monitor glucose as a first attempt. Majority of participants would like a medical student to have attempted basic medical skills, such as venepuncture, more than ten times before allowing a student to perform a procedure on them in the ED.

Conclusion:

Patients would like students to have greater training in performing procedures before attempting on patients; this may have implications for the way medical education is approached within the emergency department. A log book of skills which usually is signed after one attempt may need to be revised to instil greater confidence in the public for juniors. With increasing use of simulation technology this may be a more appropriate place for training skills rather than the ED.

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ABSTRACT FINAL ID: W-39;

TITLE: Thermal Epiglottitis Requiring Emergency Tracheostomy after Ingestion of Boiling Water

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Upper Respiratory tract obstructions are an important cause of urgent intubation/cricothyroidotomy in the emergency department and pre-hospital setting, the aetiology of which are broad. CASE REPORT: We describe the case of a male patient in his early forties who ingested an unknown quantity of boiling water and went on to require an emergency cricothyroidotomy due to an initial failure in ETT intubation because of thermal epiglottitis. The report emphasises the need for early recognition of potential airway obstruction and advocates the consideration of early intubation in such patients. DISCUSSION: The case serves as a reminder of the potentially life threatening consequences of thermal injury to the oropharynx and epiglottis in all age groups. A detailed history is vital in recognising the possibility of trauma to the oropharynx. In all cases patients should be admitted for close observation and early prophylactic intubation may need to be considered depending on the clinical course.

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ABSTRACT FINAL ID: W-140;

TITLE: An unusual case of bilateral anterior shoulder and mandible dislocations

ABSTRACT BODY:

Abstract Body: This case report describe a rare simultaneous bilateral anterior dislocation of shoulders and mandible without any fracture, in a young adult male following an episode of generalized Tonic-Clonic seizure. This patient was managed with bimanual relocation for Temporomandibular joint and closed scapular manipulation for shoulder dislocation. Coincidence of these unusual dislocations has not been reported previously.

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ABSTRACT FINAL ID: W-68;

TITLE: Emergency Department Protocol-Based Care: Is it Needed?

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Effective decision-making is especially important in the uncertain and often chaotic environment of the emergency department, which can cause patient safety to be compromised. Evidence-based protocols help emergency physicians organize the clinical decision process and become more efficient and less prone to error. These protocols are used in addition to the adherence to the general principles of emergency care that are found in the ACLS and ATLS. The purpose of this study is to underline the importance of thorough understanding and integration by health care staff, of the various emergency department protocols such as: heat stroke, Co2-intoxication, snake bite, and comatose state. DISCUSSION: The use of evidence-based protocols in medical care, and especially in the emergency department, is vital. The education of health care staff must include thorough comprehension and understanding of these protocols. This will improve patient outcome and will protect the staff from possible medicolegal difficulties.

ABSTRACT FINAL ID: W-81;

TITLE: Two-Day Primary Trauma Care Workshop – Early and late evaluation of knowledge and practice.

ABSTRACT BODY:

Abstract Body: Objectives: The management of multiply injured trauma patients is a skill requiring broad knowledge and remarkable skills. The aim of Primary Trauma Care (PTC) module is to orient medical doctors, residents and specialists to the init ial assessment of an injured patient. A course based on expanded PTC was developed for some senior and junior medical students according to determine if PTC improves the ability to perform and retain primary survey skills.

Materials and Methods: This workshop was held in Education Development Center of Tabriz Medical University in 27th-28th of April, 6th-7th of September, 22nd- 23rd of November 2007. The participants were given lectures, completed practices on moulaged patient and case scenarios about management of traumatic patient. All participants were given a pre-test and a post-test including questionnaire and Procedural Skill exams, at the end of workshop the same post-tests were done 6-12 month later.

Results: 64 people were interested in attending the workshop from the total of 90 invited and 53 people responded the late post-test. The mean score in the pre-test, early post-test and late post-test was 18.84, 26.72 and 22.17 respectively (p=0.000). Conclusion: Most of medical doctors and residents didn't have enough knowledge about basic PTC. We have shown that incorporating hands-on patient scenarios in an expanded course based on PTC principles helps medical students to obtain the knowledge and skills needed to perform the primary survey sequence correctly. Furthermore extra educational planning seems necessary to retain theses abilities as needed.

Key words: Medical doctor; primary trauma care; primary survey; education; workshop.

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ABSTRACT FINAL ID: W-141;

TITLE: Information transfer in acute care chains: Can routines explain the bottlenecks?

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Although bottlenecks in information transfer between professionals in acute care delivery occur, explanations for these bottlenecks are unclear. This study describes and examines two rival explanations for them. The first is based on literature on process typology and the second is based on literature on organizational routines.

METHODS: A multiple case study containing six cases (i.e. acute care chains) was carried out in the region of South Limburg, the Netherlands. In total, 40 semi-structured interviews were conducted (response rate 83%). Also physical artifacts and archival records about the communication process were gathered. Data were entered into a data-matrix and flowcharts. The pattern matching technique was used to examine the rival explanations.

RESULTS: Two types of processes according to the literature on process typology could be distinguished; procedure-based factories and archipelagos. The bottlenecks in information transfer occurred regardless of the type of process. Communication routines showed to be organization based and descriptions of communication routines in the acute care chains as a whole could not be found.

CONCLUSION: The bottlenecks in information transfer could not be explained by literature on process typology. Conversely, literature on organizational routines was useful to explain the occurrence of bottlenecks in information transfer in acute care chains. The results of this study imply that it is useful to further explore the role of organizational routines on communication in acute care chains to develop a solution for bottlenecks.

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ABSTRACT FINAL ID: W-64;

TITLE: Usage, Indication and Prognosis of the D-Dimer Assay in the

Emergency Department

ABSTRACT BODY:

Abstract Body: OBJECTIVE: The patient presenting in the Emergency Department who is suspected of having a thrombotic event is a challenge for the emergency physician. One of the blood tests that can help in the diagnostic approach towards patients is the D-Dimer test (the measurement of fibrin degradation products). Aim: In order to use the D-dimer test in an appropriate manner, the test's indication and limitations should be reviewed. In addition, it is important to note that the test sometimes shows "false positive" and "false negative" results. The emergency physician should keep this in mind at all times. METHODS: From March 2003 through March 2006 the Hillel Yaffe Medical Center performed 2176 D-dimer tests, 516 tests were performed in the Emergency Department. Of these 516 tests, 257 results were normal and the remainder showed elevated D-dimer levels in varying ranges. RESULTS: A sample of 168 patients with high D-dimer in the Emergency Department showed that 18 of them were discharged and 150 of them were admitted. Only one-forth of these patients were diagnosed with varying thrombotic events. Only 9 of the patients whose D-dimer levels were at the maximum (out of 21 patients) were diagnosed with having some kind of thrombotic event. When D-dimer levels were at the maximum, the patients suffered from every serious medical conditions such as sepsis with multi-organ failure and DIC and advanced malignancies. Mortality rates among these patients were especially high. CONCLUSION: Our study verified the findings from the medical literature that showed that the use of the D-dimer test is a valuable diagnostic tool. However, it is important to remember that only the combination of proper medical history taking, physical examination and appropriate use of screening test is critical for the management of patients suspected of having experienced a thrombotic event.

ABSTRACT FINAL ID: W-65;

TITLE: Special Aspects of Morbid Obesity in the Emergency Department

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Morbidly obese patients suffer not only from physical ailments but also from psychological difficulties. These include problems with self-image, self-esteem and interpersonal interactions. METHODS: A survey conducted in the ED of the Hillel Yaffe Medical Center showed that there has been a progressive increase in the amount of patients presenting to the ED who are morbidly obese suffering from a variety of symptoms. Three hundred and six morbidly obese patients were treated in our ED in 2004 and six hundred and fortynine presented in 2008. RESULTS: We review the more common problems associated with morbid obesity and how they might influence their care in the ED. In addition, practical tips for the care of this cohort of patients will be presented. CONCLUSIONS: It is preferable for the morbidly obese patient to present at the ED in an ambulance. ED beds should be capable of supporting this patient cohort. Medical equipment (such as blood pressure monitors, oxygen masks, chamber pots, pajamas, resuscitation equipment, etc.) of appropriate size should be available. Health care staff in the ED should be physically able to move these patients. In extreme cases it might be useful to have a mechanical lift accessible. Staff should receive training and guidance to prepare them for the physical and psychological problems faced in treating this rapidly growing patient population. Coordination with a social worker and psychiatrist should be considered in appropriate situations.

ABSTRACT FINAL ID: W-69;

TITLE: Use and Interpretation of Cardiac Troponins in the ED

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Cardiac troponins (cTn) are frequently assessed in patients presenting to the emergency department with chest pain and various diseases in which myocardial injury may be involved. Cardiac troponins are no longer used only for diagnostic investigations in acute coronary syndrome but may also provide valuable information regarding screening, prognosis and risk stratification of patients. The purpose of this report is to describe the use and interpretation of cardiac troponins in our Emergency Department and throughout the Hillel Yaffe Medical Center. DISCUSSION: The availability and use of sensitive and specific cardiac markers has grown substantially in the detection and management of patients with acute coronary syndrome (ACS) in our medical center. Elevated cardiac troponins are usually related to myocardial damage but are NOT synonymous with ACS. Other etiologies should be considered in the differential diagnosis of a patient presenting with atypical symptoms and elevated cTn. Thorough knowledge of how to interpret the implications of elevated cardiac troponins will enable emergency physicians to expand their list of differential diagnosis, facilitate risk stratification and ED dispositioning. This will allow better use of limited resources (staff and time), and avoid potential iatrogenic complications resulting from inappropriate interventional therapies.

ABSTRACT FINAL ID: W-67;

TITLE: What's New in our Emergency Management of Patients with Acute Stroke

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Stroke is a common medical condition that presents in the emergency department. It is widely known that 85% of all strokes are of ischemic origin and the remainder - hemorrhagic. We retrospectively reviewed stroke presentation statistics in the Hillel Yaffe Medical Center Emergency Department for the year of 2009. We found that there were 328 cases of stroke during that period, and that 283 of them were ischemic. Since April 2010, the Hillel Yaffe Medical Center, with the crucial cooperation of pre-hospital services, has been treating ischemic patients who meet the criteria with TPA. The purpose of this report is to devise a management protocol that is specifically tailored to the Hillel Yaffe Medical Center Emergency Department. METHODS: Data Sources: Primary trials, current guidelines. CONCLUSIONS: The emergency physician should keep in mind the indications and contraindications for TPA treatment when evaluating patients presenting with symptoms of stroke. Collaboration between pre-hospital medical services, the emergency physician, neurologist and imaging department will hasten identification of the cohort of patients requiring thrombolysis in ischemic stroke. The protocol presented is a practical step-by-step algorithm that adds to the literature regarding emergency department management of acute stroke. AUTHORS/INSTITUTIONS: J. Ashkar, emergency department, hillel yaffe hospital, Hadera Israel, ISRAEL;

ABSTRACT FINAL ID: W-32;

TITLE: Do Emergency Medicine Residents Know Street Drug Slang?

ABSTRACT BODY:

Abstract Body: Introduction: People with illicit substance abuse problems are frequent patients in Emergency Departments. Generally, these patients are only familiar with the "street slang" terms of abused substances. This terminology is usually not familiar to many ED professionals resulting in significant communication and treatment failures.

Objective: To measure and compare knowledge of street drug terminology among groups of health care providers.

Methods: A 25-question test on street drug slang given to EM residents, Attending Physicians and medical students. The residents were in two EM residency programs in contiguous States. As controls, the test was also given to non-EM residents, fourth-year medical students at two medical schools, EM attending staff at the two programs, pharmacists, and ED nurses. The EM Attendings were compared to the other groups using 95% confidence limits and the Mann-Whitney rank sum test.

Results: There were 34 EM residents, 31 non-EM residents, 24 medical students, 16 EM attending physicians, 7 pharmacists, and 17 nurses who participated. Each group had a mean score of less than 10 correct answers (40% correct). The EM residents had a mean score of 8.8 (Standard Deviation =3.9), EM attending physicians scored 9.9 (SD=3.8), nurses with 4.8 (SD = 2.3), non-EM residents with 5.1 (SD=2.2), medical students with 6.63 (SD=2.7) and the pharmacists scored 8.0 (SD=4.7). When compared to the other groups, the EM residents had a difference with EM attending of -1.2 (95% CI: -3.5 to 1.2), pharmacists 0.8 (95% CI: -2.8 to 4.4), medical students 2.1 (95% CI: 0.3 to 4.0), non-EM residents 3.6 (95% CI: 2.0 to 5.2), and ED nurses 4.0 (95% CI: 1.9 to 6.0). Only the comparison to medical students, non-EM residents, and nurses were statistically significant.

Conclusions: All groups performed badly on the test. Although the EM Attendings performed better than all groups, there are major knowledge deficiencies in this area which may be significant barriers to excellent emergency care. EM residencies and CME publications need to focus on this potential language gap between health care providers and the population they treat.

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ABSTRACT FINAL ID: W-78;

TITLE: Undergraduate Education in Emergency Medicine

ABSTRACT BODY:

Abstract Body: The author presents the issue of need and effect of systematic education in emergency medicine within medical studies. Emergency medicine actually doesn't take part of the obligatory subjects within the undergraduate medical education in Czech Republic. The optional Emergency Medicine Course has been run over on the 3.rd Faculty of Medicine, Charles University, Prague, in the school year 2010/2011. Selected groups of Czech and English speaking students (5th and 6th year) have been instructed in different themes of emergency medicine by both theory and practical seminars. At the end, the course has been evaluated by the students and they had to pronounce their opinion about the necessity of general education in emergency medicine prior to finish their studies. The author queries about the necessity and usefulness of the systematic and obligatory education in emergency medicine at the end of the medicine studies.

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ABSTRACT FINAL ID: W-142;

TITLE: The old man with anal pain; slipper in rectum for sexual satisfaction

ABSTRACT BODY:

Abstract Body: Introduction:

The presence off foreign bodies into the rectum is not an uncommon situation; rectal foreign bodies present as a dilemma because of delay of presentation. This case report is an old man with foam slippers in his rectum. Case presentation:

The 69 year old man who found in the home with chief complain of weakness, anxiety and pain in anal, came to emergency department of Sina Hospital. In history taking, the patient never said anything about rectal penetration, but because of pain in the rectal area, the rectal exam run for him. In rectal exam, a firm foreign body was found in the 5 cm of rectum. There is a lot of discharge but without bleeding. In the x ray there was radio lucent materials in the rectum with direction to anterior of abdomen could see , the foreign body was removed in sedation with maneuvers and speculum and Magill. The foreign body was foam slippers, because of wetting and bloating remove of it was so difficult.

Discussion and conclusion:

Anorectal foreign bodies are usually inserted transanally for sexual or medicinal purposes. The old age cannot exclude the penetration of foreign body for sexual satisfaction and if we found the patient with rectum and anal pain, we must do rectal exam; and also, in the emergency department setting with procedural anesthesia, we can remove the rectum foreign body.

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ABSTRACT FINAL ID: W-02;

TITLE: Evaluation of Standard Preparation Needs for Disaster Management in Imam Reza Hospital of Tabriz **ABSTRACT BODY:**

Abstract Body: OBJECTIVE: A hospital is in great demand following a disaster. The role and responsibilities of hospital during a disaster have been assumed by disaster medical planners for long time. The purpose of this study was comparing Emam Reza University Hospital with the best standard for disaster management at Tabriz.

METHODS: This is a cross sectional study for determining overall medical disaster planning processes of the emergency department of Emam Reza Hospital in Tabriz at 2009. Professional training & continuing education for hospital personnel, design, facility and equipment were evaluated and compared to international standards.

RESULTS: Emergency department of Emam Reza University Hospital was managed with Emergency Medicine Attend. But there was no disaster medical plan for a long time. Disaster medical training of hospital personnel has been inadequate. The interface between public/governmental agencies and hospital was weak. It is necessary to improve hospital equipment such as international standards. There was no prehospital and initial care education at this department. Research about emergency and disaster management were improved. CONCLUSION: In order to move forward, hospital and response agencies must do the following: improve disaster medical and critical care education of all hospital personnel, improve the interface between public/governmental agencies and hospital, and focus on prehospital rescue and initial medical care.

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ABSTRACT FINAL ID: W-52;

TITLE: CARDIAC ARREST AND CPR IN A GREEK GENERAL HOSPITAL

the immediate establishment of CPR teams in all Greek hospitals.

ABSTRACT BODY:

Abstract Body: Objective: Cardiac arrest is a leading cause of death worldwide. The incidence of in-hospital cardiac arrest (IHCA) is 1-5 per 1000 admissions and, despite recent advantages in cardiopulmonary resuscitation (CPR), the survival to hospital discharge is only 17.6%. The aim of our study was to analyze IHCA in a Greek general non-teaching hospital.

Methods: We retrospectively collected and analyzed data on all patients in whom resuscitation was attempted during the preceding year in Tzaneio General Hospital of Piraeus. Only patients with complete medical records were included in our study. Successful CPR was defined as the restoration of spontaneous circulation (ROSC) for a minimum of 20 min. Statistical analysis was performed with SPSS statistical software (release 15.0, SPSS Inc, USA). P<0.05 was considered to be statistically significant. Results: Ninety-six cardiac arrest victims were studied retrospectively, the demographic characteristics of which are depicted in table 1. ROSC was achieved to 15 (15.6%) patients and all of them survived for 24 hours. The initial rhythm of victims was ventricular fibrillation (19.8%), pulseless ventricular tachycardia (9.4%), asystole (56.2%), and pulseless electrical activity (14.6%). Potentially reversible causes of cardiac arrest were identified in 54 (56%) patients. The presence of cardiologist or anesthesiologist during CPR did not influence survival rates significantly. Nine patients who were resuscitated by an Advanced Cardiac Life Support (ACLS) certified resident achieved ROSC in less than 10 minutes. In a univariate analysis, training in CPR and CPR start in less than 5 minutes were predictive factors associated with the success of CPR (Table 2).

Conclusion: The immediate and 24h survival rates after IHCA are poor and do not demonstrate similarities with the global data. The main reason for this is the lack of ACLS certified personnel. Specific legislation should be enacted and implemented as soon as possible regarding the mandatory training of all Greek physicians in ACLS, as well as

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ABSTRACT FINAL ID: W-143;

TITLE: Cervicofacial and mediastinal emphysema complicating a routine dental procedure

ABSTRACT BODY:

Abstract Body: Introduction: Subcutaneous emphysema is a rare complication of dental procedure and the use of air turbines is often implicated. Dentists and physicians often attribute the facial swelling to an anaphylactic reaction due to the anesthesia. When treatment for anaphylaxis remains inefficient, emergency physicians should think of that rare barotraumatic complication.

Clinical case: An 18-year-old woman was referred by her dentist to the emergency department with a history of hemifacial swelling developing during a dental restoration. A high-speed air-turbine drill was used. Examination revealed a hemiface swelling with crepitus. A CT scan showed facial emphysema with pneumomediastinum. The patient was admitted for airway monitoring and received an antibiotherapy. 24 hours later, she was discharged from the hospital with no further complications.

Discussion: Cervicofacial emphysema results from the entry of air or gas into soft tissue planes. It's usually due to the use of compressed air powered instruments. The mechanism is a disruption of the intra-oral barrier. The symptoms are pain and swelling with crepitus on palpation. Dysphonia and dyspnea could appear if the pharyngeal spaces are swollen. Migration of air to the thorax and mediastinum may compromise respiratory and cardiac functions. Infectious complications (cellulitis, mediastinitis) are also possible. Allergic reaction, angioedema and hematoma are differential diagnosis. Radiographs of the neck and chest CT scan should be performed. Local emphysema requires simple observation. In cases of more severe involvement, airway and cardiac monitoring is necessary. Oxygenotherapy hastens the resolution of the emphysema. An antibiotherapy is recommended. Most cases will resolve after 2-3 days of supportive treatment.

Conclusion: Dentists and physicians more often attribute the sudden swelling to an anaphylactic reaction due to the anesthesia used during the dental procedure; although it's often the case, it's important that physicians recognize that rare barotraumatic complication. Indeed, early diagnosis and management are essential to prevent further complications.

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ABSTRACT FINAL ID: W-04;

TITLE: Injury Pattern and Disaster Plan for Landmines and IED Blast

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Among the man-made disasters landmines and IED explosion results in multidimensional injury pattern. It induces injuries through the well-documented primary, secondary, tertiary, and quaternary mechanisms of blast among civilians. If over 80 percent members of the international community can ensure security of their borders without using anti-personnel mines, surely India can too. What is needed is a change in defense doctrine. An estimated 4 to 5 million anti-personnel mines exist in India, which is the sixth-largest stockpile in the world.

DISCUSSION: Using historical, current research and related literature reviews, this article provides description about types of explosion, the device, pattern of injury inflicted by it, pre-hospital and Emergency department care and challenges for disaster plan. Explosives are categorized as high-order explosives (HE) or low-order explosives (LE). Landmines and improvised explosive devices that may be composed of HE, LE, or both. A landmine is an explosive device that is designed to destroy equipment or personnel. There are two types of land-based mines-- anti-tank (AT) and anti-personnel (AP). IEDs fall into three types of categories: Package Type IED, Vehicle-Borne IEDs (VBIEDs), Suicide Bomb IED. IEDs share a common set of components and consist of the following: initiation system or fuze; Explosive fill; detonator; power supply for the detonator; and container. Landmine injuries causes limb amputation, upper and lower. Remaining sustained injury to different parts of the body mainly head and face and thorax. Victim assistance includes the planning, monitoring, and coordination of all aspects. Follow hospital's and regional disaster system's plan. "Upside-down" triage - the most severely injured arrive after the less injured, who by-pass EMS and go directly to the closest hospitals Obtain and record details about the nature of the explosion, potential toxic exposures and environmental hazards, and casualty location from police, fire, EMS, health department, and reliable news

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ABSTRACT FINAL ID: W-99;

TITLE: Aortic Dissection and Medical Evacuation: A Case Report

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Thoracic aortic aneurysm can be complicated by aortic dissection. This diagnose requires prompt cardiothoracic and/or vascular surgeon consultation to decide the best immediate treatment: open surgical or endovascular stent-graft repair. Rupture is very common and responsible for death. The problem can be complicated when the patient can't receive treatment because there aren't surgeons to perform surgery. CASE REPORT: We describe the medical evacuation of a 91 yo man, that was spending the holidays in a developing country. His history was hypertension, anticoagulation in atrial fibrillation, ex smoker. He complained of chest pain and went to a local hospital where a CT scan was performed that revealed a thoracic aortic aneurysm (7.2 cm diameter) complicated by aortic dissection. The physicians explained to the patient the impossibility of providing adequate care in place. After talking with the patient and relatives and conscious that there was no other solutions we planned and performed a medical evacuation: an intercontinental flight from the developing country to Italy with a team composed of a physician and nurse. The patient was treated during the flight with oxygen, labetalolol and morphine. The patient was alert, GCS = 15. The blood pressure before take off was 116/80, but during take off and the first hour it was higher, 135/90, despite was avoided a quick rise. Then was decreased to 120/85 and after landing was 118/72. The patient didn't complain of chest pain, dyspnea or other symptoms. After the flight the patient was hospitalized and immediately evaluated by a cardiothoracic and vascular surgeon. DISCUSSION: Sometimes there are conditions that need immediate care, but the situation doesn't permit a prompt definitive therapy. The medical evacuation in these cases is an acceptable compromise (and as in this case the only solution) for the patient to get the needed care. In agreement and after informed consent of the patient it is possible to execute a medical evacuation with a high risk, but with good planning and a fully prepared medical team it is possible to reduce complications and perform the transfer in a safe way.

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ABSTRACT FINAL ID: W-101;

TITLE: Burns and Medical Evacuation

ABSTRACT BODY:

Abstract Body: INTRODUCTION: We report the experience of medical evacuation of two burns critical patients. The evacuation was require to permit to the patient to back in an hospital home and continue the care. The flights are continental flight in Europe performed with an aereomedical plane and a medical team compound by a physician and a nurse. CASE REPORTS: The patients were two males of 42 and 22 years old. The first one had third degree burns over 40% BSA and had already received decompressive fasciotomy. The cause of the burn was a car accident a few days before. The patient was transferred with an ambulance airplane for 876 km. He was alert, with oxygen and pain relief with fentanyl. The flight was 1 hour and 45 minutes long. The second patient had second – third degree burns covering 45% BSA, due to an explosion. During the transport he was alert, with oxygen and he didn't have pain and therefore was treated during the evacuation with paracetamol and saline solution as hydration. The burns were caused by boiling water.

In both the cases there wasn't any problem during the medical evacuation. The flight was 2 hours and 50 minutes long. DISCUSSION: Both patients had a medical transfer without any complications. The medical evacuation of every kind of patient requires good planning. The more important issue is knowing the condition of the patient and, if it is possible, stabilize him before the take off. The most important issue to evaluate with more attention during the trip in burn patients are the oxygen saturation and hemodynamic parameters to avoid dehydration and hypovolemic shock. Moreover the patients need a careful evaluation of therapy for pain relief. The use of aereomedical transport for medical evacuation of long distance is safe, useful, comfortable and with a very low rate of risk for the patient.

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ABSTRACT FINAL ID: W-144;

TITLE: Risk factors associated with Seizures during hyperbaric therapy in a Monoplace Hyperbaric Oxygen Chamber **ABSTRACT BODY:**

Abstract Body: Introduction: The most and most common oxygen toxicity complication during Hyperbaric Oxygen (HBO)therapy is seizures (sz).

Objective: To determine if any historical factors are associated with increased incidence of HBO related sz.

Methods: Design: Retrospective cohort study. Setting: Community hospital based practice utilizing monoplace chambers. Subjects: Consecutive patients (pts) both emergent and non-emergent performed from 2000-2009.

Protocol: A chart review was performed on all pts with a sz during HBO therapy. Data was recorded on a standardized

closed-questionnaire. Contributing factors were compared for pts with and without sz.

Results: 662 pts were treated during the time period. Males comprised 61% of the pts. Indications for HBO therapy included osteoradionecrosis, soft tissue radionecrosis, diabetic wounds/problem wounds, CO poisoning, compromised graft/flap, necrotizing fasciitis, crush injuries and gas gangrene. 357 (54%) of all treatments were 2.5 ATA or greater.

1.2% (8 pts) had seizures overall. Of these 87.5% were at 2.5 ATA (7 pts) and 12.5% (1 pt) at 3 ATA (OR:>69.9 95%)

CI:1.7-2858.3). No patients had a sz at 2.0 ATA. The mean number of treatments prior to having a seizure was 8 and all occurred when patient was at a depth of 2.5 ATA (except for pt undergoing Navy dive table 6). 75% of pts were able to continue HBO therapy. Of the 8 pts, 1 pt underwent a CAGE dive, 6 pts were being treated for STRN and 1 pt was being treated for ORN. A suspected source was determined in 50% of pts. (1 prior sz disorder + ETOH abuse, 2 pts taking tramadol, 1 patient with ex-ETOH abuse). Of all HBO pts, 1.5% (10 pts) were using tramadol and 20% of these pts experienced sz (OR:36.3 95%CI 7.1-196.1).

Conclusion: HBO related sz during treatment in a Monoplace HBO Chamber are rare and in our study were related to depth and tramadol use. Seizures occur in about 1% of pts undergoing HBO therapy in a monoplace chamber. No sz occurred at a depth of 2.0 ATA. There appears to be an association of tramadol use and the incidence of sz in the hyperbaric chamber.

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ABSTRACT FINAL ID: W-145;

TITLE: Sexual Assault Cases at Emergency Department

ABSTRACT BODY:

Abstract Body: Objective: In recent years, sexual assault cases are increasing and sexual abuse in chidren takes up position in first ranks. In this article, epidemiologic features of the patients suffered from sexual abuse referred to our emergency department were evaluated. We aimed to evaluate diagnosed as sexual abuse and to enhance the importance of this subject.

Materials and Methods: The study was designed retrospectively by examining the files of the patients who were admitted to Trakya University Emergency Department (ED) in Edirne, Turkey suffered from sexuel abuse between 2005 - 2010. Features such as age, gender, admission time, complaint, physical examination findings of the patients and distribution of persons engaged in sexual abuse were recorded. Results were expressed as mean \pm standard deviation or as number (percentage).Results: Twenty cases were included into the study. Of the cases; 80 % were female (n=16). Most of the cases were in the 1-18 years of age group (70 %). In our study the distribution of persons engaged in sexual abuse; 9 (45 %) unfamiliar person, 3 (15 %) familiar person and 8 (40 %) incest. Eight patients were seen traumatic lesion with rupture of the anal sphincter muscles.

Conclusions: Sexual assault is a major social and public health problem. Sexual assault has an increasing significance in the world and Turkey in the recent years. Although both men and women can be sexually assaulted, women are at greatest risk. Also under eighteen age people are exposed to sexual assault.

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ABSTRACT FINAL ID: W-100;

TITLE: Learning from Aviation: Introducing Occurrence Reporting into Emergency Medical Retrieval System **ABSTRACT BODY:**

Abstract Body: OBJECTIVE: Adverse incident reporting is now a widely accepted and practiced policy within Emergency Medicine, although not universally implemented. Safe systems in aviation include adverse reporting systems, as well as addressing human factors issues. Civil aviation also includes mandatory occurrence reporting systems (MORS), for predefined events even if no harm occurs. METHODS: Over an 18 month period we looked at 323 aeromedical retrievals undertaken by a physician led team. Data from each of the missions was reviewed by a blinded 3rd party to look for evidence of a pre-defined set of occurrences. This was compared against the actual actual adverse incident reports filed for those missions. RESULTS: A total of 213 occurrences were noted, giving a rate of 67%. The categories are summarised in the Figure below. During the same time the actual rate of adverse incidents reported for these missions was 7%. CONCLUSION: Our aeromedical service has an open reporting culture and staff are encouraged to record near misses as well as actual adverse events. All adverse events are investigated and reported in a no-blame fashion as part of clinical governance meetings. Despite this, adverse reporting only captures a fraction of actual events of significance. Although most of these events are low impact, and indeed are often accepted as part of normal practice, evidence from aviation has shown that MORS allows early identification of potential hazards before harm occurs. We are currently collecting prospective occurrence data from our aeromedical system to present at MEMC.

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ABSTRACT FINAL ID: W-76;

TITLE: Use of Non-conventional Media to Prepare Doctors for Emergency Procedures

ABSTRACT BODY:

Abstract Body: OBJECTIVE: We had a case of acute orbital compartment syndrome, following trauma, which needed urgent lateral canthotomy & cantholysis (LCC). We, emergency doctors, had to perform the procedure after watching on youtube, with successful outcome. Rationale: Specialist expertise in emergent medical/surgical setting are not always available in out reach /remote health care facilities. The aim of this study was to conduct a survey on non-conventional learning resources in acute surgical/clinical settings. METHODS: We collected information on reliability and technique in the internet based free media website (youtube) for performing emergent ophthamological procedure of LCC by a questionnaire based survey of 30 ophthamological consultants. This survey encompasses three main aspects of this procedure: 1. Validity of video resource, 2. Would ophthalmologist's endorse this method of learning resource in emergency settings. 3. What alternative solutions do they advocate in the absence of specialist availability in emergent clinical settings. RESULTS AND CONCLUSIONS: Our finding are expected to be available by end of June 2011 and will be presented graphically to demonstrate current specialist views on this topic.

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ABSTRACT FINAL ID: W-102; **TITLE:** The EMS in Singapore

ABSTRACT BODY:

Abstract Body: The EMS in Singapore is relatively young. It is coordinated by the Singapore Civil Defense Force under the Ministry of Home Affairs. The system has gone through many changes over the years. Headed by The Chief Medical Officer, it has a fleet of 50 ambulances and 15 Fast Response Paramedics on motorcycles covering the whole island. The other staff involved in EMS are the paramedics, the National Service Singapore Armed Forces Medics, emergency medical dispatcher and the ambulance drivers. Many of our EMS staff are versatile in first response work in disaster and humanitarian relief work and have volunteered their services in many such disasters around the world. There are also options for the trained paramedic to become a paramedic-trainer, paramedic-researcher and paramedic-administrator. A well coordinated, advanced and evolving system, the EMS in Singapore offers exciting career challenges.

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ABSTRACT FINAL ID: W-146;

TITLE: Arrival by ambulance is significantly associated with violence toward staff in the Emergency Department. **ABSTRACT BODY:**

Abstract Body: Introduction: Although characteristics of psychiatric patients exhibiting violence toward staff have been delineated, less data exists for predicting violent incidents in the emergency department (ED). Arrival by ambulance has been demonstrated to be an independent predictor of pathology such as subarachnoid hemorrhage and we hypothesize that arrival by ambulance is also an independent predictor of violent acts toward ED staff. Objective: The primary purpose of this study was to determine the association of violent incidents and mode of arrival to the ED. Methods: This was an IRB-approved, prospective study. Violent incidents in a community, level 1 trauma, tertiary care ED were identified from documentation in an ED documentation/tracking system from March 1, 2010 to March 1, 2011. Prior to removing any patient from the tracking system, users were prompted to record whether the patient had demonstrated any verbal or physical violence. If a violent event occurred, the reporting provider was prompted to indicate whether the violence was verbal, physical or both and what type of restraint if any was used. Mode of arrival (EMS, POV, or Police) is routinely recorded in the documentation/tracking system. Results: A total of 326 violent incidents were recorded over 85,581 patient visits, resulting in a rate of 3.8 incidents per 1000 patients, almost three times the rate reported from a retrospective study at the same institution over the preceding three-year period (1.3 per 1000 patients, 95% CI (2.107-2.984), p<0.0001). Over half (55%) of patients exhibiting violence arrived via EMS, compared to 23.4% of all patients (X2 = 298.637, p < 0.0001). The majority (53%) of perpetrators were male. Verbal aggression was most common (64%) with almost half (49%) of the incidents were directed toward multiple staff members. Conclusion: While attempts to characterize violent acts in the ED have been previously studied, the results of our investigation suggest that patients arriving by ambulance to ED are more likely to exhibit violent behaviour toward staff. Further investigations into this relationship need to be explored.

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ABSTRACT FINAL ID: W-11;

TITLE: What is the Situation of Disaster Preparedness in Europe?

An Overview

ABSTRACT BODY:

Abstract Body: Facts: Disasters happen. Disasters in Europe: more frequent and causing more damage. Issues: Europe constitutes a complex geographical, political, historical, linguistic, institutional reality. Co-existence of European Union, EU-affiliated, non-EU countries. Events more likely to occur: Meteorological (climate change); Geophysical; Technological; Biological; Terror-related. Disaster-related institutions: 1) EU Community Mechanism for Civil Protection (27 members + 4 participating countries), through MIC (Monitoring and Information Centre) and the CECIS (Common Emergency and Information System). 2) Civil protection modules are made of member states' national resources. 3) WHO-Europe supports the 53 member states in developing national health policies, systems and programs. 4) European Environment Agency (EEA), a European Union agency, provides information on the Environment. 5) National civil protection and other agencies. Collaboration links among countries for specific hazards. Comparison with the USA: Dept. Homeland Security (DHS) was created after 9/11, to protect USA from terror attacks; moreover, to better coordinate among the 187 federal agencies that deal with law enforcement, disaster preparedness and recovery, border protection and civil defense. FEMA was absorbed into DHS in 2003, thus becoming part of the Emergency Preparedness and Response Directorate of the Department of Homeland Security. As a federal agency, state-related problems are more easily overcome, with good coordination and homogeneity. Federal protocols concerning disaster planning, applicable in different settings (home, workplace, vehicle, etc), as, for instance "emergency kits" and tips. Conclusions: Suggestions for 1) A single, transnational coordinating institution to face all kinds of disastrous events; 2) Common European disaster protocols especially for groups of countries with common hazards; 3) Transboundary agreements for eased cross-border, and possibility to involve "across-the-border" health institutions, in case of disaster; 4) Common pre-disaster planning and training at all levels (country, community, workplace, family). Creation of a common modus operandi.

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ABSTRACT FINAL ID: W-31;

TITLE: The World of Emergency Medicine

ABSTRACT BODY:

Abstract Body: Emergency Medicine, though rapidly growing as a specialty in its own right, is still a relatively young specialty. Formal post-graduate training programs specific to the field are in a state of flux as new pedagogical approaches are integrated into training and new pathways to specialization are developed. Recent changes to the Irish Emergency Medicine pathway allow for comparison of the current state of Emergency Medicine post-graduate training pathways as they currently stand in The United States of America, Canada, United Kingdom, Australasia, South Africa, and the Republic of Ireland. A great variety in terms of training, examinations, and duration of training exists even among these predominantly English speaking regions. An additional factor to consider is the transfer of credentials from one region to another as the number of foreign born physicians in the training programs is expanding as is the movement of physicians around the globe. The length of training differs from a low of 3 years in Canada and the United States to 9 years in the Republic of Ireland.

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ABSTRACT FINAL ID: W-16;

TITLE: Lower extremity cellulitis after the flood following Typhoon Morakot.

ABSTRACT BODY:

Abstract Body: Background

The flood after a typhoon may lead to increase in patients with cellulitis of lower limbs. However, the microbiological features of these cases are rarely reported. We conducted a study of patients with lower extremity cellulitis after a typhoon followed in southern Taiwan to study the risk factors of cellulitis and the bacteriological features of the patients

Methods

We reviewed all the medical records of cellulitis at emergency departments of two teaching hospitals in southern Taiwan 30 days before and after the landing of Typhoon Morakot and collected data on the demographic and bacteriological characteristics. In addition, we evaluated the relationship between the daily number of patients and the rainfall in the Tainan area.

Results

The number of cellulitis patients increased from 183 to 344 during the 30-day period after the typhoon. The number peaked in the third and fourth days and lasted for 3 weeks.(Figure 1) The proportion of patients with water immersion of the affected limb was higher after the typhoon (6% vs. 37%, odds ratio [OR]=9.0, 95% confidence interval [CI]: 4.7-17.2). We found cultures from the infected limbs with immersion had more polymicrobial (73% vs. 25%, OR=7.8, 95% CI: 3.2-19.2) and Gram-negative bacilli infection (86% vs. 34%, OR=11.8, 95% CI: 4.1-34.5).(Table 1)

Conclusions

Flood caused by Typhoon Morakot caused increases in cellulitis patients, which lasted for 3 weeks. Empirical antibiotic treatment that were effective to both Gram-positive cocci and Gram-negative bacilli are recommended for patients with limbs emerged in the water.

AUTHORS/INSTITUTIONS: <u>K. Chen, P. Lin, H. Lin, , Emergency Department, Chi-Mei Medical Center, Tainan, TAIWAN;</u>

ABSTRACT FINAL ID: W-53;

TITLE: A comparison of hemodynamic effects of tracheal administration of vasopressin, epinephrine and vasopressin plus epinephrine in a porcine model

ABSTRACT BODY:

Abstract Body: Background: The β-adrenergic effect of tracheal administrated adrenaline would result in the initial decrease of arterial pressure (AP), which had deleterious influence on the outcome of resuscitation. Tracheal vasopressin would cause bradycardia, which impedes the recovery from cardio-respiratory arrest.

Objective: Since tracheal adrenaline could raise the heart rate (HR) and tracheal vasopressin could increase AP, the combination of tracheal adrenaline and vasopressin might abolish the undesirable effects of each drug. Therefore, we conducted the animal study to compare the hemodynamic effect of tracheal administration of vasopressin, epinephrine and vasopressin plus epinephrine.

Methods: 24 pigs were intubated; anesthetized; and divided into four groups. Control group received 5mL of water. Group A received 0.5mg/kg adrenaline. Group V received 0.8U/kg vasopressin. Group AV received 0.5 mg/kg adrenaline plus 0.8U/kg vasopressin. The drug administration was achieved by injection into the tracheal tube, followed by five artificial respirations. HR and AP were recorded before and after the drug administration for 15 minutes.

Results: The HR decreased slowly but significantly from 4 to 15 minutes in Group V. On the contrary, both the Group A and AV showed obvious HR elevations.(Figure1) In Group A, the AP decreased first; then elevated since 0.75 minute; peaked at 2 minute; and dropped gradually. Group V demonstrated significant elevations in AP from 0.5 minute post-injection. The AP elevations reached a high level at 4 minute and maintained a plateau for more than 15 minutes. Group AV showed an insignificant AP depression at 0.5 minute, followed by AP elevated since 0.75 minute. The maximal AP elevations was higher than other groups. Then the AP dropped precipitously without the plateau effect.(Figure2)

Conclusion: The combination of tracheal adrenaline and vasopressin could abolish the undesirable effects of each drug. Moreover, simultaneous tracheal administrated of both drugs results in higher APs, which might exert favorable effects on resuscitation.

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ABSTRACT FINAL ID: W-75;

TITLE: Training the Trainers: Impact of Emergency Medical Dispatchers Training at a Dispatch Center **ABSTRACT BODY:**

Abstract Body: OBJECTIVE: In France, no academic training courses are mandatory to start working as an emergency medical dispatcher (EMD), therefore most of dispatch centers propose on the field training. There is a high turnover rate of EMD at these centers. At SAMU 92, a trainers' training programme was set up in 2009. This addressed 19 EMD having more than 2 years practice in EMS. This programme was oriented on management and education procedures in order to better support the new-EMD. Its impact on the work at dispatch center was evaluated in order to assess its added value and propose improvements. METHODS: In August 2010, a survey was conducted among new-EMD (n=15), the trainers (n=19), and medical doctors (n=47). A face-to-face interview was proposed concerning their opinion on this programme, its usefulness, motivation of trainers and work performed by new-EMD. This is a descriptive survey, results are presented as percentages. RESULTS: Most of the EMD were women (82%), whereas MD were male (65%). Most EMD were less than 30 years old (56%).

Concerning trainers' training programme, trainers (80%) and MDs (62%) considered it improved the onset and management of new-EMD and eased their evaluation, whereas new-EMD considered being poorly welcomed and managed (47%). This programme was considered as very useful (73%) for the whole study population, but only 47% of trainers showed interest in training new-EMD. One of the questions was the ability of new-EMD "to identify life-threatening calls". This was considered by the whole population as not or partly achieved (54%). Trainers and MDs considered that new-EMD could not or poorly manage interview of patients (68%), whereas 60% of new-EMD considered it as partly or totally achieved. CONCLUSION: This survey showed that all the trainers' training programme objectives were not reached. This was considered as very useful, but trainers lacked motivation. This could be due to the necessity to train new-comers to very diverse aspects including use of multimedia tools or basic knowledge on first aid. These conclusions led to the implementation of a preliminary training programme of the new-comers.

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ABSTRACT FINAL ID: W-66;

TITLE: Comparison of Oxygen Saturation in Healthy Persons Between Tehran and Out of City Tehran (north) **ABSTRACT BODY:**

Abstract Body: OBJECTIVE: Pulse oximetry is one of the instruments that is very important, and often in patients it's considered a tool for measurement of a vital sign. Tehran is a one of eight world countries susceptible to face natural disaster. In Iran – Tehran because of dirty weather many of the patients have different diseases and it is thus very important to determine if there is a different oxygen saturation between Tehran and north of country. METHODS: At first we considered all of the humans above 10 years old and completed paper about their history and physical

exam in both city of country (Tehran - city of north we shored that all of the humans are healthy and then under pulse oximetry and documented in note book. Assessment with excel program and analysis. RESULTS: Mean oxygen saturation in north was 97% and minimum was 94% and maximum was 100% but in Tehran mean oxygen saturation was 95% and minimum oxygen saturation was 92% and maximum was 99%. In comparison gender in north 51% were female and 49% were male but in Tehran 48% were female and 52% were male. P Value in statistic analysis was 0/0005 and mean standard deviation in Tehran was 95 and in north was 97. CONCLUSION: We suggested because of different pulse oximetry measurement at level of sea and high altitude in normal humans shouldn't normal then this different should assessment in next study that if dirty weather causes oxygen saturation or different level of sea.

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ABSTRACT FINAL ID: W-50;

TITLE: Sudden Cardiac Death in a Rural Community Before and After AED-BLS Program for Emergency Medical Technicians

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Our objective is to know and analyze the situation of sudden cardiac death in Galicia in the phase previous to the implantation of automated external defibrillators in ambulances. We evaluate the results of the program implantation in Galicia to propose performance guides for the improvement in our community and to serve as a model for similar programs in other places. METHODS: In order to value the increase obtained in the survival rates in patients with sudden cardiac death that has corresponded with fast access to the precocious defibrillation within the survival chain we study: A.- The previous situation in the Autonomous Community of Galicia. The out of hospital cardiac arrest treated by the units of the 061. This period includes from April to December 1999. B.- The cardiac arrest treated by the 061 units of advanced life support and the ambulances of the Network of Urgent Sanitary Transport during the years 2001, 2002 and 2003. We studied the patients with susceptible defibrillatable arrhythmias before and after the implantation of the defibrillators in Galicia. We also studied the constants recovery in the point of the initial attention by the medical emergency system. Furthermore we analyzed the factors that influence survival and the effectiveness of the defibrillation. RESULTS: CA treated by ALS 1999-2003 CA treated by BLS-AED 2001-2003 CA2. 168958 CA/Month 38,0326,61 P< 0,01 Defibrillatable rhythm 33,3925,15 < 0,001 ROSC 31,6411,27 < 0,001 Presented CA25,4150,41< 0,001 CPR by bystanders 37,0318,05 < 0,001. CONCLUSIONS: In our community, characterized by a great dispersion of the population, the response time is higher than in urban areas. We try to improve the results of cardiopulmonary resuscitation, especially times of alert, arrive and defibrillation, because all of them allow to optimize the links of the chain of survival. In our community, the rate of resuscitation by bystanders is low. This indicates a little sensibilization, information and formation of the general population in basic life support. AUTHORS/INSTITUTIONS: J. Iglesias-Vazquez, L. Sanchez-Santos, A. Casal Sánchez, V. Barreiro Diaz, M. Chayan Zas, A. Rodriguez Núñez, Educational Center, Public emergency Service of Galicia, Santiago de Compostela, A Coruña, SPAIN;

ABSTRACT FINAL ID: W-103;

TITLE: SYNDROME BURN OUT IN THE PRESENCE OF EMPLOYEES IN EMERGENCY MEDICAL

ABSTRACT BODY:
Abstract Body: Abstract

Introduction: Nurses work in the field of emergency medical assistance includes a number of mental strain and type of stressors circumstances, resulting in stress and burn syndrome. The work is based on a research project, which includes Centre Emergency Medical Maribor, Celje and Ljubljana. This study was to determine to what extent and in what intensity of the threat to burn the syndrome which point domestic and foreign experts, also reflected in workers employed in the emergency department. Through this research is to offer options to address such risks in Health Care.

Methods: Participants respondents represent a sample of rescuers and their work shed light on the research problem. The questionnaire consisted of closed-ended questions 20 and consists of a through inspection of domestic and foreign literature. The research was conducted between January 2010 and June 2010.

Results: Based on the processing of the questionnaire can be found that more than half of the staff at the Centres for emergency medical assistance present mental workload. This figure shows that the rescuers may consider the physical and mental work and exhausted, which points to the fact that the stress experienced by the staff at the daily work with patients affects their physical and mental fitness.

Discussion and conclusions: The study has shown that feelings of stress clearly predict threats to the process of combustion, while they have negligible influence chronological age and experience. Personality may change, and show otopevajo alienated relationship to other younger persons, persons with less work experience and not just those that are empty due to age energy change and uniformity, they may suffer due to longer working lives.

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ABSTRACT FINAL ID: W-09;

TITLE: New Hazards for Europe: Are We Ready?

ABSTRACT BODY:

Abstract Body: Hazards Overview: 1) Social: worldwide financial crisis has involved the whole world, and, most heavily, some European countries (Greece, Portugal, Ireland), while others are likely to be involved in the future. Moreover, the continuous arrival in Europe of migrants and refugees puts great pressure on the borders of the European Union, especially Italy and Greece. The financial crisis, unemployment, or radicalism due to the massive influx of migrants may trigger social unrest. 2) New biological threats re-appeared lately in Europe, like tuberculosis. Sometimes, migrants from Eastern Europe constitute the carriers of this disease. This is often due to precarious health, low hygienic levels of their countries of origin, or cultural reasons. Emergent diseases (notably zoonoses), new viral strains, WNE, AIDS etc may create big pressure on European healthcare systems. The 2009-10 pandemic flu became a matter of major concern also for European healthcare systems. 3) Geophysical and Meteorological: The EEA declares that disasters in Europe are becoming more frequent and causing more damage, like floods (Eastern Europe), harsh weather, or earthquakes (Greece, Italy). 4) Technological: The possible risk of nuclear accident, given the existence of numerous nuclear plants throughout the continent, (some of which are obsolete) are a matter of concern. The same can be said about grid failures and other technological accidents. 5) Terrorism in any of its forms is a major issue, and is deemed always possible, and continuous safety upgrading has provoked changes in people's habits, especially in air travel patterns.

Solutions: 1) Thorough hazard and vulnerability analysis within Europe. 2) Promotion of the culture of disaster preparedness in Europe, at all levels (country, community, family). 3) Enhancement of disaster medicine preparedness within healthcare givers and institutions. 4) Improvement of the health and wealth levels of all of the inhabitants of Europe, without exclusions, notwithstanding the stringent finances. 5) Creation of a common institution to coordinate full-range, all-disaster response and information. 6) Establishment of a common safety policy within the continent.

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ABSTRACT FINAL ID: W-104;

TITLE: EXPRESSION OF RENEWAL PROCESS TO ACCEPT A PATIENT IN EMERGENCY AMBULANCE - MANCHESTER TRIAGE APPLICATION SYSTEM

ABSTRACT BODY:

Abstract Body: Introduction: Last decade, the burden on emergency departments around the world increases. Patients are increasingly exploiting free access to the emergency room and the possibility of faster treatment and diagnosis, often come with problems that are urgent or last a long time. As a result, increases the burden and frustration of health personnel working in these clinics, but also increases the waiting period for review as well as the dissatisfaction of patients. For the proper functioning of emergency duty service there is a need for a systematic and modern method of triage and patient acceptance. Practice has shown over the years the need for systematic classification of patients - triage in emergency medical aid. Therefore, we decided to reform the process of admission of the patient. The world has known many different systems triage patients. In our environment we decided to introduce a triage system Manchester, according to which patients need treatment classified into five groups. The purpose and objective of this paper is to identify the reception and triage, and present a systematic process of reform so far adopted a patient with a modified Manchester

triage system.

Results: If the patient has a life compromised by nurses take in the Triage Area, which tells the cause of arrival and then placed in a Triage team. Order

order of reading and provides the nurse with regard to the condition of the patient. Manchester system was to review and study of foreign literature also tested in our environment and it turned out that such work is much more systematically, the advantage of this is that the Triage nurse much better overview of the health status of pending. Discussion and conclusions: Triage in emergency clinic duty is a continuous process, since they have a nurse with every new patient who comes to the new edit your Triage distribution. Throughout the state has to adapt to waiting patients and patients' disability coming. Triage is therefore dynamic work, with which we must be aware of any weaknesses and also we have to aim for continuous training and improvement of it.

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ABSTRACT FINAL ID: W-105;

TITLE: Fastrach laryngeal mask airway management in out-of-hospital emergency care

ABSTRACT BODY:

Abstract Body: Introduction: We want to describe the epidemiologic profile of Fastrach Laryngeal Mask (FLM) intubations in out-of-hospital critical care patients attended by the Emergency System (ES) staff.

Methods: Observational descriptive and retrospective study. The period goes from January 2002 to December 2007. 73 patients attended by de ES staff that required a FLM to airway management. Data were collected analyzing computerized clinical histories. Parameters: Age, gender, medical or traumatic etiology, first cardiac rhythm, survival until hospital admission and the percentage of usage of this technique in the total amount of patients that required airway management.

Results: 4.114 patients that required airway management, 73 of them with FLM (1,8%). 11,1% female and 84,9% male. Average 50,7±20,5 years old. Within the previous mentioned amount it was not possible endotracheal intubation using FLM in 4 of them (5,5%; 3 male and 1 female). In 48% (35) the cause of airway management was medical whereas in the other 52% (38) it was traumatic. In patients with medical etiology, 25 (71,4%), we found cardiac arrest first rhythm, and 10 (26,3%) among those with traumatic etiology. Survival (alive at hospital arrival) was 18 (51,5%) among patients with medical etiology and 24 (63,2) among those with traumatic etiology.

Conclusions: FLM is an easy technique which allows a fast airway management both in patients with extrinsic and intrinsic conditions has a difficult airway management.

Keywords: Laryngeal mask, intubation, critical care.

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ABSTRACT FINAL ID: W-82;

TITLE: Patient integrated simulation in a public offer of employment for emergency nursing. role and results **ABSTRACT BODY:**

Abstract Body: Objective: To evaluate the skills of applicants to places owned by registered nurses (DUE) in the Emergency Medical Service (EMS) of Galicia in an objective, reproducible and comparable.

Methods: The model is similar to four cases resolved within 8 minutes of a patient with acute myocardial infarction who suffered a shockable arrhythmia and needed two cycles of cardiopulmonary resuscitation for recovery. Each applicant was informed of the clinical picture individually. There was no possible contact between candidates who were examined in four runs to be a high number. The event was videotaped and observed by the members of the court. At the end of each candidate case revised its performance that was printed on paper and was signed. If he disagreed with some actions are watching the video recording and editing. Each performance was assessed with a different score depending on how important it was in resolving the case.

Results: 87 opponents made a case. 84% solved the case study properly. The average score was 74 out of 100. Conclusions: The use of a comprehensive patient simulator is perfect for the assessment of clinical skills of a candidate for a place on an EMS. The main feature is the reproducibility and the possibility of an identical test for all opponents with assessment of all the steps necessary to adequately treat a patient according to critical knowledge and skills DUE own staff. The weighting of the proceedings because of their importance for the prognosis has proved effective to rank candidates.

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ABSTRACT FINAL ID: W-83;

TITLE: Use of robotics simulation practice for assessment of medical knowledge in a public offer of employment **ABSTRACT BODY:**

Abstract Body: Objective: To evaluate the skills of applicants to positions in property in the Emergency Medical Service of Galicia in an objective, reproducible and comparable.

Methods: We designed a case to solve in 8 minutes of a patient with acute myocardial infarction who suffered ventricular fibrillation and needed two cycles of cardiopulmonary resuscitation for recovery. Each applicant was informed of the clinical picture individually. There was no possible contact between the applicants. The event was recorded and observed by the members of the court. He was also energetic video. After reviewing the applicant if his performance was printed on paper and was signed. If you did not agree with any action is watching the video recording and editing. Each performance was valued with a score differently depending on how important it was in resolving the case.

Results: 29 people made a case. The 88% solved the case study. The average score was 77 out of 100. Conclusions: The use of a comprehensive patient simulator is perfect for the assessment of clinical skills of a candidate for a seat in a medical emergency. The main feature is the reproducibility and the possibility of an identical test for all opponents with assessment of all the steps necessary to adequately treat a critically ill patient. The weighting of the proceedings by laying down its importance for the prognosis has been shown to be effective to rank candidates.

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ABSTRACT FINAL ID: W-98;

TITLE: Hyperbaric Oxygen Therapy (HBOT) as an Adjunct to Pre-hospital Advanced Cardiac Life Support (ACLS) and Advanced Trauma Life Support (ATLS)

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Worldwide, most commercial and some naval off-shore diving operations have 24/7 on-site availability of HBOT as an adjunct to routine decompression for treatment of arterial gas embolism or decompression sickness, representing the only consistent immediate availability of HBOT at a remote potential accident site. METHODS: HBOT has been used on site to immediately treat acute exsanguanation, blast injury, crush injury and cardiopulmonary arrest when it was the only treatment available as an adjunct to AC/ATLS. RESULTS: Short video clip case reports of commercial divers at time of injury and at follow up months and years following immediate post injury HBOT are presented to demonstrate complete neurological recovery and tissue preservation. CONCLUSION: Prompt use of HBOT is simple, safe and effective as an adjunct to pre-hospital AC/ATLS. Porcine studies in our and other labs support our human case reports of efficacy in tissue preservation and complete neurological recovery. Implication: Deck decompression and saturation multi-place chambers can easily and quickly be converted to field resuscitative units in diving operations. Mobile chambers can fit in the back of an unmodified modern ambulance or helicopter to address civilian street injury or military "far-forward" injury. HBOT can gain an increasing role in pre-hospital AC/ATLS as a low cost high yield intervention.

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ABSTRACT FINAL ID: W-10;

TITLE: Perinatal Disaster Management of Emerging Infections, Biotoxins and Radiation Exposure

ABSTRACT BODY:

Abstract Body: INTRODUCTION: This paper will discuss disaster agents and unique risks and management issues for the pregnant woman, her fetus and the neonate. DISCUSSION: Contained in the paper, is a Perinatal Disaster Management tool which are hyper-linked to sections in the paper, summarizing key management issues. It can be used as a stand-alone tool in its paper format. This can become critical in a disaster setting where rapid resource access is critical and electronic technology may be compromised. A number or recommendations are drawn from the Working Group on Civilian Biodefense consensus - for measures to be taken by medical and public health professionals following the use of biological weapons against a civilian population.

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ABSTRACT FINAL ID: W-01;

TITLE: What are the Key Success Factors for Public Health Risk Communication in Emergency Situations **ABSTRACT BODY:**

Abstract Body: Many healthcare providers do not know anything about the topic "Risk Communication (RC)" and many hospitals do not have any structure for RC. The topic has widely accepted and supported in European Master in Disaster Medicine community and especially my supervisor Dr. Jeffry Arnold with support of Dr. Koenig to be published and added in her textbook. I am working on this topic as a thesis project for my master degree in (EMDM). My new area of work in this field is to create checklists for public risk communication. As we all know that disaster conditions are not the time for thinking or planning, so from here comes the idea of checklists, to create ready made checklists for disasters to be used for public communication during the incident and to be taught to the public in pre-disaster phase as preventive tool. Certainly we need a common language in disaster situations while the situation is more complicated than in emergency situations. I am suggesting checklists for all disasters based on a common language for disaster communication which is ABCDE. 5 Ws - Why: disaster is a serious disruption of the functioning of a community or a society, some can be prevented or mitigated by effective communication. What: What are risk, hazard and disaster related to the event? Who: it is mutual process involving stakeholder as sender and public as receivers. When: pre-event, during the event, post-event. Where: media, lectures, in site communications, health organizations. #prevention is better than cure: importance of RC as preventive measure for public health at pre-hospital level. 4#suggested RC classification: pre-event, during the event, post-event. #application and methodology for RC: ABCDE. Suggested methodology for RC ...

Attention (cautions); Be careful (precautions); Communicate; Disaster perception; Effective communication = Evaluation. #success factors for risk communication(RC) in emergency situations; #failure factors for risk communication(RC) in emergency situations; #Recommendations for further research and for application.

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ABSTRACT FINAL ID: W-43;

TITLE: Emergency Department Caretakers' Perceptions of Drug Seeking Patient Behavior

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Drug seeking behavior is considered a common challenge for the Emergency Department (ED). It impacts both staff morale and patient safety. However, fact based analysis of this patient group is very limited. We sought to identify ED staff perception regarding these type of patients.

METHODS: The attending physicians (AP), resident physicians (RP), and nurses (N) at an urban academic ED were given identical surveys. 15 AP, 15 RP and 15 N were surveyed. The surveys asked respondents to identify the prevalence of drug seeking behavior in the ED. The most common chief complaint among patients perceived to be drug seekers, and the medication most often requested by the presumed drug seeker, The averages and percent of responders were determined and difference between groups with 95% confidence intervals (CI) were calculated. RESULTS: Of the 45 surveys, all (100%) were returned. The percent of ED patients believed to be drug seeking was 18% for AP, 14% for RP, and 46% for N. Back pain was perceived to be the most common chief complaint of patients seeking drugs by 73% of AP, 60% of RP, and 27% of N. Headache was perceived as the next most common chief complaint of patients seeking drugs by 7% of AP, 13% of R, and 53% of N. Dilaudid was identified as the most common medication requested by those seeking drugs by 80% of AP, 87% of RP, and 100% of N. There were no significant differences between any of the perceptions of AP and RP. The perceptions of N in for perceived frequency of patients seeking drugs and the most common chief complaints differed significantly from both AP and RP. CONCLUSION: Emergency department staff perceive that drug seeking behavior is extremely frequent especially regarding certain presenting symptoms. Understanding medical provider perceptions may lead to better care for patients with painful conditions presenting to the ED.

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ABSTRACT FINAL ID: W-54;

TITLE: Challenging the Superiority of Amiodarone for Rate Control in Wolff-Parkinson-White and Atrial Fibrillation **ABSTRACT BODY:**

Abstract Body: The objective of this review is to explore and challenge the superiority of amiodarone for rate control in Wolff-Parkinson-White syndrome and concomitant atrial fibrillation (WPW-AF). The current standard of care for pharmacological treatment of this condition is amiodarone. A review of the literature of the last 25 years found several studies which support the small yet considerable risk of ventricular fibrillation secondary to amiodarone administration for rate control in WPW-AF. Additionally, a review of the literature supported the safe and effective use of procainamide for rate control in WPW-AF. This review concludes amiodarone is not superior to procainamide in rate control for WPW-AF.

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ABSTRACT FINAL ID: W-106;

TITLE: SYNDROME BURN OUT IN THE PRESENCE OF EMPLOYEES IN EMERGENCY MEDICAL

ABSTRACT BODY:

Abstract Body: Introduction: Nurses work in the field of emergency medical assistance includes a number of mental strain and type of stressors circumstances, resulting in stress and burn syndrome. The work is based on a research project, which includes Centres for emergency medical assistance Maribor, Celje and Ljubljana. This study was to determine to what extent and in what intensity of the threat to burn the syndrome which point domestic and foreign experts, also reflected in workers employed in the emergency department. Through this research is to offer options to address such risks in Health Care.

Methods: Participants respondents represent a sample of rescuers and their work shed light on the research problem. The questionnaire consisted of closed-ended questions 20 and consists of a through inspection of domestic and foreign literature. The research was conducted between January 2010 and June 2010.

Results: Based on the processing of the questionnaire can be found that more than half of the staff at the Centres for emergency medical assistance present mental workload. This figure shows that the rescuers may consider the physical and mental work and exhausted, which points to the fact that the stress experienced by the staff at the daily work with patients affects their physical and mental fitness.

Discussion and conclusions: The study has shown that feelings of stress clearly predict threats to the process of combustion, while they have negligible influence chronological age and experience. Personality can change and show its relationship to other alienated younger persons, persons with less work experience and not just those that are empty due to age energy change and uniformity, they may suffer due to longer working lives.

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ABSTRACT FINAL ID: W-06;

TITLE: Hospital Design for Disaster Center: Beams, Columns, Facilities

ABSTRACT BODY:

Abstract Body: OBJECTIVE: East Azerbaijan and its capital, Tabriz, lies on old faults and because of nearness of Bonab's (small town near Tabriz) nuclear plants to Tabriz, existence of disaster and trauma center must be considered. METHODS: Considering evaluating regions, available facilities, how access and history of unexpected events, a field study was done. In regards to the geographic plans of Tabriz and transportation availability (such as road, rail and air ways) and considering Tabriz developing plan and topography, a suitable place was chosen in a far distance from the fault line that expands beneath parts of some of the city. The hospital is supposed to have 400 beds, due to Iran's northwest population, with beautiful architecture that will create a calm and relaxed atmosphere for patients and their families. In the present study, the beams and columns were modeled as a posttensioned concrete and CFT respectively using computer code ETABS ver 9.5. This proposed hospital is also designed to have a confined fire and police station, refinery, sewer, water, power, gas and dispatch center that able to handle in crises situation. RESULTS AND DISCUSSION: Regarding to transportation availability considering confined welfare facilities and being far away of fault line and Bonab's nuclear plant, SHAH-GOLI (38° 1′ 31.16″ N, 46° 21′ 56.15″ E) was chosen. The proposed hospital is supposed to have 400 beds with astonishing architecture.

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ABSTRACT FINAL ID: W-40;

TITLE: Successful Treatment of an Intractable Trigeminal Neuralgia by Intravenous Magnesium Sulphate: A Case Report

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Trigeminal neuralgia (TN) is a neuropathic pain syndrome characterized by severe unilateral paroxysmal facial pain. TN pain typically remits and relapses, even when patients are on conventionally used treatments, resulting in a major source of disability and poor quality of life. We present a patient with TN who was intractable to carbamazepine, and was treated successfully by intravenous magnesium sulphate. CASE REPORT: We describe a 65-year-old man who suffered from typical TN pain on the right side of his face for 7 years. He used medications, including baclophen (10 mg per day) and carbamazepine (1200 mg per day). The pain was triggered by speaking, eating or touching. He presented to the Emergency Department with severe TN pain. The pain was evaluated using a visual analog scale (VAS), which ranged from 0 (no pain) to 10 (worst pain imaginable). According to the VAS, the patient rated his pain as 10. We administered intravenous magnesium sulphate 30 mg/kg over 30 min (the required amount was added as a 50% magnesium sulphate solution to 100 ml of saline). The severity of pain (VAS score) obviously decreased to 2 after 30 minutes of start of mentioned treatment. DISCUSSION: We have presented a short-lived but simple, inexpensive, low-risk, and effective technique for treating pain associated with intractable TN. Magnesium could be expected to modulate neuropathic pain by blocking the NMDA receptor calcium ionophore. Parenteral magnesium sulphate can reduce pain dramatically or subtly. AUTHORS/INSTITUTIONS: H. Soleimanpour, R. Rajaei Ghafouri, , Emergency Department, Tabriz university of medical science, Tabriz, IRAN, ISLAMIC REPUBLIC OF; D. Aghamohammadi, K. Marjani, , Anesthesiology Department, Tabriz university of medical sciences, Tabriz, IRAN, ISLAMIC REPUBLIC OF; M. Soleimanpour,

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ABSTRACT FINAL ID: W-38;

TITLE: Role of Parenteral Lidocaine on Painful Conditions: A Review of the Literature

ABSTRACT BODY:

Abstract Body: INTRODUCTION: The effectiveness of systemic lidocaine in relieving acute and chronic pain has been recognized for many years. This literature discusses the effects of parenteral lidocaine on the patients with acute or chronic painful conditions. REVIEW: Parenteral lidocaine has been reported to be useful in several neuropathic pain conditions, including diabetic peripheral neuropathies, Refractory Complex Regional Pain Syndrome (CRPS) and postoperative pain. It is also effective in post-herpetic neuralgia, centrally mediated pain and malignant nerve infiltration. In particular, systemic lidocaine has been utilized both as a diagnostic and therapeutic tool for intractable neuropathic pain during the last years. A study showed the lack of effect of systemic lidocaine on acute nociceptive pain and the limited and selective effect on secondary hyperalgesia seen in other studies. Some studies confirmed the benefit of a continuous small-dose lidocaine infusion during surgery for reduction in postoperative pain. Other studies suggest that lidocaine significantly reduces opioid requirements in the ambulatory setting without affecting time to discharge. Another study demonstrated that parenteral lidocaine is an effective and safe treatment for patients presented to emergency department with renal colic. DISCUSSION: Systemic lidocaine is thought to have its suppressive effects on spontaneous ectopic discharges of the injured nerve without blocking normal nerve conduction. However, a number of clinical issues remain to be investigated, such as: an effective and meaningful dose range for the clinical use, identification of painful conditions relieved by systemic lidocaine, indications, safety and long-term outcomes of systemic lidocaine. In conclusion, lidocaine has been hypothesized to alter sympathetic tone to the smooth muscle by suppressing transmission through afferent sensory pathways.

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ABSTRACT FINAL ID: W-17;

TITLE: MCI: Mass Communication Incidents

ABSTRACT BODY:

Abstract Body: The recent passenger train accident in Soweto, South Africa on May 20, 2011 gives an opportunity to examine information flow through the disaster management chain of command to the media and the ultimate consumers of information, the public. In addition to traditional avenues of communication new mobile technologies and internet based technology such as Twitter and Facebook, among others are changing the methods and speed at which information reaches the public. This presents new challenges in terms of disaster information management but also provides new opportunities to improve disaster management. The South African passenger train case is examined and explored before being utilized to draw wider inferences to information management in future disasters.

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ABSTRACT FINAL ID: W-05;

TITLE: Emergency Conditions in Pediatric Surgery

ABSTRACT BODY:

Abstract Body: INTRODUCTION: The definition of emergency conditions in pediatric surgery specify any medical conditions directly or indirectly endangering the health or life of the child, which require surgical intervention in a specialized pediatric center. Diagnostics and treatment should be carried out by pediatric surgeons. Unfortunately, more and more often general surgeons deal with these procedures - with different results. It is associated with both deficient pediatric professionals as well as errors in the organization and financing of medical procedures by the National Health Fund in Poland. DISCUSSION: The number and variety of emergency surgical conditions in children has led the author of the paper to divide them into groups according to the cause of the uprising. He pointed out emergency conditions with base of developmental anomalies, trauma, inflammatory processes and neoplasms. Then he analyzed those conditions taking into account the body region and organ systems affected. The author presented his 14-year experience in diagnostics and treatment of Polish children with emergency surgical conditions in the Clinical Department of Pediatric Surgery and Traumatology, Medical University of Lublin, discussing the most common and the most rare conditions. The aim of the study is a comprehensive perspective on emergency conditions in pediatric surgery from the viewpoint of emergency medicine in the form of a pictorial lecture, which essential volume will be dictated by time of presentation referred by the organizers of the congress.

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ABSTRACT FINAL ID: W-97;

TITLE: Dyspnea and the Role of the ALS Team

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Dyspnea is the feeling of breathlessness or difficult breathing. It is a generic symptom that appears in a lot of medical diseases. This is an analysis of medical reports that refers to this symptom at the arrival of an ALS team in rural setting. METHODS AND RESULTS: During the period October - December 2010 an ALS team was dispatched 300 times. 54 (18% of all cases) times the patient referred dyspnea as a symptom. 24 (44.44%) were male and 30 (55.56%) female. The age was between 21 days to 102 yo, average was 73.9 yo, median 79 yo, mode 89 yo. 33 (66%) patients were more than 75 yo. In 3 (5.55%) cases the patient refused hospitalization, in 2 (3.70%) the patient was treated on place. 77.36% (41 cases) of the calls were from home and 16,98% (9 cases) from a nursing home. The patient was minor in 24 (44.44%) cases (2 white code and 22 green code) and in 30 (55.56%) was major (28 yellow and 1 red). In 1 case the patient, with diagnosis of cancer, died. The problem was cardiac related in 14 (25.93%) and respiratory related (in particular respiratory failure in suspect of pneumonia) in 30 (55.56%). 24 (72.73%) patient had history of COPD. In 6 (11.11%) there was fever. The EKG revealed 5 (9.26%) atrial fibrillation, 2 (3.70%) second degree AV block of which 1 required transcutaneous pacing, 1 (1.85%) sinus tachycardia. In 4 (7.41%) cases the patient was hemodynamically unstable. The saturation was below 90% at the arrival in 15 (27.78%) patients and after the treatment in only 2 (3.70%) of which 1 required intubation. In 2 cases the patient was administered nebulization and in 2 CPAP was used. During the treatment and the transport there were 2 (3.70%) patients with complications of which 1 died (the person with cancer). CONCLUSIONS: The dyspnea was often related with a serious medical condition. This study, despite several limitations, can remark the important mission of an ALS team especially in rural settings where the distances to a hospital are often wide. In particular how an immediate and aggressive treatment can improve the symptoms, decrease complications and achieve a better outcome for the patient.

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ABSTRACT FINAL ID: W-77;

TITLE: Paramedic Personnel Professional Evolution in the SMURD-North East Romania

ABSTRACT BODY:

Abstract Body: OBJECTIVE: Emergency Medical System in Romania is based on ambulance services and SMURDemergency ph, nurses and paramedics- firefighters. This study aims to asses the profile and performance (theory and practice) of paramedics after one month of initial formation and after one year of intervention in the field, to compare the evolution over time and ways of improving the regular training sessions. METHODS: This study involved 245 persons belonging to the counties of north-eastern region of Romania (Bacau, Botosani, Iasi, Neamt, Suceava, Vaslui). The training center is located in lasi, coordinated by the teaching staff and the University of Medicine and Pharmacy "Gr.T.Popa" lasi, Emergency Medicine Department. Students were evaluated both theoretically as well as practical after the teaching period- first evaluation, they have a continuous evaluation during their work and the second formal evaluation was performed after more than one year. Statistical data were processed in SPSS v.19. RESULTS: Of the 245 student paramedics, 76.7% are high school graduates, 16.7% college and 6.5% of faculty. Paramedics age is between 26-48 years and 97.6% are men. Experience in firefighter department and first-aid service: 15.5% were 6 years experience in crew, 20% 5 years, 12.2% 4 years, 3 years 20.4%, 28.5% two years and 3.2% one year. 96.73% of paramedics work in urban areas serving surrounding rural zones. First evaluation proved a higher average (9.44) compared with the second evaluation (8.65) - the knowledge declined during the time, but it's proved a statistically significant difference between the theoretic and practical secondary evaluation (p<0.05), noting the increasing share of general average practice (9.54) at the expense of the theoretical (7.76). CONCLUSION: There are good results for the first evaluation - both practical and theoretical but after a period of working in the field we noted a decrease in theoretical knowledge along with an increase in practical skills. In the continuous formation of paramedics with practical experience in the field theoretical aspects should be reinforced, along with practical recertification. AUTHORS/INSTITUTIONS: C.C. Diana, O.V. Popa, A. Petris, Emergency, University of Medicine and Pharmacy "Gr. T. Popa", Iasi, Iasi, ROMANIA; B. Zamfir, , "Sf.Spiridon" Clinical Emergency Hospital, Iasi, Iasi, ROMANIA;

ABSTRACT FINAL ID: W-07;

TITLE: The European Master in Disaster Medicine Alumni Association in Action: Multicentric Multinational Research through Networking

ABSTRACT BODY:

Abstract Body: INTRODUCTION: For the past six years, the graduates of the European Master in Disaster Medicine (EMDM) have organised themselves into their Alumni Association (EMDM-Alumni). One of the pillars of the association is the multinational, multicultural and multisystem input of each of its members, transcending borders, religions, customs, political and economical status. Having such an immense resource at hand invites multinational research in disaster medicine, which results in outcomes much greater than the sum of the individual participant's input. In doing so, the Alumni contributes to the shaping of disaster medicine, both in preparedness and response, in many countries. CASE REPORT: This case study describes the use of the Alumni in the survey of the teenage population with regard to disaster preparedness and survival skills in Australia, Singapore, Pakistan, the Kingdom of Bahrain, United Kingdom, Greece, Croatia, Cyprus, Scotland, South Africa, Japan, Italy, USA, Egypt and the United Arab Emirates.

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ABSTRACT FINAL ID: W-132;

TITLE: Anaphylactic Shock to Non-Ionic Low-Osmolality Contrast Medium: A Rarity that Happens

ABSTRACT BODY:

Abstract Body: INTRODUCTION: In today's modern medical world, imaging plays a central role in patient diagnosis and management. Adverse reactions to radiocontrast medium occur with the greatest frequency in those between 20 and 50 years of age, with relative rarity in the pediatric population. The rate of adverse events varies from study to study but typically is reported between 5 and 12% for ionic high-osmolality contrast media (HOCM) and between 1 and 3% for non-ionic low-osmolality contrast media (LOCM). CASE REPORT: A 60 year-old woman, with history of stable angina pectoris with 6 months evolution, obesity, hypertension and dyslipidemia was proposed to do a coronary angiography. To study the angina pectoris the patient had already underwent an angio-TAC, that revealed an intense calcification of the coronary arteries, and a cardiac MRN that suggests multi-vessel disease. These examinations were performed without adverse reactions. During the coronary angiography, a few minutes after the administration of nonionic LOCM, 65mL of Ultravist 370, on the left coronary, the patient developed severe hypotension, bronchospasm, glottis, tongue and palpebral edema and dyspnea, without loss of consciousness. To treat the anaphylactic shock she was administrated 750ml of gelafundin, 300mg hydrocortisone, 2mg clemastine and 0,5mg IM of adrenaline, with correction of hypotension but without reversion of the respiratory symptoms and edema. At sequence two bolus of 0,1mg IV of adrenaline were made, with progressive clinical improvement. She was admitted at a Coronary Intensive Care Unit for vigilance, and was discharged the day after with complete resolution of the symptoms. DISCUSSION: In spite of a rare condition, the anaphylactic reaction to a non-ionic LOCM may occur. Physicians need to be alert to the clinical signs and hemodynamic monitoring to allow early identification and treatment of any adverse reaction. AUTHORS/INSTITUTIONS: N.A. Pereira, A. Martins, H.C. Rebelo, D. Saraiva, Anesthesiology, Centro Hospitalar Gaia, Vila Nova de Gaia, PORTUGAL;

ABSTRACT FINAL ID: W-138;

TITLE: Training on the Triage System in an ED I Level with About 80,000 Hits per Year

ABSTRACT BODY:

Abstract Body: OBJECTIVE: There is no national triage system in Italy, but there are efforts in Lazio Region to try to unify it with regional guidelines with a global triage system, the Triage Model Lazio (TML). METHODS: Sandro Pertini Hospital is a Level I ED, and one of two hospitals of the ASL ROMA/B with a catchment area of 850,000 people. From 2007 to 2010 ASL Roma/B organized 14 editions of a triage course to train nurses (RNs), EM physicians, pediatricians, midwives, student nurses and volunteers. In the 8 editions from December 2007 to June 2008, the aim was to improve knowledge of the global triage process, assignment of color codes, communication, and knowledge about FAST system. In other editions, 4 in 2009 and 2 in 2010, the course aimed to improve knowledge of RNs and doctors working in ED about triage process and their operating protocols to optimize the pathway clinical/diagnostic/therapeutic for each patient, allowing the ED to maintain the effectiveness and efficiency of emergency services, even in situations of overcrowding or special cases. It also explored the concept of immediate care of the patient and carers, which is not limited to the overall evaluation of syndromic pictures of waiting for a redistribution in favor of more severe disease, but requires a professionally appropriate and specific response to numerous requests for health and/or social-health that came daily in ED. Each edition was two days (16 hours) of training between classroom lectures and practical exercises. RESULTS: In 2007/2008 editions, among 195 participants, 89% demonstrated good knowledge of triage in the pre test, improved to 97% in the final test. In 2009 edition, among 62 participants, 57% demonstrated a good knowledge on the pre test, improving to 76% on the final test. In 2010 edition, among 58 participants, 57% demonstrated good knowledge on the pre test, improved to 83% on the final test. CONCLUSION: Now RNs working in the ED are all trained to perform triage and all use the same tool, so there is a consistency in the process of triage. The TML continuously monitors the triage, the process of improving quality through statistical research.

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ABSTRACT FINAL ID: W-84;

TITLE: Training of EMD at a medicalised dispatch center

ABSTRACT BODY:

Abstract Body: In medicalised dispatch centers (DC), Emergency medical dispatchers (EMD) are key persons in the management of calls and this requires well identified skills. Their role is to 1) identify the chief complaint, 2) switch the call to dispatching medical doctors (MD) and 3) send adequate means of transportation according to the severity of cases. Assessment and final decisions are performed by MD. French EMS are multi-tier systems, with wide resources ranging from urgent/non-urgent calls, medical advice or forensic emergencies.

In France, since 2006, a 350-hours training called "training to job adaptation" is mandatory for EMD, although, they usually undertake this training after starting to work at the DC. Therefore, these centers propose on the field training for new-comers.

At SAMU des Hauts-de-Seine DC, a province of 1.5 Million inhabitants, there is a high turn-over rate of EMD. A recent survey showed they were more frequently young (56% were less than 30 years old) and female (82%). For a long period, new-comers were instructed by already working EMD.

In 2009, a trainers' training programme was set up, in order to prepare EMD having more than 2 years practice in EMS to better manage and support new-comers. This programme was evaluated in August 2010 and proved the need to provide a theoretical training to new-comers before starting to work, particularly in the use of communication tools and their ability to evaluate the level of severity of calls. This led to the implementation in 2010 of a 2-weeks EMD training programme, which is mandatory before starting the work.

The programme, provided by MD and EMD, included the following aspects: first aid, organization of the center, practice of communication tools (phone, software,...), role of different actors in the EMS, legislation, use of medical terms, available health care supply in the area, EMS procedures and contingency plans, identification of life-threatening calls and management of difficult situations and role-plays.

After this training, 8 new-comers worked on the field under the supervision of trainers. This new training will be evaluated next July 2011, in order to assess its impact on DC daily work.

AUTHORS/INSTITUTIONS: I. Laffrat, J. Boutet, C. Vintezou, S. Goddet, A. Ozguler, M. Baer, , SAMU 92, Garches, FRANCE;

ABSTRACT FINAL ID: W-137;

TITLE: Evaluation of Training in Emergency Medicine Residents How to Deal with Abuse and How to Report it Before the Residency Period

ABSTRACT BODY:

Abstract Body: OBJECTIVE: A study in 2010 in the United States noted that many residents reported not receiving formal or informal talks about how to deal with issues of abuse and harassment. Therefore, we aimed to determine the prevalence of training in EM residents on how to deal with abuse and how to report it in Iran. METHODS: Awareness of abuse, how to deal with abuse, and how much training residents receive was asked through questionnaires of operating emergency residents and physicians in four different training hospitals in major cities in Iran. The questionnaire was anonymous, completely optional, confidential and to be returned in closed envelope. RESULTS: From 90 questionnaires distributed, 65 were returned. Almost half of them were males (51%), (63%) married and with the average 33 years old (SD 5.3). 26% of the studied population had awareness of how to deal with situations of violence and abuse and 57% of residents had no knowledge about it. Only 18% of residents trained informally on how to deal with abuse and violence. 67% of these numbers trained in its medical center and 33% outside. Only 3% of them reported the abuse they experienced. CONCLUSION: A large number of emergency medicine residents at the beginning period of residency in Iran are aware on how to deal with abuse and violence situation and no knowledge in this area are trained. Considering the high prevalence of abuse among resident of this field, we should begin to see the course training required.

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ABSTRACT FINAL ID: W-107;

TITLE: Prehospital Evaluation and Management of Patients With Autism Spectrum Disorder

ABSTRACT BODY:

Abstract Body: OBJECTIVE: There has been increased publicity about Autism Spectrum Disorder (ASD) and a political push for more educational programs for healthcare providers. To our knowledge, there are no studies analyzing the prehospital evaluation and management of patients with ASD. We sought to identify and analyze the prehospital advanced life support (ALS) care of patients with ASD.

METHODS: Design: Descriptive study of a retrospective cohort. Setting: A large, suburban, hospital-based EMS system. Protocol: The prehospital ALS medical records over a 42 month period were searched electronically for an ASD listed in the past medical history (PMH) were reviewed. ASD was defined as Autistic disorder, Asperger syndrome, Pervasive Developmental Disorder Not Otherwise Specified, Childhood Disintegrative Disorder, and Rett Syndrome. Charts were reviewed to determine patient characteristics, presenting problem, procedures and medications given, origin of call, and whether special precautions related to the ASD were documented. Descriptive statistics and 95% confidence intervals (CI) were calculated.

RESULTS: Out of 56,810 ALS dispatches, only 35 (0.06%) patients had a PMH of an ASD. Of the patients with ASD, 77% (CI: 63, 91) were male and the average age was 21.5 years (CI: 16.6, 26.4) . 83% (CI: 70, 96) of the calls were for patients with seizures, and 69% (CI: 47, 79) of all patients had a PMH of seizures. 26% (CI: 11, 40) of seizure calls were for new-onset seizures. 41% (CI: 23-58) of calls were dispatched to a special needs school or group home. Only 29% (CI: 13, 44) of patients had an IV or IO established, and 20% (CI: 7, 33) were administered a medication. 24% (CI: 9, 38) of all calls for ASD patients had a documented explanation why care was limited or special precautions were taken.

CONCLUSION: Prehospital ALS providers rarely evaluate and treat patients with ASD, and the overwhelming majority of these calls are for seizures. Special precautions are taken or care is limited in a significant number of them. **AUTHORS/INSTITUTIONS:** B. Walsh, O. Hung, D.P. Calello, , Morristown Memorial Hospital, Morristown, NJ;

ABSTRACT FINAL ID: W-108;

TITLE: OUTCOMES OF PATIENTS WITH PREHOSPITAL INTRAOSSEUS LINES

ABSTRACT BODY:

Abstract Body: OBJECTIVE: With increased awareness and advancements in the placement technique, paramedics are placing intraosseous (IO) lines more frequently, especially in adults. It is unclear how the placement of an IO line affects outcomes. We sought to determine the outcomes of patients that had an IO placed prehospitally. METHODS: Design: Retrospective Cohort. Setting: A hospital-based, suburban prehospital system which treats 30,000 patients per year. Protocol: The prehospital and hospital discharge records were reviewed retrospectively for patients who presented to an academic emergency department and had an IO line placed prehospitally over a 4 year period. Initial prehospital vital signs and prehospital interventions were recorded, as was the patient's outcome (discharge to home vs. discharge to rehabilitation vs. death). Summary statistics and proportions were calculated with 95% confidence intervals (CI).

RESULTS: In the study period, 18,363 patients were treated by ALS and brought to the study hospital. Of these, 92 patients (0.5%, CI: 0.4, 0.6) had IOs placed. 3 were excluded for missing data. Of the 89 patients in the study, 84 (94%, CI: 90, 99) were adults over age 18 and 48 (54%, CI: 44, 64) were male. Of the 84 adults, 32 (38%, CI: 28, 49) presented in cardiac arrest, of which 0 survived. Of the 5 children, 2 (40%, CI: 0, 88) were in cardiac arrest of which 0 survived. Of the 52 adults not in cardiac arrest, 15 (29%, CI: 16, 41) survived to hospital discharge of which 5 (10%, CI: 2, 18) were discharged to home. Of the 3 children not in cardiac arrest, 2 (67%, CI: 1, 100) survived to hospital discharge and both were transferred to another facility. Overall, out of 89 patients that had prehospital IO lines placed, 5 (6%, CI 1, 10) survived to be discharged to home.

CONCLUSION: For patients initially in cardiac arrest, the placement of an IO line prehospitally is associated with 0% survival. For patients not in cardiac arrest, survival to discharge is about 30%. Larger comparative studies are needed to determine if prehospital IO placement improves the probability of survival in these patients.

AUTHORS/INSTITUTIONS: B. Walsh, K. Schulz, A. Troncoso, , Morristown Memorial Hospital, Morristown, NJ;

ABSTRACT FINAL ID: W-109;

TITLE: A Comparison of Prehospital Rapid Sequence Intubation Success To Non-Paralyzed Patients **ABSTRACT BODY:**

Abstract Body: OBJECTIVE: Prehospital intubation, and especially prehospital rapid sequence intubation (RSI), is a controversial procedure that is frequently debated in the literature. Our paramedics intubate frequently, have regular educational updates, and are evaluated routinely in cadaver labs. In order to fine-tune our educational process, we sought to determine our paramedics' baseline intubation skills and the impact of RSI on intubation rates.

METHOD: We retrospectively analyzed all patients in which intubation was attempted by our ground and air units over a 23 month period. In order to determine baseline procedural competence and the impact of RSI, we subdivided patients in to three groups: those in cardiac arrest (CA), those with a pulse who underwent RSI (RI), and those with a pulse that did not receive RSI (I). We compared the group in terms of "successful" intubation (<= 2 attempts) and "overall" intubation (<=4 attempts), statistically correcting for multiple comparisons.

RESULTS: There were 751 intubation attempts: 330 were CA, 196 were RI, and 225 were I. In the CA group 88% were intubated successfully. In the RI group 90% were intubated successfully. In the I group 82% were intubated successfully. The differences in successful intubation rates between these groups was significant between the RI and I groups only (p=0.05). There were a total of 64 patients (8.5%) who were not successfully intubated: 6% of the CA group, 6% of the RI group and 15% of the I group. Patient in the CA and RSI groups were significantly more likely to be intubated than those in the I group (p<0.05 for both comparisons).

CONCLUSIONS: In terms of successful and overall intubation rates, paramedics have a greater success intubating patients when utilizing RSI, and the success rate of RSI are equal to that of patients in CA. This suggests that RSI is an effective adjunct to intubation. Prospective, outcome-based studies are needed to determine the true impact of RSI in our group of paramedics.

AUTHORS/INSTITUTIONS: B. Walsh, H. Felderman, A. Troncoso, , Morristown Memorial Hospital, Morristown, NJ;

ABSTRACT FINAL ID: W-30;

TITLE: WHEN THE STORM HAS PASSED: LESSONS LEARNED FROM HAITIAN'S QUAKE

ABSTRACT BODY:

Abstract Body: BACKGROUND- In January 2010, a 7.0 Richter earthquake occurred in Haiti, Most of the patients severely injured died during the first hours after the quake. For those who survived, is crucial to understand the pattern of injuries and also the first medical treatment offered during the initial phase to plan the subsequent treatment. Although literature describes immediate consequences of earthquake, there is a lack of information regarding injury pattern 30 days after. The aim of this study is to identify these patterns and quality of initial care provided. METHODS: From 07 February to 15 March 2010, a medical team joined an established Disaster Recovery Center on the Haiti side of the border with Dominican Republic. This camp had received 275 patients hospitalized in tents created to accommodate injured quake victims who underwent surgery or other treatment in the nearby Dominican Hospitals. The first action was to conduct a census of patients in order to prioritize care according to severity, carried out based upon history, physical examination and casts removal. After this, all patients were submitted to radiologic exams. Criteria and definitions of quality treatment were based upon functional incapacity, deformities, bone fracture type and sites, and compliance with consensus based on standards. RESULTS: 97 guake related victims were analyzed. Most of victims (92.8%) were taken to a hospital at least 24 hours after the guake. Mean age was 38.4 ± 20.1, and 58.8% were female. On admission, 22 had previously been amputated (below knee was the most common site, 25%) and 65 had been operated with injured extremities (55 had lower extremity fractures, 13 upper extremity fractures and 11 pelvic fractures). Inadequate management was identified in 45%. The most common errors were inappropriate intraoperative technique (35%) and delayed diagnosis (32%). CONCLUSION: Considering the limitation of resources and patient volume, lack of coordination and supervision contributed to inadequacy. In addition, we must highlight the need for an experienced and trained medical team. A tertiary evaluation after the quake should be implemented. AUTHORS/INSTITUTIONS: M. Steinman, M. Ferretti, O.P. Dos Santos, M. Cenderoglo, C.L. Lottenberg, , Hospital Israelita Albert Einstein, Sao Paulo, sao paulo, BRAZIL;

ABSTRACT FINAL ID: W-110;

TITLE: Naloxone is Overused in the Prehospital Setting

ABSTRACT BODY:

Abstract Body: Background: Many clinicians would argue that the only appropriate use of naloxone in the prehospital setting is to improve a patient's ventilatory status, and administering it inappropriately could cause harm to patients and prehospital providers. We sought to determine what percent of naloxone administrations are for hypoventilation, and of these, how accurate are providers in predicting who will respond.

Methods:

- -Retrospective cohort study
- -Two tiered EMS system
- -18 Month period
- -Consecutive patients treated prehospitally with naloxone

Vital signs on initial ALS evaluation and on arrival at the Emergency Department (ED) were recorded. A priori, hypoventilation was defined as an initial respiratory rate (RR) < 9 or a pulse oximetry <92%. Hypoventilated patients (defined as having a positive response to naloxone) were not intubated and had an increase of 4 or more breaths per minute or final pulse oximetry over 95%. Percentages and 95% confidence interval ("CI") were calculated.

Results:

Of 41,804 ALS requests, 324 (0.8%) patients were treated with naloxone. 54% were male and the average age was 51 years. Of these patients, 102 (31% (CI:26-37%) were hypoventilating at the time of initial ALS evaluation. Among the hypoventilating patients, 50 patients (49% (CI:39-59%) had a positive response to the naloxone and 39 patients (38% (CI:29-48%)) were intubated despite treatment.

Conclusion:

Two-thirds of patients treated by ALS with naloxone are not hypoventilating, suggesting that it is being administered for other reasons. This overuse could result in harm to patients and providers. When used in patients that are hypoventilating, one-half improve without the need for an invasive airway. Naloxone use should be limited to hypoventilating patients, where it is more effective and unlikely to cause harm.

AUTHORS/INSTITUTIONS: <u>A. Troncoso,</u> B. Walsh, D.P. Calello, Emergency Dept., Morristown Memorial Hospital, Morristown, NJ;

ABSTRACT FINAL ID: W-111;

TITLE: The Utilization of Prehosptial Advanced Life Support for Toxic Ingestion

ABSTRACT BODY:

Abstract Body: Background:
Advanced Life Support
("ALS") is requested frequently
for patients with suspected
drug overdose or ingestion, but
its' utility has not been proven.
Anecdotally, many of these
patients are simply observed
prehospitally and in the
emergency department ("ED"),
so ALS resources may be
applied more efficiently with
other patients.

Objective:

What percent of ALS calls dispatched as drug overdose or ingestion receive acute interventions in the field.

Methods:

- -Retrospective cohort chart review
- -Two tiered EMS system
- -30 Month period
- -Prehospital charts were reviewed and prehospital interventions were recorded. We defined acute interventions as establishing IV access, administration of IV medications, and establishing a definitive airway. Percentages and 95% confidence interval ("CI") were calculated to describe the proportion of patients receiving interventions.

Results:

Out of over 41,804 paramedic dispatches, 673 (1.6%) were dispatched as "Ingestion/Poisoning" or "Overdose." Of those patients, ALS was cancelled on 16% (CI:13-18). 51% (CI:47-55) had an IV established prehospitally. 14% (CI:11-17) received any medications, the majority of whom received naloxone. 1% (CI:1-2) were intubated in the prehospital setting.

Conclusion:

Of all ALS dispatches for "Ingestion" and "Overdose" in our suburban EMS system, the overwhelming majority get no emergent treatment en route to the hospital. More focused dispatching of these calls may be appropriate to conserve diminishing EMS resources.

AUTHORS/INSTITUTIONS: <u>A. Troncoso,</u> B. Walsh, D.P. Calello, R.D. Shih, Emergency Dept., Morristown Memorial Hospital, Morristown, NJ;

ABSTRACT FINAL ID: W-112;

TITLE: Paramedics Treat Very Few Infants In Need of Critical Care

ABSTRACT BODY:

Abstract Body: Background / Objective: Paramedics often feel uncomfortable treating infants and our paramedics have noted a lack of experience and education in this area. We sought to determine what types of interventions are needed in infants (age < 1 year) in order to focus our educational efforts.

Methods: We retrospectively reviewed the records all infants that were evaluated by paramedics in a suburban, hospital-based EMS system over a 30 month period. Dispatch category, medications administered, and procedures performed were noted. Oxygen administration was not considered a medication or a procedure. Percentage of patients and 95% confidence intervals (CI) were calculated. Our IRB approved the study.

Results: Out of 36,143 patients treated by the paramedics, 177 (0.5%) were less than 1 year old. Of these patients, 43% (CI: 36-50) were dispatched as "respiratory," 17% (CI: 11-22) were "seizures," 9% (CI: 5-13) were "trauma," 8% (CI: 4-13) were "anaphylaxis/allergy," and 6% (CI: 3-10) were "cardiac," "cardiac arrest, "unresponsive," or "altered mental status." Out of the 177 patients, 29 patients (16% (CI: 11-22)) were treated with a medication: 18 patients (10% (CI: 6-17) received albuterol/atrovent, 6 patients (3% (CI: 1-6)) received benzodiazepines, 3 patients (2% (CI: 0-4)) received epinephrine, and 3 patients (2% (CI: 0-4)) received another medication (morphine, dexamethasone, or diphenhydramine.) Of the 177infants, a procedure was performed in 14 patients (8% (CI: 4-12): 12 patients (7% (CI: 3-10) received peripheral IVs and 2 patients (1% (CI: 0-3) received I/O lines. No patients were intubated.

Conclusion: Paramedics treat very few infants in need of critical care. Many infants they evaluated have respiratory illness that need no prehospital treatment or can be treated with albuterol/atrovent only. Only about 8 out of every 10,000 patients paramedics evaluate are infants in need of a medication, and 4 out of every 10,000 patients are infants needing a procedure. Furthermore, in 30 months, paramedics in our system did not intubate any infants. Given this very low rate of treatment, our recent emphasis on pediatric training may be unnecessary.

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ABSTRACT FINAL ID: W-113;

TITLE: The Use of Continuous EndTidal CO2 Prevents

Hyperventilation of Intubated Trauma Patients

ABSTRACT BODY:

Abstract Body: OBJECTIVE:

Prehospital studies have suggested that trauma patients are often hyperventilated after intubation and this hyperventilation may lead to poor neurological outcomes.

Our EMS program mandates that all intubated patients have continuous end-tidal CO2 (ETCO2) monitored, and paramedics are trained thoroughly on the use of ETCO2. We hypothesized that our trauma patients would not be hyperventilated, likely

secondary to the use of continuous ETCO2.

METHODS:

Design: Retrospective cohort. Setting: A suburban, hospital based EMS system primarily serving three hospital, including a level one trauma center. Protocol: The prehospital records of all trauma patients who were intubated in the prehospital setting by our advanced life

support (ALS) providers between February, 2007 and May, 2009 were reviewed. The patient's initial ETCO2 and final ETCO2 on arrival in the ED were recorded. The difference between the two values was calculated with a 95% confidence interval. We defined hyperventilation as a drop in ETCO2 of 5 or more and a final ETCO2 less than 35.

RESULTS:

Between February, 2007 and May, 2009, 44 trauma patients were intubated prehospitally. The patients' average age was 42.6 years, 66% were male. The average initial GCS was 5.0 [95% CI: 3.9, 6.1]. Of the 44 intubated trauma patients, 31

(70%) had ETCO2 measurements recorded. The average initial ETCO2 was 30.7 [95% CI: 25.3, 36.2]. The average ETCO2 on arrival in the ED was 31.3 [95% CI: 27.0, 35.6]. The average difference between initial and ED arrival ETCO2 was -0.6 [95% CI: -3.6, 2.4]. One patient (3%; 95% CI:

0%, 10%) was hyperventilated: a 38 y.o. male with head trauma after a MVC who was partially ejected and had a GCS of 3. His ETCO2 went from 42 to 30.

CONCLUSIONS:

Although some studies suggest that trauma patients tend to be hyperventilated prehospitally, overall the trauma patients in our study were not hyperventilated. The use of continuous ETCO2 likely helps to minimize the tendency of ALS providers to hyperventilate trauma patients.

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ABSTRACT FINAL ID: W-33;

TITLE: Emergency Medicine in Georgia

ABSTRACT BODY:

Abstract Body: The country of Georgia does not have standardized training in emergency medicine (EM) or emergency departments (ED) in their current healthcare infrastructure. In recognition of the opportunity to improve acute care to patients presenting to the hospital, a group at Kipshidze Central University Hospital (KCUH) in the capital of Tbilisi, opened the first emergency department in the country and changed the system in order to provide more effective care. Through a grant from the United States Agency for International Development, the hospital leadership collaborated with Emory University Department of Emergency Medicine faculty, the Tbilisi State Medical University, and the Ministry of Health to develop a formal emergency medicine training program that would lead to the recognition and certification of the first emergency medicine specialists. In the first year, eight of ten physicians passed the eight month program that was led by Emory faculty. Emory faculty, in collaboration with Georgian physicians practicing in the KCUH's ED, developed the curriculum that covered the breadth of emergency medicine through lectures, case simulations, practical skills training and clinical time in the ED. Emory faculty led the classroom-based component as well as supervised the Georgian physician trainees in KCUH's ED. This program was created in the "Train the Trainers" style in order to develop the first trainees as faculty in EM to continue emergency medical education. The two overarching goals were to train practicing physicians in an abbreviated course to meet the current need and eventually establish a full three year residency modeled after European and American training programs to meet future demands for emergency physicians. The process continues now as the graduates of the first year are the faculty in the second year, while Emory faculty continue to coordinate and direct the program. A few of the challenges encountered were defining the specialty and scope of practice in a setting in which there was no experience or familiarity with the concept of EM, integrating a new specialty into the existing healthcare system, and gaining access to relevant training materials.

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ABSTRACT FINAL ID: W-129;

TITLE: USE OF UNIVERSAL SCREENING FOR DETECTION OF PARTNER VIOLENCE

ABSTRACT BODY:

Abstract Body: OBJECTIVE:To assess the need of implementing a validated questionnaire, the OMS Partner Violence Screen (PVS), to be used in the routine anamnesis of patients attended in the Emergency Department for detecting occult cases of partner violence, and to evaluate the level of involvement of health care professionals.

METHODS:A cross-sectional study was carried out in three Emergency Departments in Barcelona. The PVS includes three questions: "Have you been hit,kicked,punched,or otherwise hurt by someone within the past year? If so, by whom?", "D you feel safe in your current relationship?", and "Is there a partner from a previous relationship who is making you feel unsafe now?" All women>16 years of age,who understood what they were asked,agreed to participate,were not accompanied by other people,and who had or have had a partner were eligible. Women at the time of delivery or with an urgent vital condition were excluded. Demographics and professionals who fulfilled the questionnaire were recorded.

RESULTS:88 women participated but 12 were excluded.Most of them were Spaniards(67.1%). Ages ranged 16-84 years;57.9% of women interviewed had children.The questionnaire was fulfilled by nursing personnel in 52 cases(68.4%) and by physicians in 24 cases(31.6%).Responses to the first question was affirmative in 5 cases(6.6%),to the second question,the response was negative in 5 cases(6.6%), affirmative in 64(84.2%) and 7(9.2%) did not have a current partner.The third question was affirmative in 7 cases(9.2%).

CONCLUSIONS:1.A total of 6.6% of women interviewed had suffered from some aggression by her partner in the last year, and 6.6% referred not feeling safe in the relationships with the current partner, and 9.2% felt to be threat by some of her partners in the past. 2.Most participants aged between 26 and 65 years, were from Spain, and had children.3.Involvement of the nursing personnel was markedly higher than that of physicians.4.None of the participants refused to answer to the questionnaire.5.It is necessary to include specific questions in the anamnesis to detect partner violence and thus to be able to intervene.

AUTHORS/INSTITUTIONS: <u>I. Puente Palacios, M. Martinez Izquierdo, M. Puiggali Ballart, S. Laso de la Vega, C. Clemente Rodriguez, E. Diez Fuentes, C. Rueda Garcia, N. Leon Bertran, Emergency, Parc de Salut Mar, Barcelona, SPAIN;</u>

ABSTRACT FINAL ID: W-147;

TITLE: Persistent hiccups as a rare presenting symptom of a Saddle Pulmonary Embolism

ABSTRACT BODY:

Abstract Body: Pulmonary Embolism (PE) is a relatively common and potentially life-threatening condition. The most common symptoms of PE in decreasing frequency are dyspnea, pleuritic chest pain, cough and hemoptysis. PE may also present with syncope, seizure, delirium or flank pain. Hiccups have only been rarely attributed to PE. Here we report a case of persistent hiccups as an atypical presenting complaint of a saddle pulmonary embolus in a 52 year old male without risk factors or co-morbid conditions.

AUTHORS/INSTITUTIONS: M. Singh, emergency medicine, metropolitan hospital, Nyc, NY;

ABSTRACT FINAL ID: W-55;

TITLE: Patients with acute coronary syndrome (ACS) treated at a thrid level hospital

ABSTRACT BODY:

Abstract Body: Objectives: To determine the characteristics of the patients diagnosed with ACS in a tertiary hospital from May 2009 to May 2011.

Material and methods: descriptive study based on data from the program ARIAM to our hospital. 682 patients were studied.

Results: NSTEACS 32%, 68% SCASTE, mean age 62.4 years, women 21%. Regarding risk factors, absence of 5.4%, smokers 45.8%, diabetes 31.5%, disipemia 40%, 55.1% hypertension, peripheral vascular ischemia 3.6%, 6.46% obesity, family history, 9%, renal failure after 3.2 %, 5.09% prior stroke, prior MI or angina 26%.

As for the medication used previously 17.17% beta-blockers, aspirin 30%, 32.8% ACE inhibitors or ARA II, diuretics 6.84% anticoagulated 3%, Lipid 27%.

53% entering the hospital carried by 061 and 37% by DCCU / CS, while the first contact with the health system with DCCU loess in 55% of cases and 33.5% to 061.

As pre-hospital care received, AAS 56%, 62.7% nitroglycerin, ECG 74%, 63.7% peripheral vein, monitoring 57.2%, 78.9% IV medication.

The delay that occurs from the beginning models symptoms until they enter the hospital has an average of 170 minutes, the delay in an ECG performed at admission from 8.6 minutes.

The complications arising s are, reinfarction 0.45%, VF 1.8%, postinfarct angina 4.75%, Ischemic stroke 0.15%.

Conclusions: In our hospital predominates SCASTE 2 / 1 front NSTEACS. It is more common in men 5 / 1, 80% were Killip class I at admission, highlights running late for almost 3 hours of onset models symptoms to hospital care, and nearly 7 minutes in conducting or ECG. The most prevalent risk factors were hypertension and dyslipidemia, 63% presented at least 2 risk factors.

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ABSTRACT FINAL ID: W-149;

TITLE: EMERGENCY MEDICINE IN LATIN AMERICA

ABSTRACT BODY:

Abstract Body: Actually, around de world, all countries have a quick development of the emergency medicine, in orden to optimize the clinical, research, scientific and educational aspects, all items that it have a great influence in our patient in prehospital and hospital scenarios.

Latin America emergency medicine through its history, has an interesting development. The Latin America countries have not all tecnologies advances of most countries in europe, asia and north america, but the ingenuity, proactive and professional commitment of emergency medicine and hospital care in our countries, besides the high incidence of medical and trauma emergencies that occur daily without all tecnology resources in order to optimal attention, have begun to open a new trend in Emergency Medicine: Emergency Medicine in Latin America.

Today, the Latin American countries are represented by an organization that brings us and is responsible for developing and updating research in the field of Emergency Medicine, Prehospital Care and Disaster Medicine. ALACED is the Latin American Association for Cooperation in Emergency and Disaster, is committed to establish a consensus for institutionalizing the new wave of Emergency Medicine: The Latin American current.

The Association brings together Emergency Medicine professionals and pre-hospital care in Mexico, Cuba, Guatemala, Nicaragua, Costa Rica, Panama, Colombia, Venezuela, Brazil, Peru, Ecuador, Paraguay, Uruguay and Argentina.

Within its mission, ALACED has set a commitment to establish and consolidate a Latin American emergency medicine as an important global benchmark for the timely assistance and high quality of patients entering the system, either by the Prehospital Care as well as initial support for the Hospital Emergency Room.

This prresentation shows all the progress made in Latin American countries for the benefit of the consolidation of emergency medicine in Latin America, which has so substantial and important progress that may serve as reference for the rest of the currents of the Emergency Medicine around the world.

AUTHORS/INSTITUTIONS: R. Peña, , SOCIEDAD VENEZOLANA DE MEDICINA DE EMERGENCIA Y DESASTRES, San Tome, ANZOATEGUI, VENEZUELA;

ABSTRACT FINAL ID: W-56;

TITLE: Automated external defibrillator (AED) compared with full and semi-automated types.

ABSTRACT BODY:

Abstract Body: Purpose

AED has been established mainly at public facilities and education programe also developed and increased to laypersons and healthcare peoples in korea. But, relatively, They has not known about full type AED compared with semi type AED. Therefore, we compared two type AEDs and analysis of results.

Materials and Methods

Two type AEDs were conducted with licenced emergency medical trainer, who was not known about this study, in each isolated rooms with established video recording system. We enrolled 4 groups with layperson, nurse, emergency trainee, doctor. In regular training program, we inserted this section with blindness. All data were collected with paper and recorder. We analyzed them by 1 emergency physician.

Results

Total enrolled person was 175 (37±14 years, male 101) with 40 laypersons, 42 nurses, 51 emergency trainee (EMT) and 42 doctors. 58% (male 41) of them were already educated with basic life support program of AHA and 67% (male 42) of them were already known about AED. Full type AED was known at 30% (52; 1 layperson, 3 doctors, 2 nurses and 46 EMT) but 2 of 52 had performed full type AED at past. Convenience of operation was (1~10 point; 1 worst, 10 best)) was higher in full type (mean 9.76) than semi type (mean 8.11) (p<0.05). Satisfaction of operation (1~10 point; 1 worst, 10 best)) was higher in full type (mean 8.74) than semi type (mean 7.09) (p<0.05). The main cause of satisfaction was the fear of press shock button (32 laypersons, 29 nurses, 18 emergency trainee (EMT) and 19 doctors).

AUTHORS/INSTITUTIONS: H. Kim, , soonchunhyang university, Bucheon, KOREA, REPUBLIC OF;

ABSTRACT FINAL ID: W-57;

TITLE: Development and implementation of expert consensus-based resuscitation room protocol for respiratory failure

ABSTRACT BODY:

Abstract Body: Study Objectives: Resuscitation room in emergency department(ED) is a critical space for acute care and life-saving procedures. Systemic protocol used in resuscitation room can make a rapid diagnosis and response, potentially resulting in decrease the rate of complications and errors. The objects of our study were 1) to develop resuscitation room protocol for patients with severe respiratory failure and 2) to examine the impact of the protocol for respiratory failure on the improvement of clinical performances and outcomes.

Methods: Using the Delphi technique and consensus meetings, a panel of 6 expert emergency physician made consensus for critical intervention/time-limit list and developed a protocol for respiratory failure. The protocol consisted with 3 steps: critical ABC(airway, breathing, circulation) within first 5 min, life saving procedure within 30 min, and disposition within 60 min. This potocol were implemented in a clinical environment during a 6-months study period. Using a checklist based on the intervention/time-limit list, we analysed the video-recorded clinical performance in resuscitation room for phase 1 (pre-protocol period) and phase 2 (post-protocol period).

Results: A total of 113 cases were included in the analysis: 50 and 63 in the phase 1 and phase 2 groups. Male were 74 (65.5%) and mean age were 66.9 ± 13.5 years. Demographic data were not different between two groups. Implementation of the protocol for respiratory failure resulted in a greater percentage of patients receiving timely eight ABC interventions(phase 1, 47.0% vs. phase 2, 59.5%, p =0.001) compared with the pre-protocol group. There was no difference in mortality rate between two groups.

Conclusion: Implementation of a resuscitation room protocol for respiratory failure increased timely performance of early critical intervention in crowded ED.

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ABSTRACT FINAL ID: W-150;

TITLE: Reliability of Emergency Severity Index Version 4 for triage in Korea

ABSTRACT BODY:

Abstract Body: Study Objectives: The Emergency Severity Index 4 (ESI-4) is

widely used as a triage tool. The aim of this study is to test the interrater reliability of ESI-4 in Korea.

Methods: This study was carried out from August 2010 to September 2010 in a single regional emergency center (level 1 center). A total of 10 triage nurses who completed ESI-4 training involved patient triage. The collection of the triage data was done by triage nurses. The convenience sampling method was used to select participants. Two research nurses and ten triage nurses scored the ESI-4 to the selected patients as references, independently. We calculated the weighted kappa between the triage nurses and research nurses to evaluate the consistency of the ESI-4.

Results: Among 2,925 patients who visited the emergency center during the study period, 233 (8.0%) patients were enrolled this study. Classification of ESI level was as follows -level 1(1.02%), level 2(18.94%), level 3(68.21%), level 4(11.01%), and level 5(0.82%). Interrater reliability was weighted kappa 0.79(95% CI: 0.74-0.83) and agreement rate was 87.1%. Under-triage rate by triage nurse was 6.0% and 6.9% patients was classified over-traige. A third of ESI level 1 patients (66.7%) were admission to ICU and 40.3% of level 2 patients were hospitalized. A hugher percentage of ESI level 3(69.4%), level 4(93.5%) and level 5(95.8%) patients were discharged. Conclusion: ESI-4 score by nurses have good interrater reliability in Korea and well predicted hospital admission and disposition.

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ABSTRACT FINAL ID: W-85;

TITLE: Correlation of having a non-medical university degree with immediate and late Basic Life Support knowledge improvement in non-medical hospital staff after a short Basic Life Support course

ABSTRACT BODY:

Abstract Body: We conducted a prospective randomised trial to test the hypothesis that university trained non-clinical hospital staff would yield better Basic Life Support knowledge improvement immediately and a year after a short BLS course compared to their colleagues with no university degree.
br>Methods: Among not-medically-trained nonclinical staff of 3 different teaching hospitals in Tehran we randomly selected a group of 74 with and another group of 79 of without a university degree. Both groups were assigned to a 2-hour session of theoretical and a 2-hour session of practical skill training on Basic Life Support within a protected paid time with extra salary incentives for wellperforming participants. Just before and after the training, we tested subjects to determine their BLS knowledge using standardized multiple choice question tests scored on a continuous scale from 0 to 10. For comparison of scores between those two groups, we calculated differences of pre-course scores compared to scores just after and also 12 months after the course in each subject and compared the mean changes in those two groups using an unpaired ttest.

test.

Trainees with a university degree displayed superior BLS knowledge improvement immediately after the course compared with those without a university degree (95% CI for the difference in mean score improvement of 0.21-0.36 and P-value <0.01) .Interestingly, comparison of mean score improvement for both groups a year later revealed more improvement from baseline scores in those without a university degree compared with the other group (95% CI for the difference in mean score improvement of 1.71-2.00 and P-value <0.01)<pre>
class of the difference in mean score improvement of 1.71-2.00 and P-value <0.01)</pre> Conclusion: We found that having a university degree in a non-medical field only correlates with immediate superiority in the BLS knowledge retention and improvement assessed by MCQ tests when it comes to train non-clinical hospital staff with a 4-hour BLS course, while those without a university degree show more improvement from the baseline score after a year.

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ABSTRACT FINAL ID: W-151;

TITLE: Lack of reported cases of abuse in emergency residents in Iran

ABSTRACT BODY:

Abstract Body: Background:

A study in 2010 in the United States revealed that only 12% of abuse to emergency staffs cases were officially reported. Therefore, we aimed at investigating upon this matter and finding out the reasons underlying not reporting the abuse cases by emergency staff in Iran if no cases are reported.

Methodology:

Questionnaires included questions about reported cases of abuse, reporting person, and reason of not reporting were handed out among emergency residents and physicians in five different training hospitals in Iran.

The questionnaires were anonymous, completely optional and confidential and to be returned in closed envelopes.

The gathered information were analysed using SPSS19 software.

Only 3% were previously informed how to report an assault.

Findings:

From 90 questionnaires distributed, 65 completed and returned. Almost half of the respondents were males (51%),(63%) married and with average age of 33 years (SD: 5 / 3) Analysis of the responses revealed:

29% of the abuse cases were reported.

Reports conducted in a descending order by the hospital centrally resided police, and watch guards and is manager of the emergency ward.

Outcome of reports shows 6% interest as well as 6% loss for the assaulted staff in reported cases. Additionally, 37% of the reported cases resulted in no effects.

The reasons under lying not reporting in priority order are determined as the uncertainty of officials following up, acceptance of abuse as part of medical practice, lack of knowledge of how to report, fear of social loss, hesitation of talking about the cases of "abuse", fear of retaliation, fear of charges of deception and fear of loss of career.

Conclusion:

Most of the emergency residents and physicians in emergency ward have not reported cases of abuse because they are uncertain if the officials follow up and accept it, they disregard it as part of their medical practice and they do not have enough knowledge on ways of reporting any abuse towards them.

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ABSTRACT FINAL ID: W-114;

TITLE: A CASE REPORT. PREHOSPITAL THREATMENT OF ACUTE MYOCARDIAL INFARCTION WITH ST-SEGMENT ELEVATION

ABSTRACT BODY:

Abstract Body: BACGROUND: Acute myocardial infarction (MI) is potentially life-threatening event and requires fast and right diagnosis and therapy. Recognising of symptomps and calling Emergency Medical Service (EMS) are the same important as adequate education and equipment of the EMS team members.

A CASE: A 69 years old man called EMS because he had chest pain. Pain started about 30 minutes ago, and was following with a cold sweating. When EMS team arrived at the patient's home, he was pale, with wet and cold skin and adynamic. BP was 100/60 mmHg on the both arms, HR was 55/min, RR was 14/min, oxygen saturation was 96%, temperature 36,6°C, blood level glycose 10,0 mmol/L and Glasgow Coma Scale score was 15. Heart sounds were rythmic and silent. Breath sounds were clear. Abdomen was tender, without pain during palpation. Pulses were regular, symmetrical. ECG showed sinus rythm, with HR 55/min, ST-segment elevation in I, aVL, V2 and V3 leads, with hyperacute T-wave in V4 and V5, and ST-segment depression in III and aVF leads.

Since diagnosis was acute MI, therapy was given immidietly, at the house of patient. Patient got: ASA 300mg s.l, spray Nitropen 2 times s.l, amp. Fentanyl 0,1 mg iv, Clopidogrel 300mg po, Enoxaparin 30mg iv, Pantoprazol 40mg iv, amp Tenecteplase 40mg iv, 2 iv lines were placed (one only for thrombolitic), sol. NaCl 0,9% 500 ml was administred in slow infusion and patient was on monitor all the time during the transport to the hospital (nearest hospital was non-24h-PCl center in this period). About 50 min after thrombolitic administration, patient's ST segment was on isoelectric line. Next morning, patient went on PCl, and got one drug diluted stent. After a few days, patient left hospital without complications.

CONCLUSION: Acute MI is serious event with potentially deadly consequences. Right diagnosis and prehospital therapy depend of education and equipment of EMS teams. It is specially important at non-24h-PCI centres, when, in the absence of contraindications, thrombolitic administration can save a patient life.

KEY WORDS: Acute myocardial infarction, prehospital, thrombolitic, education, equipment.

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ABSTRACT FINAL ID: W-18;

TITLE: Are emergency nurses prepared for chemical and nuclear incidents in Flanders?

ABSTRACT BODY:

Abstract Body: As one of the densest populated regions of Europe with a high concentration of Seveso institutions, the worlds second petrochemical port, a nuclear research centre, a nuclear power plant and another one just across the border, Flanders bears an inherent risk for chemical or nuclear incidents. After a national survey on hospital - and emergency physician preparedness we hypothesised that emergency nurses are not prepared for these risks either. To evaluate their preparedness we sent an online survey to 489 nurses on the mailing list of the Flemish Federation of Emergency Nurses. This survey consisted of questions about training and education, how prepared emergency nurses feel individually to deal with a nuclear or chemical event and a selection of theory questions to test the correlation between perceived preparedness and actual knowledge. There was a response rate of 45%. The results show that in general, Belgian nurses feel more prepared to deal with a chemical than a nuclear event. When it comes to a nuclear event they feel badly prepared even though about 30% have followed a training course in disaster management. Despite this perceived lack of preparation, 84,2% of nurses are still willing to go to work in the emergency room and even pre-hospital if there is enough protection and radio-detection equipment available. However, many say they have not been trained and do not feel capable to use this equipment. The theory questions confirm that there is a general lack of knowledge when it comes to nuclear events. Some remarkable conclusions include the misplaced confidence that iodine tablets have a protective effect against external radiation, and the belief that decontamination should be performed prior to treatment of life-threatening injuries. In conclusion, even though a high percentage of nurses are active in the high-risk zone surrounding a nuclear or a Seveso site, there is a clear lack of theoretical and practical knowledge. The survey suggests that there is a need for better training and education. AUTHORS/INSTITUTIONS: L.J. Mortelmans, C. Jaobs, K. Anseeuw, Emeregency Medicine, ZNA, Antwerp, BELGIUM:

ABSTRACT FINAL ID: W-44;

TITLE: Pilot Phase Findings from High-fidelity In Situ Medical Simulation Investigation of Emergency Department Procedural Sedation

ABSTRACT BODY:

Abstract Body: Introduction: In situ simulation may assist research-driven development and implementation of Emergency Department procedural sedation (EDPS) safety systems. Investigators initiated the Simulation Learning Initiative in Procedural Sedation Training for Routine Engagement of Anticipatory Maneuvers [SLIPSTREAM] program to evaluate an in situ EDPS simulation methodology's ability to generate objective data for system safety analysis.

Methods: Two high-fidelity simulation (SIM) scenarios were developed and featured EDPS preparation, induction, maintenance and recovery phases, adverse events and patient safety probes. Checklists for EDPS critical actions and patient safety behaviors were developed through review of published guidelines, institutional protocols and forms, and expert consultation. Institutional Review Board approval was obtained. Pilot sessions assessed the study protocol structure and limitations, scenario face and content validity, data acquisition functions and simulation EDPS checklists.

Results: 5 EM interns (0±0 live EDPS experience) and 5 EM attending physicians (51±16 EDPS; p=0.006) with similar SIM exposure piloted the scenarios over three months. Between-group differences in compliance with institutional EDPS protocols were detected for pre-sedation oxygenation (p=0.008) and EtCO2 monitoring (p=0.004). 20% of interns and all attendings (p=0.024) optimally managed EDPS complications. 60% of interns and 80% of attendings (NS) recognized patient potential for difficult sedation; recognition of defective equipment did not attain significance (33% interns [n=3 due to protocol errors] vs. 80% attendings). Pilot data resulted in derivation of a 10-point simulation EDPS safety composite score correlating strongly with live EDPS experience (r=0.838); a cutoff value of 6.7 exhibited 80% sensitivity, 100% specificity, 100% PPV, 75% NPV and 88% accuracy for detecting experienced operators.

Conclusion: Pilot sessions tested an in situ EDPS study protocol, SIM scenarios and checklist tools that appear to constitute an effective methodology to elicit and compare EDPS performance.

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ABSTRACT FINAL ID: W-86;

TITLE: Basic Life Support Skills and Knowledge Retention by Medical Students & Adaptation to the Revised Resuscitation Guidelines

ABSTRACT BODY:

Abstract Body: Aim. The aim of the study was to evaluate retention of skills and knowledge on Basic Life Support (BLS) one and two years after initial training of 4th and 5th year medical students respectively.

Methods: Medical students of 4th and 5th year were assessed without prior information on BLS practical performance and also on BLS knowledge with a written questionnaire. The results on BLS skills and knowledge of the two groups of students were compared. The students were also asked whether they had witnessed in or out – of hospital cardiac arrest and attempted resuscitation.

Results: Significantly more 5th year students were able to perform good quality compressions two years after their initial training compared to 4th year students who had attended the course one year previously. Comparison of the different parameters of the BLS algorithm regarding knowledge and skills showed that although students had the relevant knowledge for the majority of parameters they were unable to apply them. The majority of the 5th year students (66%) had witnessed in hospital arrest and had also participated in attempted resuscitation. On the other hand, only 1 student in the 4th year group had a similar experience.

Conclusions: Factual knowledge and practical skills of the BLS algorithm of medical students decline over time, and this decline is more pronounced in practical performance. The experience and participation in cardiac arrest and attempted resuscitation results in better retention of the skills required to perform good quality compressions. **AUTHORS/INSTITUTIONS:** K. Fakiris, A. Papaioannou, G. Stefanakis, H. Askitopoulou, Anaesthesiology, University Hospital of Heraklion, Heraklion, Crete, GREECE; O. Fraidakis, P. Agouridakis, , University Hospital of Heraklion - A&E Department, Heraklion, Crete, GREECE; A. Papaioannou, N. Volakakis, K. Pavlaki, H. Askitopoulou, , Medical School of Heraklion, Crete, GREECE:

ABSTRACT FINAL ID: W-45;

TITLE: Rapid Sequence Intubation (RSI) versus Non-RSI in Emergency Department (ED): Multi-Center Prospective Observational Study in Japan

ABSTRACT BODY:

Abstract Body: Objective:

Emergency medicine is increasingly recognized as a medical specialty in Japan, however, comprehensive studies evaluating current practices of ED airway management are lacking. Many emergency physicians in Japan still experience resistance regarding RSI. We compared RSI with non-RSI (intubation with sedation only, neuromuscular blockade only, without medication) in terms of success and complication rate.

Methods:

We formed the Japanese Emergency Airway Network (JEAN), a consortium of 10 academic medical centers in Japan and prospectively collected data for ED intubations from March 2010 to February 2011. The participating sites are level 1 (n=9) or level 2 (n=1) trauma centers with an average annual ED census of 31,000 patients. All patients performed intubation in ED were eligible for inclusion. Data were entered in real time by the intubator with a standardized data form. We present descriptive data as proportions with 95% confidence intervals (95%CI). Odds ratio (OR) are reported with 95%CI and p-value via chi-squared testing; p-values < 0.05 are considered significant.

Result:

We recorded 1,470 oral intubations (compliance rate 99%). Excluding cardiac arrest cases, we recorded 303 RSI and 559 non-RSI. Success rate of RSI on first attempt is higher than that of non-RSI (77.6% vs 61.9%; 95%CI for difference [9.3%-21.7%] p<0.0001). Success rate of RSI within 3 attempts is higher than that of non-RSI (98.4% vs 95.2%;95%CI for difference [0.6%-5.4%] p=0.0129). We recorded 40 complications in RSI (13.2%) and 89 complications in non-RSI (15.9%), without significant difference by method (p=0.3). Use of RSI for non-cardiac arrest patients varied among institutions ranging from 0% to 79% (median 40.5%; interquartile range[IQR] 1% to 59%).

Conclusions:

In this multi-center prospective study in Japan, we demonstrated high degree of variation in use of RSI for ED intubations. Additionally we found the success rate of RSI on first and within 3 attempts were both higher than that of non-RSI. This study has the limitation of reporting bias and confounding by indication.

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ABSTRACT FINAL ID: W-115;

TITLE: Mobile Phone-based Emergency Medical Dispatch in Low-Income Countries: A Pilot Program in Haiti **ABSTRACT BODY:**

Abstract Body: Lack of access to health care services has been identified as a major contributor to health disparities between developed and developing nations. Often times, access can be significantly improved by increasing transportation availability through better communications systems, thus reducing the time interval between an event's onset and the patient's transfer to definitive care. Injury, childbirth, disease outbreak and disaster are examples of public health risks where time can be a critical determinant of patient outcomes. In developed countries, emergency medical services are supported by robust telecommunications systems to provide both urban and rural populations with improved access through early detection; rapid response; and expedited transport. In Haiti, a weak telecommunications infrastructure precludes trained first responders from providing basic prehospital care and transport where and when it is needed. As a result, Haiti has substantially higher mortality rates for what would otherwise be considered preventable deaths, including deaths from traffic accidents, out-of-hospital childbirth, and cholera. However, by equipping resource-poor communities in Haiti with low-cost, reliable telecommunications capabilities, community-based prehospital care systems can be organized to improve care and transportation for emergency patients, thus reducing preventable deaths. An SMS-based emergency medical dispatch system is currently being developed in Haiti by leveraging the ubiquitous use of mobile phones. This dispatch system enables mobile phone users to send requests for emergency assistance via text message, which are then relayed to a trained cadre of layperson first responders with transport capabilities. We believe that the minimal human, physical and financial resources associated with an SMS-based emergency medical dispatch system will make the implementation of prehospital care systems possible wherever mobile phones are used, providing a sustainable and cost-effective model for other low-resource settings. Access to models and criteria for evaluation will be needed for wider testing and implementation.

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ABSTRACT FINAL ID: W-116;

TITLE: Implementation of intraosseous access in the out-of-hospital setting

ABSTRACT BODY:

Abstract Body: In an out-of-hospital emergency, rapid vascular access is often needed to infuse fluids and administer drugs. Intraosseous infusion is an effective alternative means of providing fluids and medications in a prehospital environment. Intraosseous access (I.O.) is indicated in severely ill patients in whom intravenous access is not possible to establish in a very timely fashion (60-90 seconds). According to the most recent international guidelines peripheral venous access is the first-choice, whereas I.O. access is the first alternative when intravenous access is delayed or impossible. Currently, I.O. access is the first recommended vascular access in paediatric emergencies such as cardiac arrest. But there are, however, little data on its use in an emergency setting, whether in paediatric or adult .patients. In 2009 all ambulances of Falck Záchranna staffed by doctors were equipped with EZ-IO device – semiautomatic battery powered needle driver for use in both children and adults. Medical supervisors provided training in the I.O. technique to all the physicians and paramedics. Training included theoretical and practical sessions according an algorithm for difficult vascular access. All participants have to pass the test and practical examination. At the present time all 32 ambulances are equipped with intraosseous devices and all physicians and paramedics are regularly retrained in this technique. Every use of the device is recorded on a standard form to audit the efficacy and safety of the new method. We present the data of I.O. access in first 30 patients. Data include indications, places of administration, the administered drugs and the complications. The results show that the EZ-IO device is safe and has a high success rate after an adequate training and retraining.

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ABSTRACT FINAL ID: W-126;

TITLE: Stability of Prehospital adrenaline at ambulance and drug storage room Narenthorn Center Rajavithi Hospital Thailand

ABSTRACT BODY:

Abstract Body: Background: Thailand is located in South East Asia. The weather is tropical, temperature in 2010 ranged from 19 degreeC to 44 degreeC. The ACLS medications were labeled to be stored at 2-8 degreeC. However, ambulances in Thailand do not certain refrigerator, the medications need to be stored at room temperature. Objective: To assess the stability and quality of adrenaline stored at room temperature in ambulance and drug storage room in Narenthorn Center, Rajavithi Hospital.

Material and Method: Forty vials of adrenaline bitartrade were stored at the temperature in each season for period of 4 weeks. Half werestored in one ambulances and the other half in drug storage room. Samples were then analyzed their appearance, pH and using stabilit indicating High Performance Liquid Chromatography

Results: The average temperature in drug storage room were 30 degreeC, 28 degreeC and 27 degreeC in hot, rainy and cool seasons respectively; and 34 degreeC, 30 degreeC and 31 degreeC in Narenthorn Ambulance

- -The appearance of adrenaline is not changed as it is still clear. The average pH is 3.18 to 3.36
- -Adrenaline was found to be stable when storage in both ambulance and drug storage room. The percent drug remaing was 90 to 115 la.
- -There was no significant difference in between drug quality the two storage places p= 0.792 There was significant difference in the percent drug remaing between rainy season from other seasons p< 0.005

Conclusion: Even though the temperature in drug storage room and ambulance was higher than recommended storage temperature, adrenaline stability and quality were not changed when testing by High Performance Liquid Chromatography.

Keywords: Drug storage, Stability, Drug quality,

Prehospital ACLS

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ABSTRACT FINAL ID: W-34;

TITLE: Characteristics of the Patients Transferred by Air: Descriptive Epidemiologic a Study

ABSTRACT BODY:

Abstract Body: Introduction: Air ambulances are used for the transfer of the patients before the hospital and between the hospitals in trauma, neurologic, cardiac, pediatric cases and other conditions that require specific care. Methods: In the study, we retrospectively examined the data included in the air ambulance transfer form provided by provincial directory of health, which belong to the patients that had been transferred by air ambulance of 112 command and control center in the city of Van between January 2010 and December 2010.

Results: A total of 241 patients were included in the study and 51% were men and 49% were women. It was found that the majority of the patients were between 0-1 years-old (40.2%). In adult patients, the most commonly seen diagnosis were trauma (31.6%), obstetric problems (24.7%), cerebrovascular events (12.4%) and myocardial infarction (9%), respectively. It was determined that, in terms of medical disciplines, the patients were most commonly transferred to the clinics of pediatric (45.2%), neurosurgery (9.1%), gynecology (9.1%), cardiology (6.2%), neurology (5%) and general surgery (5%). Total flight time was 115.3±4.7 and the subjects were most commonly transferred to a university hospital.

Conclusions: The decision about the use of air ambulance may be made based on the distance, the length of the transfer and transportation, the resources of the health institutions located in the relevant region, and environmental and climatic conditions. However, the patient groups to be transferred should be analyzed with caution. Keywords: Air ambulance, Critically ill patient, Transportation, Time.

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ABSTRACT FINAL ID: W-152;

TITLE: A New Challange For Emergency Physicians: Dasatinib

ABSTRACT BODY:

Abstract Body: Introduction:

Dasatinib is a potent Bcr-Abl inhibitor approved for the treatment of imatinib-resistant or intolerant chronic myeloid leukemia(CML) and Philadelphia chromosome-positive acute lymphoblastic leukemia. Although reported to be well-tolerated, severe events such as pleural or pericardial effusion have been reported.

Case:

A 49 year old male patient presented to the emergency department(ED)with complaint of shortness of breath. Chronic myeloid leukemia had been diagnosed in 1997, and Philadelphia chromosome-positive, BCR/ABL mutation was detected. Because of imatinib resistance he was on dasatinib since two months 140 mg/daily.

His vital signs were recorded as follows: blood pressure 100/85 mmHg; heart rate 104/min; respiratory rate 20/min; oxygen saturation on room air 91%; and temperature 37.2°C.

The physical examination revealed normal except chest auscultation. Rales were detected bilaterally on the basis of the lungs and heart sounds were found to be normal. A sinus rythm with right bundle branch block were noted on the ECG. His echocardiography was revealed a normal left ventricle ejection fraction, however his right ventricle ejection fraction was found to be 30%, and systolic pulmonary artery pressure (sPAP) was found to be 95 mmHg. A pulmonary hypertension was diagnosed, and a minimal pericardial effusion was detected around the right ventricle. A computerized tomography angio was ordered with suspicion of pulmonary embolism, however only pericardial and pleural effusions bilaterally was revealed

(Figure 1).

The patient was admitted to the pulmonology department. Dasatinib was discontinued. He received diuretics. Pleural and pericardial effusions and were resolved. The patient's clinical condition improved over a couple of days, and he was discharged with discontinuation of dasatinib.

Conclusion:

Patients with oncologic problems are getting more often admit to the ED's. Emergency physicians are familiar to many types of oncologic problems, thereby adverse effects of different chemotherapeutic agents are a going to be new challenge for emergency physicians. Dasatinib is one of them which is causing pleural and pericardial effusions. **AUTHORS/INSTITUTIONS:** M. Ersel, M. Ozsarac, O. Cevrim, Y. Altunci, , Ege University Medical Faculty , Izmir, TURKEY; E. Aksay, , Izmir Tepecik Research and Education Hospital, Izmir, TURKEY;

ABSTRACT FINAL ID: W-87;

TITLE: Targeted radiology teaching for General Practitioners in an Urgent Care Centre setting – A minor injury or major catastrophe?

ABSTRACT BODY:

Abstract Body: With the recent push for moving Urgent Care out of the Emergency Department in the UK, there has been an increase in the popularity of the Urgent Care Centre(UCC) concept.

In the majority of UCC models, care is centred on General Practitioners with the addition of Advanced Nurse Practitioners(ANP'S). Whilst Minor Injury radiograph interpretation is common place amongst ANP's, it was felt an educational session for General Practitioners might be of use.

Traditionally in many departments, ambulatory patients presenting with 'Minor' injuries are often managed by some of the more junior staff within the department.

Using our experiences of commonly missed injuries on plain radiology, a system for Xray interpretation was developed and presented to our General Practitioner colleagues with the aim of identifying subtle injuries highlighted through our past experience.

Our aim is to expand and develop this educational model and appraise using pre and post session evaluation of a wide spectrum of commonly seen injuries mixed with normal radiographs.

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ABSTRACT FINAL ID: W-19;

TITLE: checklists for public risk communication

ABSTRACT BODY:

Abstract Body: checklists for public risk communication

ABCDE.....

Attention (cautions)

Be careful (precautions)

Communication

Disaster perception

Effective communication =Evaluation

AUTHORS/INSTITUTIONS: Y. Hemeida, ER, EMDM, Makka, SAUDI ARABIA;

ABSTRACT FINAL ID: W-117;

TITLE: Triage of multiple-patient incident in traffic accident

ABSTRACT BODY:

Abstract Body: Background: The priority of everyone involved in the menagement of the injured in traffic accident is a security of the team, the scene triage, recognition that there is a large number of injured, prompt evaluation of each patient, menagement and transport of patients according to the triage.

Case: In a traffic accident with multiple injured, at the same time were sent two teams of ambulance various distances from the accident. The team that arrived first on the scene finds a vehicle that had crashed into a tree. According to evaluation of kinematics of trauma, the mechanism of injury and the appearance of the vehicle, it is probably a traffic accident with critically injured patients. There are also numerous passers-by who pulled out injured from the vehicle. The assessment of the team is that probably comes to unprofessional drawing injured from the vehicle. Three injured in lying position placed around the vehicle, one injured in the vehicle and two injured standing near the vehicle. Teams begins with triage and treatment of injured patients. Two injured standing near the vehicle are categorized as green. The first person who is injured lying near the vehicle, has a great scalp head injury, complaining of stomach pains and breathing with difficulties placed in the category red. Injured patient who is in a vehicle with GCS 3 classify the category of red. Third injured, lying near the vehicle, has a face injury and left elbow injury categorized as yellow. Fourth injured who complains of stomach ache categorized as yellow. Another ambulance team called to the rescue. First menaged and transported the injured categorized as red, then injured categorized as yellow, and eventually injured categorized as green.

Conclusion: Rapid scene triage, the number of injured, treatment and transport according to the triage of the team is of essential importance for the survival of injured in traffic accidents. In our institution for primary triage, in the case of mass accidents with multiple injured in less space, START-Simple Triage And Rapid Treatment methods are used. Key words: Triage, number of injured, treatment, transport

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ABSTRACT FINAL ID: W-35;

TITLE: Global Emergency Medicine: Introduction into a Three-Year US Emergency Medicine Residency Program **ABSTRACT BODY:**

Abstract Body: Introduction: Availability of overseas experiences in Emergency Medicine (EM) has become an important recruitment tool for US training programs (1). Benefits to trainees working abroad include encountering an array of pathology and working with limited resources (2). Residents report an overall positive impact on their training (3). Methods: Training directors and chief residents at UNC create time in a three-year curriculum (most common format in the US) (4) for overseas experiences through flexible scheduling. Residents can provide clinical servicelearning; participate with program development; and enroll in a Global Concentration. Faculty mentorship, a scholar project, time abroad, and attendance of a national Global Heath meeting comprise this concentration. Observations: There is increasing interest from EM residents at UNC for overseas experiences. Five of thirty (16.7%) EM residents have taken part in international experiences in the past two years. UNC offers field rotations in Kenya and Tanzania. There, residents and students provide supervised clinical care and navigate important cross-cultural exchange, conducting research in some cases. Trainees have provided service-learning in Haiti and Mexico among others. All trainees are required to complete a scholarly project during their time abroad. UNC has established an exchange with institutions in Japan and Korea. This serves to expose trainees and faculty to alternative EM practice. It also encourages national EM development in these countries. Visiting foreign physicians are involved in a variety of activities, including clinical "shadowing"; emergency medical systems (EMS) "ride-alongs"; research projects; and participation in research, administrative and educational leadership meetings. Conclusions: Global EM experiences abroad have become an integral part of competitive US-based EM training programs. UNC's EM Residency, with support from its parent University, has worked hard to create time and space for high-yield clinical experiences abroad. Residents have expressed overall positive experiences and have demonstrated increased academic productivity.

AUTHORS/INSTITUTIONS: C. Ngaruiya, J. Tintinalli, I. Martin, , University of North Carolina - Chapel Hill, Chapel Hill, NC:

ABSTRACT FINAL ID: W-88;

TITLE: Simulation-based learning in Emergency Medicine: a training tool

ABSTRACT BODY:

Abstract Body: Simulation is a technique applied to replicate the real situation in a controlled and safe environment. Simulation-Based Learning (SBL) is now used to develop skills and attitude required in many medical disciplines, especially emergency medicine. High fidelity simulation is accepted as a teaching/ training tool for medical personnel and should be incorporated in the training of healthcare personnel working in emergency medicine. SBL can help enhance diagnostic and procedural skills, whilst protecting patients from unnecessary risks. It can also be used to teach and assess problem solving and decision making skills and practice management of uncommon clinical situations. Evidence-based practices can be put into action with the use of protocol/ algorithms, which can then be practiced via simulation scenarios. Emergency medicine is all about team work, involving doctors from other disciplines, nurses, paramedics and other healthcare personnel. SBL helps to cultivate and practice team-based competencies. Training for multidisciplinary teams such as trauma teams, medical emergency teams allows individual members to understand each others' roles and responsibilities better, towards nurturing the collaborative culture and a group identity. Interpersonal communication skills and conflict resolution too can be practiced. It serves as a powerful learning element because repetitions are possible until the skills are perfected and learning by making mistakes will not have adverse consequences. The complexity and difficulty levels of simulated scenarios can be individualized and varied based on respective needs and appropriate level of training. Video-taping the performance, followed by playback during debrief, serves as a means of effective learning. Thus, use of SBL as a training tool in emergency medicine will eventually lead to transfer of skills into real world setting and an impact on patient safety, hence improving patient outcomes.

AUTHORS/INSTITUTIONS: S. Pothiawala, F. Lateef, Emergency Medicine, Singapore General Hospital, Singapore, SINGAPORE;

ABSTRACT FINAL ID: W-58;

TITLE: Chest recoil evaluation result after BLS provider course

ABSTRACT BODY:

Abstract Body: Complete chest wall decompression during the CPR is recommended in the American Heart Association (AHA) and European Resuscitation Council. CPR programs have stressed the need of chest compression, chest wall recoil and hand off time. Instructors have teached hands should be resting on the chest during its recoil, but applying no pressure.

In Korea. AHA BLS provider course have opened from 2004. From 2006,

we have open BLS provider course for medical person. We had question about how check chest recoil. AHA checklist showed chest recoils were checked visual estimation or used by special machine.

This prospective observational study was conducted at Hallym medical center KangNam BLS training Center from 2008 and 2009. Study subjects performed single-rescuer CPR on a Laerdal Skill Reporter™ CPR manikin, which is capable of recording and displaying each chest compression/decompression waveform, compression duty cycle, depth of compression, measurement of complete chest wall decompression, and the accuracy of hand position placement during each compression

Doctor, nurse, medical student, student nurse and EMT were participated in BLS course

In BLS course Resusci Annes-CPR training mannequin were used. Instructors teached with AHA BLS provider mannual. After course. We checked BLS skill with Skill Reporter CPR manikin. We checked chest compression depth and compression/ recoil ratio 281 were participated in BLS provider course. Exclude incomplete data. 235 cases were remained. Student mean age was 25.8 ± 8.5 . Compression depth average were 43.4 ± 9.6 cm . chest compression/ recoil ratio average was 0.6 ± 0.16 .Complete chest coil(decompression) is some difficulty to educate, training, perform. Many student didn't performed complete chest recoil. Other method for complete chest recoil taining method should be deveploed

AUTHORS/INSTITUTIONS: G. Kang, Emergency Medicine, Hallym University, Seoul, KOREA, REPUBLIC OF;

ABSTRACT FINAL ID: W-20;

TITLE: Fight or flight: will our colleagues come to work when disaster strikes?

ABSTRACT BODY:

Abstract Body: Hospital managers count on maximum commitment of their staff in case of disaster situations. However, you have to take into account that some will be inflicted by the incident itself resulting in absenteism. Can they count on the remaining staff members? Following a survey amongst nurses and ambulance personnel our hypothesis is that a part of them will not come to work or only under certain circumstances.

To evaluate the willingness to work amongst the 397 physicians of our hospital (metropolitan area with huge petrochemical port and nuclear power plant) we've send them an online questionnaire on their opinion and knowledge on 11 hypothetical disaster situations.

The response rate was 35%. M/F ratio was 2/1 with a mean age of 45 years. 12% worked on critical departments and 7% had had any form of disaster course. The figures on willingness to work in the11 disaster situations is presented in the table. Depending upon the situation 73 up to 96% will come to work, be it under certain circumstances. Effective protective equipment, good and timely information and possibilities to contact the family are the main factors to convince those who are in doubt. Nevertheless there will always be colleagues that won't come to work. Conclusion: apart from people inflicted one should calculate drop outs in medical staff in disaster situations. Management can minimise this group by providing effective protective equipment, good information and communication channels with the family.

AUTHORS/INSTITUTIONS: L.J. Mortelmans, K. Anseeuw, G. Van Meensel, Emeregency Medicine, ZNA, Antwerp, BELGIUM;

ABSTRACT FINAL ID: W-94;

TITLE: Removal of corneal foreign bodies using slit-lamp and non-slit lamp aided techniques - a prospective observational study.

ABSTRACT BODY:

Abstract Body: Most CFBs are routinely removed by Emergency Physicians (EPs) and do not require immediate referral to an Ophthalmology service. The majority can be subsequently safely discharged from the Emergency Department. A recent review of physician practice in our Emergency Department highlighted the use of different removal techniques -some preferred to remove CFBs under direct vision, while others opted for the magnification of a slit-lamp.

We hypothesized that CFB removal under direct vision is a safe, alternative option to using a slit lamp and aimed to show that recovery times and complication rates are similar regardless of method of CFB removal.

60 patients were enrolled. Equal proportions had removal using a slit lamp and direct vision. All patients had topical proxymethacaine inserted and were given topical fusidic acid twice daily for 3 days. Patients were asked to fill out visual analogue pain scores at 12 and 24 hours and a satisfaction rating from 1 to 5. Participants were reviewed at 5 to 7 days by a study investigator with qualification in ophthalmology for complications and rates of rust ring removal. There were no complications in any patient enrolled. One patient in the "non-slit lamp" aided group was referred to ophthalmology for ongoing visual blurring due to persistent foreign body over the visual axis and a mild anterior chamber reaction. Only 25% of patients attended for follow-up review. Of the remainder, all were contactable by telephone. Satisfaction rates and pain scales were similar both groups.

In this small study on the removal of corneal foreign body by the non-ophthalmologist /emergency physician, we have found that removal under direct vision is a safe alternative to removal with a slit lamp. We recommend that all patients are given the opportunity to attend an ophthalmologist for slit lamp examination within 5-7 days.

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ABSTRACT FINAL ID: W-95;

TITLE: Foreign body traumas of eye managed in a university emergency department

ABSTRACT BODY:

Abstract Body: Introduction

Superficial corneal foreign bodies (SCFB) are common injuries presenting to ED. The aim of this study was to describe the eye injuries caused by foreign bodies, and determining clinical strategies for prevention and management of ocular trauma.

Methods

This was a retrospective chart review of the previous 2 years. Demographic data, the timing of injury, injury type (open or closed globe injuries), source of foreign body, hospital admission and ophthalmology consultation, treatments and the long term complications seen in patients were recorded.

Results

There were 476 patients, 83% were male, with an average age of 34.16±14.02. 9.7% of the eyes had an open-globe injury, while the rest were closed-globe injuries with or without SCFB. Most common FBs were metal fragments (37.6%) and dust (31.1%). The majority of patients (72.1%) had work-related injuries. 42.4% of the patients were consulted with ophthalmology, and the remaining were treated by emergency physicians. Only 10% of the patients required hospitalization and complications were seen in 2.3% of the patients.

Conclusion

Ocular FB involved mainly young healthy males who had sustained work-related injuries. Since, large number of eye injuries seen in EDs, ED colleagues should train themselves in order to recognize, treat, and refer the SCFB injuries seen in the ED.

AUTHORS/INSTITUTIONS: O. Yigit, A. Yuruktumen, S. Arslan, emergency medicine, akdeniz university, Antalya, TURKEY;

ABSTRACT FINAL ID: W-118;

TITLE: Emergency Medical Services Transport Times in Pediatric Poisonings

ABSTRACT BODY:

Abstract Body: Background: Although there are numerous GI decontamination options in the poisoned patient, previous data demonstrates that most poisoned patients arrive in the Emergency Department (ED) too late for optimal efficacy. Even in the pediatric age group, where parental supervision and concern often prompts an 'immediate' ED visit, the median time from exposure to triage has been reported to be 1.2 hours for all modes of transport. We sought to determine the transport times in poisonings under 18 years when EMS was utilized.

Methods: Retrospective review of EMS database from a large suburban hospital-based Advanced Life Support unit which treats approximately 30,000 patients per year. All pediatric ingestion/poisoning patients were identified. We evaluated time from initial call to arrival time in ED. Statistics were performed on Microsoft Excel.

Results: 114 patients, mean age 13.6y (SD 5.6), 51.7% female, 18.4% under 6yo. Median time elapsed from initial call to EMS make available status was 33 minutes (mean 34.7mins, +/-2.16, range 16-66 mins).

Discussion: Previous data has shown a time from exposure to ED presentation to be over an hour. Although this study looked at time from EMS call and not time of exposure per se, this is a reasonable proxy for exposure time especially in young children. This data suggests that EMS transport in poisoned children may save valuable time which may be utilized for time-sensitive decontamination methods.

Conclusion: The time from initial EMS call to patient arriving in ED was less than previously reported with pediatric poisonings from all modes of transport. EMS transport may positively affect treatment options and clinical course in these patients.

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ABSTRACT FINAL ID: W-89;

TITLE: Is there a Gender Bias in Descriptions of Applicants in Standard Letters of Recommendation for Emergency Medicine Residencies?

ABSTRACT BODY:

Abstract Body: Objective:

An integral part of the application process, the Standard Letter of Recommendation (SLOR) distinguishes EM from other medical specialties. Within the SLOR is a paragraph where evaluators can include commends with respect to the applicant. The potential exists for lapsing into the same habits and biases as seen in the traditional LOR. Anecdotal reports indicated that men were more likely to be described as intelligent and aggressive and women were more likely to be described as compassionate empathetic, team player, descriptions that conform to traditional gender roles.

Method:

We reviewed all applications to an allopathic Emergency Medicine residency program during the 2008-2009 year. The remaining 778 SLORs were reviewed and we developed 39 categories for comparison. These categories included all synonyms for a given term (e.g. intelligent=smart, bright, apt, genus, sharp, intellectual) and ranged from star quality to knowledge base to work ethic to various personality traits (e.g. enthusiasm, low maintenance). Pearson Chi-Square Test was used to analyze larger categories. Smaller categories less than n<5, the Fisher Exact Test was used. All analyses were performed using SAS 9.2 by SAS Institute.

Results:

Star potential, intelligence, compassion/empathy, aggressive/assertive qualities, enthusiasm and team player showed no significant gender difference or bias. We uncovered three statistically significant differences. Those areas which differed amongst genders were in the area of work ethic, reserved personality, and solid achievement.

Conclusion:

Male applicants are more likely to be described as hardworking than their female colleagues. He perception of men as solid candidates may be neutral or favorable depending on how solid is interpreted by the residency program. Curiously, in a field known for its more proactive members, men were more likely to be perceived as shy or reserved. **AUTHORS/INSTITUTIONS:** T. Veronica, R. Merritt, P. Cheng, K. O'Keefe, T. Sanson, , USF/Team Health, tampa, FL;

ABSTRACT FINAL ID: W-36;

TITLE: Do Male Emergency Physicians Focus on Different Personal and Professional Traits in Writing the Standard Letters of Recommendation for Fourth year Medical Students than Their female Colleagues?

ABSTRACT BODY:

Abstract Body: Background:

Designed to be a truly objective assessment of a medical student's suitability and potential for success, the Standard Letter of Recommendation (SLOR) retains a comment section that enables the individual evaluator to include handwritten remarks about an applicant's intelligence, knowledgebase, or overall personality. These remarks can provide the color and context for a student's applications. We anticipated that there would be no difference in the areas male or female letter writers would chose to comment on in the SLOR and that the comments would be evenly distributed.

Method:

We reviewed all applications to an allopathic Emergency Medicine residency program during the 2008-2009 year. Files without SLORs removed and composite SLORs, written by multiple physicians, were removed. We developed 39 categories for comparison. The data tested our null hypothesis of no relationship between evaluator gender and specific applicant personality traits or characteristic. Pearson Chi-Square Test was used to analyze larger categories. Smaller categories less than n<5, the Fisher Exact Test was used. All analyses were performed using SAS 9.2 by SAS Institute.

Results:

After reviewing the data from all 39 categories, we uncovered for statistically significant differences it the areas of enthusiasm, low-maintenance personality, team player, and solid achievement

Conclusion:

Male EP's appear to focus less on an applicant's energy and enthusiasm for the field of EM or their ability to function as a team player than female EP's. additionally, men appear to value an applicant's easy going or hassle-free personality less than female EP's. Male EP's, on the other hand, are more likely than their female counterparts to note than an applicant is a solid prospect.

AUTHORS/INSTITUTIONS: T. Veronica, R. Merritt, P. Chung, K. O'Keefe, T. Sanson, , USF/Team Health, tampa, FL;

ABSTRACT FINAL ID: W-153; TITLE: A weird suicide attempt

ABSTRACT BODY:

Abstract Body: Suicidal ideation is a common medical term for thoughts about suicide, which may be as detailed as a formulated plan, without the suicidal act itself. Although most people who undergo suicidal ideation do not commit suicide, some go on to make suicide attempts.

A family history of suicidal behavior, history of psychiatric hospitalization and symptoms of anxiety or depression are the risk factors for suicidal attempt.

A 25-year old mental retardation woman was admitted to to our hospital emergency service. From the history taken from the patient, we learned that she had swallowed two boxes of (30 numbers) sewing needles.

Her physical examination was normal. All the needles were discharged during the patient's follow-up by gastrointestinal tract.

Suicides or suicidal injuries due to sewing needles are very rarely reported in the medical literature. We present an interesting case of a suicide attempt using sewing needles. We believe that patients with mental retardation may vary from the normal population in point of weird ways of suicide attempts.

AUTHORS/INSTITUTIONS: <u>A. Kalkan, M. Tas, S. Gokhan, , Diyarbakir Training and Education Hospital, Department of Emergency Medicine, Diyarbakir, Diyarbakir, TURKEY; M.E. Memetoglu, , Gumushane State Hospital Department of Cardiovasculer Surgery, Gumushane, Gumushane, TURKEY;</u>

ABSTRACT FINAL ID: W-130;

TITLE: Illness Perceptions of Rural Belizeans with High Blood Pressure

ABSTRACT BODY:

Abstract Body: BACKGROUND: Widespread adoption of the "Western" diet in lesser developed nations has led to a rise in the prevalence of hypertension (HTN). Little is known however, about heath beliefs as they relate to HTN in these regions.

OBJECTIVES: To determine perceptions of HTN and their potential relationship with health status among rural Belizeans with high blood pressure (BP).

METHODS: 326 individuals > 18 years old were screened for HTN at eight rural clinics in the Cayo District of western Belize. Patients with elevated BP (≥140/90 mm Hg on averaged automated brachial cuff measurement) or a self reported history of HTN were asked to complete 2 survey instruments: the Illness Perception Questionnaire-Revised and the Short Form-12 (SF-12). Descriptive data were compiled (Table) and group-wise comparisons were performed.

RESULTS: 71 (22%) had a documented history of HTN or were found to have elevated BP (mean [SD] age: 49[14.7]; BP: 140[21]/88[11] mm Hg). HTN was most commonly attributed to diet or eating habits (79%), stress or worry (74%), and patient behavior (61%), while only 44% believed it was influenced by heredity. 61% thought treatment would cure HTN and 35% say they do not understand the illness. When comparing patients with a history of HTN (n=49) vs. those with elevated BP as a new finding (n=22), illness perceptions were generally similar though individuals with previously diagnosed HTN were less likely to attribute their disease to diet or eating habits (35% vs. 71%, p=0.03). Illness perceptions were also similar among those with a history of HTN whether (n=19) or not (n=30) their BP was controlled. Overall mean [SD] physical (42 [11]) and mental (46 [10]) health scores were low, with no statistically significant difference between groups.

CONCLUSIONS: Among rural Belizeans with high BP, diet and stress are perceived to be important contributors to HTN. Fewer than 40% however, recognize the long lasting nature of HTN and many express a general lack of disease understanding. Such information can be used to guide future interventions aimed at modifying health beliefs with a goal of improving health status and self-management of HTN.

AUTHORS/INSTITUTIONS: J. Bammer, A. Marinica, C. Vannier, J. Flack, P. Levy, , Wayne State University, Detroit , MI;

ABSTRACT FINAL ID: W-131;

TITLE: What Role Should Hands-On Foreign Healthcare Experiences Play in Management of High Blood Pressure? **ABSTRACT BODY:**

Abstract Body: BACKGROUND: Belize is a popular destination for foreign medical groups to visit and many participate in population screening for conditions such as hypertension (HTN). Though well meaning, there is concern that these efforts may lead to unintended consequence including inappropriate initiation of therapy and interference with existing patient-provider relationships.

OBJECTIVES: To evaluate the role of rural health clinics operated by visiting foreign healthcare providers in the management of patients with high blood pressure (BP).

METHODS: BP screening using automated brachial cuff measurement was performed in 326 individuals > 18 years old at eight rural clinics in the Cayo District of western Belize. Based on BP reading, three patient groups were defined: 1) elevated BP (≥140/90 mm Hg) without prior history of HTN; 2) elevated BP with known HTN; and 3) controlled BP with known HTN. Descriptive data were compiled and group-wise comparisons were performed. RESULTS: Elevated BP was present de novo in 22 (7%) cases (59% male; mean [SD] age = 44 [16]; mean [SD] BP = 142[14]/91[10] mm Hg) and with known HTN in another 30 (9%) individuals (27% male; mean [SD] age = 52 [16]; mean [SD] BP: 150[23]/91[11] mm Hg), 13 (43%) of whom were taking anti-hypertensives. 19 (6%) had a history of HTN with controlled BP (20% male; mean [SD] age: 49 [12]; mean [SD] BP: 119[10]/76[9] mm Hg) only 7 (37%) of whom were on anti-hypertensive therapy. All patients with high BP on screening were referred to a government subsidized primary care clinic for further management.

CONCLUSION: Hands-on foreign healthcare experiences should focus on identification of patients with: 1) known HTN whose BP is uncontrolled despite medical therapy; 2) known HTN and elevated BP who are not on current medications; and 3) elevated BP but no history of HTN. For all 3, the primary intervention should be referral to a local provider. Establishing a definitive diagnosis of HTN in those with de novo BP elevations and efforts aimed at treatment, especially initiation or alteration of antihypertensive therapy, can be detrimental and should be avoided. **AUTHORS/INSTITUTIONS:** J. Bammer, A. Marinica, C. Vannier, J. Flack, P. Levy, , Wayne State University, Detroit , MI;

ABSTRACT FINAL ID: W-90;

TITLE: Alteration of knowledge and attitude toward CPR done by ward nurse through Mock CPR training

ABSTRACT BODY:

Abstract Body: Background

Mock CPR training; In situ simulation for CPR has advantage on increasing educational effect. Simulation is done in clinical surroundings which real hospital workers are doing their jobs and reality is reflected in educational environment. Many studies report about the efficacy of in situ simulation for CPR.

Purpose

Our study investigate the influence of Mock CPR training on nurse's ability to CPR and confidence of knowledge and attitude.

Methods

The study was done between 4th and 15th of april 2011. 13 general wards were randomly selected and investigator ran the simulation by placing the CPR mannequin (Little Anne, Laerdal Korea) on the station, assuming that cardiac arrest has occurred and this was done without prior arrangements. At least 5 cycles of CPR was done, after simulation debriefing and 5 point scale survey was conducted.

Results

Total 204 people responded to survey and 43 people(21.1%) participated in simulation, 161 people(78.9%) did not participated. Two groups age(35.81 ± 9.06 vs 35.09 ± 8.53 , p=0.625) and service year(11.92 ± 8.89 vs 11.47 ± 8.71 , p=0.766) did not showed difference. Also employment history of special department, such as ER or ICU (6/43 vs 10/161, p=0.093), acquisition of BLS provider certification (20/42 vs 89/161, p=0.343) showed no difference. Comparison of before and after the education on 43 people, who participated in simulation, showed statistically significant increase in overall ability of CPR and confidence on knowledge.(3.24 ± 0.76 vs 4.12 ± 0.67 , 3.38 ± 0.76 vs 4.12 ± 0.71 ; p<0.001, p<0.001)

Conclusion

Mock CPR training, in situ simulation for CPR may increase nurse's confidence and knowledge about CPR. Because the actual performance of CPR is not only determined by skill but also circumstances of scene, attitude, and emotional state of CPR provider can be affected, Mock CPR training could be effective way of education.

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ABSTRACT FINAL ID: W-154;

TITLE: Inmediate care protocol for advance nursing

ABSTRACT BODY:

Abstract Body: Introduction:

In our emergency service, nurses are in charge of making the first assessment of the patient, since they develop the triage. The nurse assigns the severity level of the user and if the require immediate attention. Due to a frequent collapse of the emergency service and delays in medical care we decided to develop a consensual protocol for nursing action, in which they can act independently using the triage and vital signs evaluation.

Objective:

- Streamline and improve customer service, when a possible delay in medical care is expected.

Methods:

- Interdisciplinary meetings: Where the healthcare team in consensus (physicians and nurses) will develop a standardization of techniques that nursing staff will apply independently, regarding the vital signs of the patient prior the medical care.

Results:

Inmediate care protocol for nurses (with the following items):

- -Evaluation of triage: Blood pressure, heart rate, respiratory rate, temperature, oxygen saturation and blood glucose.
- -Standardization of nursing techniques to be perform without a prior medical order, according the reason of consulting and the altered vital signs: the establishment of an intravenous catheter, blood samples, EKG, blood gas analysis, oxygen administration, urine samples.
- -In some cases drug administration.

Conclusions:

- -The protocol will allow us to optimize patients care further to a collapse in the emergency service and/or a possible delay in medical care.
- Allows nursing to work in a standardized way and independently.
- Streamline and improve the quality of customer service.

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ABSTRACT FINAL ID: W-155;

TITLE: Death in the emergency department of Virgen Macarena Hospital Area during the year 2010 AUTHORS: Gálvez San Román, JL, Portillo Cano MM, Garcia Sanchez MO, Jimenez Hidalgo, C., Navarro Bustos C. **ABSTRACT BODY:**

Abstract Body: INTRODUCTION / OBJECTIVES: In the emergency department deaths occur as in any area of the Hospital. To analyze the deaths in the ER, was designed a sheet of death in the Mortality Committee of Virgen Macarena Hospital Area where the most important data collected medical history and the causes of death, among others, as well as its location at that time to detect failures in the circuits of patients and implement measures to correct them.

MATERIAL AND METHODS: To collect the data recorded on the sheet designed at the time of death in the section, along with the death certificate, incorporated into a database and analyzed using a spreadsheet calculation. RESULTS: There were a exitus 2.01 ‰ (average: 27.92 per month), with a proportion of men:women of 54.71%:45.29%. 61.4% were aged over 75 years. The 40.43% did so within 6 hours of arrival to the ER. In Observation occurred in the 48.02% and 30.70% in Recovery. The distribution of hours observed a progressive decrease in the morning and also rise from early morning. On weekdays, peak of 15.81% on Friday, falling for the weekend and then ascending. For months, the highest mortality was in the winter months. Were performed 2.43% clinical autopsies and 3.95% legal autopsy. The 96.5% were medical causes. The most frequent underlying causes were cardiac (21.19%) and cancer (18.54%). The most immediate cause of death was attributed to respiratory failure (27.66%).

CONCLUSIONS: 1. Stability in the number of death occurring in the emergency department. 2. The distributions of dying due to location, hours, days of the week and months can be affected through no fault of the section. 3. The most frequent causes of death are of cardiac origin. 4. Respiratory failure is the most common immediate cause. 5. It is necessary to establish the use of a single registration system (Computer System "DIRAYA") that is comprehensive and effective.

AUTHORS/INSTITUTIONS: J. Gálvez San Román, M. Portillo Cano, M. Garcia Sanchez, C. Jimenez Hidalgo, C. Navarro Bustos, , Hospital Virgen Macarena, Sevilla, Sevilla, SPAIN;

ABSTRACT FINAL ID: W-59;

TITLE: Patients with cardiac arrest arriving at the Emergency Department at Karolinska University Hospital Solna: treatment and outcome

ABSTRACT BODY:

Abstract Body: In this study we compare data from patients arriving at the Emergency Department at Karolinska University Hospital Solna (ER) to national data and to international guidelines and compare survivors (S) with nonsurvivors (NS). Method: Patients arriving with return of spontaneous circulation (ROSC) or ongoing cardiopulmonary resuscitation (CPR) at the ER 1 Jan 2007-31 Dec 2009 were included. Data from computerized records were collected. Results: 285 patients were included, mean age 64 years, 73% men. Prehospital data showed that 81% witnessed CA, bystander CPR 63%, 39 % ventricular fibrillation or tachycardia (VF/VT) as initial rhythm, 47% defibrillated, 73 % adrenaline and 68% intubated. At the ED it was recorded that 9% VF/VT, 15 % defibrillated, adrenaline 73%, 21% intubated, and therapeutic hypothermia (TH) started on 31% patients. 46 % arrived at the ED with ROSC, and 8% attained ROSC at the ED. 48% were admitted alive (AA), 89% to the ICU. Of the AA, half (51%) were treated with TH and emergency percutaneous intervention (PCI) was performed on 38 %. 61 patents, 21% were alive at 1 month, 82% with good neurological outcome (cerebral performance category 1 -2). In fact, 44 persons are still alive today! The 61 S were compared to the 224 NS at 1 month. Differences were seen in age (61 vs. 65), initial rhythm VF/VT (77% vs. 29%), bystander witnessed (95 vs. 77), bystander CPR (87% vs. 57%), arrival with ROSC (90% vs. 33%), TH (66% vs. 13%) and PCI (52% vs. 9%). When comparing to national data on patients where CPR has been initiated, differences were found in that 24% were AA and 9,8% were alive after 1 month, 39% of patients AA were treated with TH, 25% got PCI, bystander witnessed (69%),48% were intubated prehospitaly. No differences were seen in age, gender, bystander CPR, adrenalin and initial rhythm VF/VT. Conclusion: Treatment of patients with OHCA arriving at the ED is active, adheres to international guidelines and results in very good patient outcome. AUTHORS/INSTITUTIONS: J. Fryckstedt, L. Rulu, Dept of Emergency Medicine, Karolinska Institutet, Departement for Medicine, Solna, Stockholm, SWEDEN;

ABSTRACT FINAL ID: W-119;

TITLE: Romanian National Triage Protocol Difficulties and solutions

ABSTRACT BODY:

Abstract Body: The evolution of the emergency medicine has caused the settlement and the implementation of some triage protocols. In 2009 in Romania a national protocol was implemented on five categories in accordance with the emergency system. Last year, in 2010, the quality of the triage was evaluated by means of a retrospective study, a retrospective overview of performance indicators related to triage. We reviewed 5010 medical records from different Emergency Departments from Romania. The triage nurse designation was compared to the triage level determined by an expert triage nurse. The main conclusion was a surprise due to the fact that it identified a large number, 55%, of under-triaged patients, 21% over-triaged and just 24% was right triaged. This outcome emphasize the fact that from 5010 patients 1322 are hospitalized: 12 red codes, 149 yellow, 955 green, 196 blue and 10 white. As under-triaging is a negative result which warns against some deficiencies, we proposed to ourselves to identify the reasons and the causes of this phenomenon. To obtain information as true and as correct as possible, and to provide a screen shot about the real situation, we proposed to ask for the staff's opinions about the triage protocol in general and about the difficulties of implementing it as well. We elaborated two sets of questionnaires, each of thirty questions. A set is addressed to the nurses, the ones who do the triage, in order to find out the level of their understanding of the protocol, the difficulties when applying it and the suggestions to improve it. The other set is addressed to the doctors from whom we can find out their level of knowing the protocol, their opinions about the concordance of the codes with the patients' state as well as suggestions for improvement. The results of these evaluations will lead us to find the best solutions to eliminate the problem of the under-triage and to take measures that will improve the activity of the triage.

AUTHORS/INSTITUTIONS: H. Vass, E. Turucz, C. Boeriu, R. Arafat, H. Borcea, M. Casoni, A@E, Mres County Emergency Hospital, Targu Mures, ROMANIA;

ABSTRACT FINAL ID: W-120; TITLE: ALERT HAE PROGRAM

ABSTRACT BODY:

Abstract Body: Introduction: Angioedema Alert Program is an initiative of the Galician Society of Allergy with the participation of the Allergy Service of Vigo Hospital, the University of Vigo and the Public Health Foundation of Galicia-061.

This project is aimed at urgent care patients diagnosed with hereditary angioedema, the strengthening of the coordination of different levels of care and facilitation of access to means-hospital emergency care available in the Community through the number 061

Objectives:The early warning of an event of hereditary angioedema.Reducing the time between warning and health care.Assessment and assistance for the care and medicalized units of 061 to the reporting of patient records at the time of activation.The transmission of clinical information to healthcare team delivering care.Facilitation of the referral between levels of care involved for coordination and appropriate referral of patients.The transfer and delivery of patient to hospital for follow up.

Methods: In the event that the patient has a health problem at any point in the Autonomous Community of Galicia, they will contact the opening 061 number, at the time of its history thanks to a software application designed for this purpose. After telephone consultation, and based on the information contained in the record, and if the situation so requires, the emergency coordination center will send, depending on circumstances and location, the appeal for assistance.

The 061 report the medical history of care that will attend him, informing him of the treatment.

He knows his disease patients have the necessary medication for administration.

Conclusions: With this program may be given urgent attention to all patients with hereditary angioedema. The response time will be minimal. The administration of medication needed will be immediate.

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ABSTRACT FINAL ID: W-71;

TITLE: Analysis of Guideline Application to ACS patients (Resur-1 study)

ABSTRACT BODY:

Abstract Body: Introduction:

The aim of this study is to observe morbidity and mortality of ACS patients received in the ED and the impact with the application of recommendations of best practice.

Methodology:

A prospective multicenter study was conducted in 19 emergency departments (Resur-1 study), and allowed the inclusion of 2000 patients admitted for chest pain. The emergency diagnosis and definitive diagnosis at 48 hours were analyzed. The application of 5 major recommendations was studied:

- 1. writing and interpretation of the ECG <= 10 min,
- 2. administration of acetylsalicylic acid,
- 3. of heparin and
- 4. of a thrombolytic
- 5. referral to angioplasty.

Results:

525 (29.3%) patients were diagnosed with ACS. 462 adverse events were recorded, including 110 deaths (further results see table below).

Discussion:

It appears that guidelines are not consistently applied, and that the application has no global overall impact. Yet we note the link between the application of international and national guidelines, and the reduction of morbidity and mortality.

Conclusion:

The application of guidelines yields a benefit in terms of morbidity and mortality in ACS patients of our ED cohort, yet with a nuanced response profile.

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ABSTRACT FINAL ID: W-60;

TITLE: Immidiate outcome of in-hospital cardiac arrests: A two year experience

ABSTRACT BODY:

Abstract Body: Introduction:

Aim of the study was to record the outcome of in-hospital cardiac arrests managed by anesthesiologists.

Method-Materials:

During our 21 month prospective cohort study, we recorded all in-hospital cardiac arrests managed by our anesthesiologist-based MET team in our hospital. The parameters recorded were: reason for call, method of monitoring and vital signs and immediate outcome. A total of 70 out of 350 calls were included for further analysis, conducted with Microsoft Office Excel 2007.

Results:

45 out of 70 patients with cardiac arrest regained ROSC or ROSB and transported to ICU –type unit, and 25 died. No defibrillation therapy was admitted. 47/278 patients eventually died after a cardiac arrest, though the reason for MET activation was other than cardiac arrest.

Conclusions:

Our study outlines the importance of CPR and especially response time in the management of in-hospital cardiac arrest and enforces the significance of alertness health personnel should have about the possibility of an forthcoming cardiac arrest.

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- 2.Peberdy MA, Ornato JP, Larkin GL et al. Survival from in-hospital cardiac arrest during nights and weekends JAMA 2008:299:785-92
- 3.Cooper S, Janghorbani M, Cooper G. A decade of in-hospital resuscitation: outcomes and prediction of survival. Resuscitation2006;68:231-7

AUTHORS/INSTITUTIONS: S. Charitidou, E. Matiaki, T. Aslanidis, E. Anagnostara, First department of Anesthesia, Ippokrateio Hospital of Thessaloniki, Thessaloniki, GREECE;

ABSTRACT FINAL ID: W-61;

TITLE: The frequency and the role of invasive monitoring in management of in-hospital emergencies.

ABSTRACT BODY:

Abstract Body: Introduction:

The aim of the study was to investigate the frequency and the role of invasive monitoring during the management of in-hospital emergencies in a tertiary hospital.

Material- method:

During a 21month period we recorded in detail every Medical Emergency Team – call in our hospital. The team was anesthesiologists-based and the parameters recorded were: reason for call, method of monitoring and vital signs and immediate outcome. A total of 350 calls were included for further analysis, conducted with Microsoft Office Excel 2007. Calls for patients who had been managed with the help of any invasive monitoring before M.E.T. –call were excluded.

Results:

MONITORING: 1) HR 350/350, 2) BP 335/350, 3) ECG 158/350, 4) Diuresis 246/350, 5) CVP 63/350 (17.9%), 6) ABG 94/350 (26,85%), 7) SpO2 350/350, 8) RR 350/350.

Conclusions:

The study proves that although a relatively high percentage of patients admitted in high dependency type units, this was possible only with simple monitoring. Moreover, only 13.5% of calls had as immediate end-point DEATH. The latter implies the importance of monitoring, and set the limits to the first management of in-hospital emergencies.

References:

- 1.M.A.Devita, K.Hilmann, R.Bellomo, Medical Emegrency Teams: Implementation and Outcome Measurement, Springer 1st ed., 2006
- 2.Cooper S, Janghorbani M, Cooper G. A decade of in-hospital resuscitation: outcomes and prediction of survival. Resuscitation 2006;68:231-7

AUTHORS/INSTITUTIONS: S. Charitidou, <u>E. Matiaki,</u> T. Aslanidis, E. Anagnostara, First department of Anesthesia, lppokrateio Hospital of Thessaloniki, Thessaloniki, GREECE;

ABSTRACT FINAL ID: W-121;

TITLE: Prehospital and early in-hospital management of patients with brain trauma in Austria

ABSTRACT BODY:

Abstract Body: In the period 4/2009 - 4/2010, 16 Austria centers enrolled 446 traumatic brain injury (TBI) patients into an observational study of prehospital as well as early hospital care. The study was funded by the Ministry of Health and the AUVA (Austrian Occupational Trauma Insurance). For each patients we monitored: Prehospital status & treatment; Status & treatment in the Trauma Room; ICU treatment summary, Hospital & 6-months outcome; times of admission and discharge. From the patient data, we have calculated time intervals (EMS-Hospital; Hospital Arrival-CTscan, CTscan-Operation Room, etc). Using the Hukkelhoven score, we have calculated probability of mortality and probability of poor outcome for each patient. Looking at the ratio between observed mortality or rate of poor outcome and predicted probability (O/E ratio), we found that the following factors were associated with lower mortality and/or better long-term outcomes: short EMS arrival - Hospital arrival interval, Maximal treatment effort (specified by the score we have developed), treatment and transport by aeromedical teams (versus Ambulance cars), use of capnography in all patients who are ventilated, use of Ringer solution or HES (Hydroxyethyl starch) for volume therapy and hypertonic NaCl in all patients with shock, CT scan prior to or immediately after trauma room admission, as well as short interval between CT scan and start of neurosurgery, use of thrombelastography in the trauma room (especially in patients>60 years). According to our analysis, the measures that lead to higher mortality and/or to worse long term outcomes, and therefore the measures to avoid are: corticosteroids (use of corticosteroids more than doubled the odds for mortality), cooling (contrary to patients after CPR, cooling in TBI patients was associated with higher mortality).

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ABSTRACT FINAL ID: W-134;

TITLE: Time of performance surgical tracheostomy and mechanical ventilation weaning

ABSTRACT BODY:

Abstract Body: Objective:

Performance of tracheostomy is a common practise in critical ill patients whose demand in mechanical ventilation is expected long.

Purpose of our study is to find out the optimal momentum of performance tracheostomy in such patients, in order to improve the outcome of mechanical ventilation dissociation.

Material and methods:

In a period of 3 years time, (2005-2007), 36 critical ill patients were examined in a 4 bed ICU facility.

The patients were divided in 2 groups of 18 members, with identical demographic and clinical characteristics among them.

In grop A tracheostomy was performed prior to & days from admission in the ICU while in group B, tracheostomy had been performed at any time beyond the 7th day.

The tracheostomy was performed from the same group of physicians.

Duration of mechanical ventilation, time of successful weaning, PO2/fiO2, pCO2 a day before and a day after were measured and overal survival.

Statistical analysis was conducted with paired t-test.

Results

Among the two groups statistically signicant difference was noticed in time of weaning:7.6 days in group A,15.4 in group B,(p 0,006)

days of staying in ICU:22(group A) vs 30.8(groupB)p:0.012.

Conclusions:

Early tracheostomy in critical ill patients diminishes the duration of mechanical ventilation and facilitates weaning procedure.

Bibliography:

- 1.Heffner J.E. "The Role of Tracheotomy in Weaning", Chest 120,pg 477-485, 2001.
- 2. "Evidence Based Guidelines For Weaning and Discontinuing Ventilatory Support" Chest 120 (σ) 375 388, 2001 3. Bradley F.D., et al "Relationship between tracheotomy timing and dura-tion of mechanical ventilation in critically ill patients" Critical Care Med 33 (11): 2513-2520, 2005.

AUTHORS/INSTITUTIONS: C. Ntiakalis, N. Vavatsiklis, V. Bayiazidou, T. Tsakonas, I. Vavatsiklis, ICU, General Hospital Komotini, Komotini, GREECE;

ABSTRACT FINAL ID: W-122;

TITLE: Romanian National Triage Protocol Difficulties and solutions

ABSTRACT BODY:

Abstract Body: No matter the utilization in disasters or Emergency Department, triage means establishing priorities in patient's management. In 2009 in Romania a national protocol was implemented on five categories in accordance with the emergency system. Because triage is the first step of the medical act in the ED, it must be structured as a dynamic process, which works based on established criteria which can be evaluated and updated. Last year, in 2010, the quality of the triage was evaluated by means of a study, a retrospective overview of performance indicators related to triage. We reviewed 5010 medical records from different Emergency Departments from Romania. The triage nurse designation was compared to the triage level determined by an expert triage nurse. The main conclusion was a surprise due to the fact that it identified a large number, 55%, of under-triaged patients, 21% over-triaged and just 24% was right triaged. This outcome emphasize the fact that from 5010 patients 1322 are hospitalized: 12 red codes, 149 yellow, 955 green, 196 blue and 10 white. As under-triaging is a negative result which warns against some deficiencies, we proposed to ourselves to identify the reasons and the causes of this phenomenon. To obtain information as true and as correct as possible we proposed to ask for the staff's opinions about the triage protocol in general and about the difficulties of implementing it as well. We elaborated two sets of questionnaires, each of thirty questions. A set is addressed to the nurses, the ones who do the triage, in order to find out the level of their understanding of the protocol, the difficulties when applying it and the suggestions to improve it. The other set is addressed to the doctors from whom we can find out their level of knowing the protocol, their opinions about the concordance of the codes with the patients' state as well as suggestions for improvement. The results of these evaluations will lead us to find the best solutions to eliminate the problem of the under-triage and to take measures that will improve the activity of the triage.

AUTHORS/INSTITUTIONS: <u>H. Vass, E. Turucz, C. Boeriu, M. Casoni, A@E, Mres County Emergency Hospital, Targu Mures, ROMANIA; R. Arafat, , Ministry of Health, Bucharest, ROMANIA;</u>

ABSTRACT FINAL ID: W-91;

TITLE: Sequential Trauma Educational ProgramS (STEPs): Establishing trauma care training for developing countries.

ABSTRACT BODY:

Abstract Body: Introduction: The World Health Organization describes trauma as a "global epidemic". Many factors influence this epidemic, but the lack of specific, high quality and consistent training in trauma management for physicians is a contributory factor. We describe the development of a program designed to address this need for trauma training and education. Methods: In 2005, with grant funding U.S. National Institutes of Health Fogarty International Center, University of Maryland in collaboration with Ain Shams University and Egyptian Ministry of Health developed the STEPs trauma training course. This course addresses the need for high quality, affordable and adaptable training in the evaluation and management of trauma patients in lower and middle-income countries. Transition of course management from American to in-country trainers for continuity of the course was a stated objective. Results: Since 2005, 15 STEPs courses have been conducted in Egypt training more than 500 physicians from more than 6 countries in the region. We started with a full American faculty and now have more than 15 certified Egyptian trainers who lead STEPs under supervision of a joint Egypt-American committee. Lectures have been modified to fit the regional situation in trauma management; workshops and clinical scenarios were also modified; and criteria for choosing the faculty were established. It became clear that the medical education practices were different between the United States and Egypt: while medical education courses in Egypt are taught in English, the primary testing method is through narrative exams and not multiple choice question (MCQ) tests. Therefore, the MCQ formats was not a testing methodology most Egyptian physicians had experienced. In response, 4 Objective Structured Clinical Examinations were added as an additional method of assessing trauma knowledge and skills. Conclusion: Transition of a high quality trauma training course, developed in a high-income nation, to a Middle-Eastern low-middle income nation is possible with collaboration of trainers, academic institutions and the Ministry of Health. AUTHORS/INSTITUTIONS: M. El-Shinawi, , General Surgery Department, Faculty of Medicine-Ain Shams University, Cairo, 0, EGYPT; M. McCunn, , Anesthesiology and Critical Care MedicineUniversity of Pennsylvania, Phliadelphia, PA; A. Sisley, R. Adams Cowley Shock Trauma Center, University of Maryland School of Medicine, Baltimore, MD; M. Elsetouhy, , Department of Community Medicine, Faculty of Medicine-Ain Shams University, Cairo, EGYPT; J.M. Hirshon, , Department of Emergency Medicine, Department of Epidemiology and Preventive Medicine, University of Maryland School of Medicine and The Charles McC. Mathias. Jr. National Study Center for Trauma and EM, Baltimore, MD;

ABSTRACT FINAL ID: W-123;

TITLE: The successful factors for activity of Emergency Medical Service Udonthani hospital, Thailand Daoruang Kommuangpuk MPH.(Biostatistic)*, Anuchar Sethasathien MD. **

*Department of Emergency and Forensic Medicine, Udonthani Hospital, Thailand

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ABSTRACT BODY:

Abstract Body: Udonthani hospital has Emergency Medical Service units since the year 1998, the number of services more than two thousands times a year. This study aimed to the successful of EMS unit Udonthani hospital in the five factors. 1) knowledge of paramedic nurse 2) leadership and decision making of paramedic nurse 3) team working 4) communication and working with network 5) the overall situation and environment of the event. The sample is a working team per time. The 78 teams use a sample size. Data were collected using standard tools. The validated by three experts. The reliability coefficients Cronbach's alpha are 0.6 0.7 0.6 0.8 and 0.6 respectively. The results showed that the factor of knowledge communicate and the situation has relationships with successful of EMS unit. The correlation coefficient of Pearson significance was 0.26 0.26 and 0.64, respectively. Logistic regression, successful = 11.51 + 0.41 (the knowledge) + 1.81 (the situation). This regression could predicted the successful factors for activity of Emergency Medical Service Udonthani hospital was 45 percent. The results of this study can be used to development of the EMS unit Udonthani hospital. Including the application of knowledge to research in Emergency Medical Service.

AUTHORS/INSTITUTIONS: D. Kom., A. Set., , Udonthani hospital, Udonthani, THAILAND;

ABSTRACT FINAL ID: W-156;

TITLE: Emergency nurses' perceptions and attitudes towards their roles

ABSTRACT BODY:

Abstract Body: Emergency nurses are one of important members of health team in hospitals. Misunderstanding of roles and responsibilities or having a negative attitude towards the duties may lead to undesirable outcomes.

To find emergency nurses' perceptions and attitudes towards their roles, a qualitative study using semi structured individual in-depth interview was carried out at eight general emergency clinics and wards in five teaching hospitals in Tehran, Iran. Emergency department nurses, head nurses and nursing managers were interviewed in a secure and confidential environment by a psychiatrist who did not have any collaboration with or connection to the settings investigated. The interviews were audio-taped and transcribed verbatim. Collecting data went on until it was concluded that information was saturated. The data were then coded and a thematic variable-oriented analysis was carried out.

In total, 23 interviews were done with both male and female, with different ages, and different year experiences. The study findings showed that emergency nurses believed in roles such as clinical taking care of patients, communication with patients, explanation of the illness to the patient and what is going to be done, answering patient's and his company's questions and guiding them, educating the patient about the illness, cooperation with other personnel involved in patient improvement, managing different duties and prioritizing the activities, following up para clinical affairs of the patient, and so on. Although there was a consensus on roles mentioned above and the nurses had a positive attitude towards them, only some of the nurses interviewed admitted entering data related to the patient into the computer as one of their roles and only a few nurses pointed out that obeying the hospital policy and rules and providing feedback to the managers in order to improve patient care are their duties.

Since the nurses' perception of their roles is important to do their duties in the best way, and some nurses do not admit some of the duties defined as their responsibilities, it is necessary for the health care system to think of some solutions and interventions.

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ABSTRACT FINAL ID: W-157;

TITLE: What causes emergency departments' nurses do not perform their responsibilities

ABSTRACT BODY:

Abstract Body: Delivering acceptable and beneficial nursing care to patients referring to emergency departments is essential but improving nursing care needs identifying the obstacles.

To detect factors that cause nurses working at emergency wards do not perform their duties appropriately, a qualitative study using semi structured individual in-depth interview was carried out in five main teaching hospitals in Tehran, Iran. 23 nurses were interviewed in a secure and confidential environment by a psychiatrist who did not have any collaboration with or connection to the settings investigated. Purposive sampling was used to ensure maximum variation and heterogeneity and the study participants were from both sexes, with different ages and different year experiences and job positions.

Collecting data went on until it was concluded that information was saturated. The interviews were audio-taped and transcribed verbatim. The data were then coded and classified on the basis of the area and subject.

The study findings revealed various problems in different pivots needing improvement, some of which are as follow:

- Inadequate number of nurses at emergency departments considering the number of the patients referring to them
- Nurses' shortage of time, in consequence of performing duties that are not in their position description and yet spending too much time on doing different duties due to lack of defined procedures or lack of their implementation and mismanagement in different parts of the hospital
- Some nurses' job dissatisfaction
- Having long and in tandem shifts resulting in tiredness
- Disability to control their anger and using displacement defense mechanism
- Lack of adequate supervision
- Misunderstanding of responsibilities
- Lack of appropriate encouragement and punishment policy and procedures

- ...

The study findings indicate that to achieve a better nursing care in emergency departments needs overcoming various existing problems, some of which are caused by factors out of emergency department, and developing and implementing appropriate policies and procedures.

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ABSTRACT FINAL ID: W-158;

TITLE: Emergency nurses' problems from their own point of view

ABSTRACT BODY:

Abstract Body: Nurses working at emergency departments provide care for patients in the critical or emergency phase of an illness or trauma and it seems they may do their responsibilities better in situations where they think there are fewer problems and barriers.

To find emergency nurses' own point of view towards problems related to their job, a qualitative study using semi structured individual in-depth interview was carried out in five main teaching hospitals in Tehran, Iran. Emergency department nurses, head nurses and nursing managers were interviewed by a psychiatrist who did not have any collaboration with or connection to the settings investigated. The interviews were audio-taped and transcribed verbatim. Collecting data went on until it was concluded that information was saturated. The data were then coded and a thematic variable-oriented analysis was carried out.

In total, 23 interviews were done with both male and female, with different ages and different year experiences. In nurses' opinion, they had many problems in their job domain, some of which are as follow:

- Providing care to many patients while there are inadequate number of nurses in a working shift
- Role ambiguity
- Role conflict
- Doing many duties in a working shift, some of which should not be done by an emergency nurse, so it seems impossible to do all of them properly
- Spending too much time on different duties due to lack of defined procedures or lack of their implementation and mismanagement in different parts of the hospital
- Being reprimanded because of faults of others
- Not feeling secure at emergency environment
- Not investigating their problems and complaints by authorities
- -Too occupational and non occupational stress
- Job burnout
- Having inadequate salary for the job they do as well as comparing to the other jobs
- Compulsory overtime work
- Feeling compulsion from their parents or husbands to leave their job due to over work although they themselves love emergency nursing

- ...

It seems emergency nurses think they have too many various problems related to their job, some of which may lead to leaving the emergency nursing.

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ABSTRACT FINAL ID: W-124;

TITLE: Road traffic injuries managed by Emergency Medical Services: an overview of Tehran, Iran in 2010 **ABSTRACT BODY:**

Abstract Body: Background:

Around 1.2 million people die and number affected is about 50 million each year as a result of road traffic injuries worldwide. Iran has approximately 28,000 killed and 300,000 affected people in Road Traffic Accidents (RTA) annually. So, the efficiency of pre hospital response and suitable care is a major concern in emergency medical systems (EMS). This study describes the current situation in terms of response, scene and evacuation times of EMS missions in Teheran as well as vital signs and type of injuries of the patients.

Method:

This is a retrospective cross-sectional study. All related missions of Tehran Emergency Medical Services were included in this study, March 2009 to February 2010. All missions for Road Traffic Accidents were included. Result:

Tehran's Emergency Medical Services had a total of 62 854 missions as a consequence of road traffic accidents. Eighty percent of casualties were male. Mean age was 31.8 years. Ninety-eight percent of missions took place in urban areas. Means of response time, on-scene time and evacuation time were 13.0, 15.4 and 13.8 minute respectively Blood pressure wasn't measurable in two percent of casualties with severe bleeding. Four thin percent of victims had tachycardia and 7% of casualties had tachypnea GCS was ≥13 in 98.7% of them. Lower extremity trauma was the most common injury (39.1%), head and neck 23.6%; multiple trauma 23.1% and upper extremity 7%. Only 71% of causalities were transported to hospital, as 59% by ambulance and 18% by privet cars, but 29% got medical care at the scene including minor injuries, that didn't accept to be transferred to a hospital or died at the scene (0.6%).

Conclusion:

Around half of the injured patients had multiple or head and neck trauma, rapid medical care is critical for these injuries. Nearly 21% of the victims weren't transported to a hospital. A recommendation is needed to expand the EMS in Tehran to diminish mission time intervals especially for multiple trauma casualties and to set up a reliable registration system to evaluate the quality of care given to the victims.

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ABSTRACT FINAL ID: W-159;

TITLE: Quality of nursing care beyond the words of emergency departments' nurses

ABSTRACT BODY:

Abstract Body: Delivered nursing care is an important determinant to evaluate emergency departments and promote their quality. Meanwhile performing an in-depth interview with the nurses themselves, especially when declaring defects, can be so valuable.

A qualitative study was carried out at eight general emergency clinics and wards in five teaching hospitals in Tehran, Iran. 23 nurses from both sexes, with different ages and different year experiences and job positions were interviewed by a psychiatrist who did not have any collaboration with or connection to the settings investigated.

The study used semi structured individual in-depth interview. Interviews went on until it was concluded that information was saturated. The interviews were audio-taped and transcribed verbatim. The data were then coded and classified on the basis of the area and subject.

In spite of admirable nursing care delivered by some nurses to the patients at emergency departments, the findings of the study showed various problems needing improvement, some of which are as follow:

- Delivering inadequate clinical care by some emergency nurses or not doing some orders as they are wanted (e.g. checking vital signs may not be done regularly, blood perfusion can be performed delayed, and some drugs which should be infused based on special regularities, may not).
- Doing some major duties less than what should be like explaining the patient's illness to him and what the staffs are going to do to diagnose and manage it. In addition, educating patients about what they should or should not do and empathizing with patients are performed less than what is expected in everyday practice by nurses, in spite of working hard, and accepting theses activities as their responsibilities.
- Patient abuse (generally verbally) or patient neglect by some nurses
- Patient's company abuse or neglect by some nurses (they may not answer the company's questions and if he repeats them, they may shout at him).

- ...

The study findings indicate lack of delivering qualified care to the patients by some nurses and the necessity for detecting problems causing it.

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ABSTRACT FINAL ID: W-96;

TITLE: Innovative Method to Develop an Eye Model for Ultrasound Education

ABSTRACT BODY:

Abstract Body: Background: The use of ultrasound for detection of eye pathology is an emerging science in emergency medicine education. Currently there are no models available for this modality.

Objective: This study detail the steps in development of an eye model for the detection of specific pathology by ultrasound in the emergency department.

Methods: This was a collaborative effort between an undergraduate engineering department and the section of emergency medicine ultrasound. We identified the need for the following structures: anterior chamber, lens, vitreous, cornea and fundus. Using acoustic impedance equations, we identified substances that mimic the ultrasound images for these structures in the eye. We simulated the vitreous with an agar combination. We used this same agar combination to suspend the orbital model in a box. We utilized a bath bead to simulate the lens of the eye. The structure of the eye, including the cornea and fundus was created with a plastic blend. The structure was created using a 3 dimensional printing modality, creating 2 separate eye structures, the cornea and the globe, as well as the retinal detachment piece. In addition, for our pilot model, we created a retinal detachment. The retinal detachment was placed on the posterior aspect of the globe. The 3D model was filled with the agar gel, creating the aqueous humor. The model was suspended in an agar gel to stabilized it.

Conclusion: Using expert consenses we found the the model created images to accurately represent a normal eye as well as a retinal detachment.

AUTHORS/INSTITUTIONS: <u>L. Mills, W. Yee, P. Salem, G. Howe, , University of California, Davis, Davis, CA; T. Mills, , Louisiana State University, New Orleans, LA;</u>

ABSTRACT FINAL ID: W-46;

TITLE: Reasons of Delayed or Inadequate Pain Control in the Management of Acute Abdominal Pain in Emergency Department Patients

ABSTRACT BODY:

Abstract Body: Background and aim. Statistically, 4-8% patients seeking help from emergency departments suffer from acute abdominal pain. Acute abdominal pain control in emergency departments is still not adequate. We test the hypothesis that pain control can be inadequate because of differences in pain assessment by patients and doctors or nurses. The present study aims to assess the differences between the patients reported abdominal pain severity and the severity assessed by physicians or nurses. Aim of the study. To assess the differences between the patients reported abdominal pain severity and the severity this assessed by physicians or nurses. Methods. The study included patients over 18 years of age with acute abdominal pain (<78 hrs.) of unknown origin. On admission to the emergency department, the severity of pain according to Numeral rating scale (NRS) was assessed by patients, physicians and nurses. Wilcoxon signed ranks test was used to compare means of scores. Results. 41 patients with abdominal pain were included in the study: 39% male age 36(16.1) years and 61% female, age 40(16.2) years. Physicians and nurses scored lower VAS than patients at the arrival (average (SD): 7.0(1.67), 5.9(2.10) and 5.6(2.10) respectively, p<0.05 Wilcoxon signed ranks test. Differences in VAS scoring remained before discharge from the emergency department: 3.6(2.77), 3.04(2.76) and 2.87(2.51) respectively, p<0.01. We observed the similar trend in the both groups of discharged and hospitalized patients. Conclusion. Differences in assessment and evaluation of abdominal pain by nurses and physicians may lead to different decisions made in providing emergency care for these patients. AUTHORS/INSTITUTIONS: E. Vaitkaitiene, K. Stasaitis, D. Vaitkaitis, , Lithuanian university of Health sciences, Kaunas, LITHUANIA;

ABSTRACT FINAL ID: W-160;

TITLE: POSTTRAUMATIC LIPID NECROSIS AT SUBKSIFOID LIPOID TISSUE AND MASS IMITATION AT PET/CT **ABSTRACT BODY**:

Abstract Body: Introduction and purpose: Because of the fact that we handled a slight solidity with palpation in the case which came with the feel of painful swelling at subksifoid region, requirement of further evaluation with PET/CT (positron emission tomography) arised. Without needing further evaluation with more expensive techniques, we aimed to share CT (Computed Tomography) clues related to enzymatic-posttraumatic lipid necrosis, via images of this case. Material and Method: 27-year-old female patient, 4 weeks ago, during a traffic accident in a car, felt transient sensitivity at subksifoid area mid-line as a result of exposing to a strict object crash and after that her 2-3 days lasting problems ended. But after 4 weeks, induration and sensitivity continued at her subksifoid area. In acquired CT image, after reporting of lesion that is compatible with mass, in consequence of tru-cut biopsy, lipid necrosis was diagnosed in the advanced evaluation with PET/CT needed case. But, after obtaining biopsy data, in consequence of CT reevaluation, the fact that present alterations occurs with the mixed nature of lipomatous densities, there found nidus in lipid density in central, and its being exactly unmarked from soft tissue with its neighboring bone, gave rise to think of changes which were emerged after lipid necrosis.

Result: When typical findings which supports lipid necrosis with CT are detected, if clinical and anamnesis findings supports too, with more advanced re-evaluation, waste of time and cost, patient's exposure to radiation or invasive procedures will be prevented.

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ABSTRACT FINAL ID: W-72;

TITLE: PREVALENCE RATE OF REMOVAL. LOCATION AND FINAL DESTINATION

OF CRITICAL PATIENTS IN A HOSPITAL OF REFERENCE

ABSTRACT BODY:

Abstract Body: Introduction:

Early Warning Systems are used to facilitate and shorten the identification of patients, establish corrective measures and provide levels of care according to the "score" resulting, and are used as triage tools. Inside this it is best adapted and is more feasible to implement the MEWS (Modified Early Warning System) to measure variables such as TA, FR, HR and T °.

Objective:

To estimate the prevalence of patients according to physiological parameters SCORE (MEWS), which require moving by the UCI-mobile, earlier location and final destination.

Study subjects: Patients transported by Emergency Service (ES) Outpatient ServiceCritical Care (OSCC) of the Hospital Carlos Haya (organised into severalhalls / wings) a reference Hospital in Malaga, Andalusia, Spain during the years 2008 and 2009.

Methodology:

A descriptive cross-sectional multicenter study.

Data Type: Process and intermediate outcome

Data source for sampling: List of medical records of 273 patients obtained from hospital records with a history of outpatient transfer by EPES (Public Health Emergency services) to the Area of Critical Services in the years of 2008 and 2009.

Data sources for the study: data from the collection leger and translation made in the SPSS table. Version 15. Variables: We use the scale of MEWS (Modified Early Warning System).

Results:

273 patients were collected, there were 17 patients with \geq MEWS figures 5 (6.22%), of which 16 (94.11%) go directly to the observation area .Of the 17 transfers with a high MEWS score (\geq 5), 15 (88.23%) are made by the UCImobile.As for their fate, 4 (23.52%) are Exitus (double MEWS figures <5), 5 (29.4%) was the hospital discharge and 6 (35.29%) are admitted by specialists.

Conclusion:

The triage system with the use of MEWS can determine the approach to patients in the Critical Area of a hospital according to the score obtained by the hospital when receiving the patient, placement and optimisation of aftercare. Still triage systems based on physiological parameters have confounding variables

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ABSTRACT FINAL ID: W-73;

TITLE: Transportation of critically ill patients in a rural area.

ABSTRACT BODY:

Abstract Body: Introduction:

Critically ill patients' transportation from ICU to other settings is called "secondary transportation", and is difficult in rural hospitals.

Objective:

A retrospective survey was conducted in a 4 bed ICU facility in a city of 60000 inhabitants in northern Greece, in a period of 10 years, (1998-2007) in order to determine the difficulties of critically ill transportation.

Material and methods:

In the examined period 530 patients were transferred, out of 1656 who were hospitalised for specific exams or treatment in ICU of tertiary hospitals.

375 were male (70.7%) and 155(24.3%)female.

The average age was 62.4 years.

In the first 5 years period (1998-2002)the transfer was made without the presence of ICU physician, while in the second period of 5 years (2002-2007), all transfers were performed under ICU physician attendance.

In the examined period 169 complications took place,133(78.6%)in period A and 36(21.4%) in period B. Statistical analysis was conducted with paired t-test.

Results:

ET displacement, haemodynamic instability and severe cardiac arrhythmias were statistically significant more often in period A when the transportation were not attended by ICU physician, but less experienced personnel. Conclusions:

Transfer of ICU patients has to be well organized preferably by ICU doctors who accompany the patient also. Referances:

- 1.Patient transportation. Reeves K J Emerg Nurs 01-JUL-2010; 36(4): 302.
- 2.Intrahospital transport of critically ill patients Löw M Anaesthesist 01-JAN-2009; 58(1): 95-105.
- 3. Review of a large clinical series: intrahospital transport of critically ill patients: outcomes, timing, and patterns. Voigt LP J Intensive Care Med 01-MAR-2009; 24(2): 108-15.

AUTHORS/INSTITUTIONS: <u>C. Ntiakalis,</u> N. Vavatsiklis, V. Bayiazidou, P. Develege, I. Vavatsiklis, ICU, General Hospital Komotini, Komotini, GREECE;

ABSTRACT FINAL ID: W-74;

TITLE: CHARACTERISTICS OF PATIENTS ATTENDED BY A DEVICE FOR CRITICAL AND EMERGENCY CARE IN A HOSPITAL OF REFERENCE

ABSTRACT BODY:

Abstract Body: Objective:

To dicover the demographic characteristics of patients transported by hospital Emergency services Study subjects:

Patients transported by Emergency Service (ES) Outpatient Service Critical Care (OSCC) in the Carlos Haya Hospital (organized into several halls / Wings).a reference Hospital in Malaga, Andalusia, Spain during the years 2008 and 2009.

Methodology:

A descriptive cross-sectional multicenter study.

Technical data: Dimensions of quality: quality scientific and technical or professional competence, adequacy and continuity of care

Data type: The Process and intermediate outcomes

Data source for sampling: List of medical records of 273 patients obtained from hospital records with a history of EPES-hospital transfer by (Public Health Emergency services) to the Area of Critical Services for the years 2008 and 2009.

Data sources for the study: collection leger and data and translation made in the SPSS table Version 15. Results:

The mean age of patients is 54.85 years, with 57.4% males. Transfer resources: relocating ambulance 18%, 40.8% ACT (Advanced Coordination Team) and 40.8% ICU (Intensive Care Unit). The average stay is between 7-8 hours depending on the hall/wing. 38.2% admitted to high care unit. The final destination is 57% at home, hospital 16.25%, 14.3% referral to specialty consultation, Exitus 2.2%, 1.8% Other

Conclusions:

The prototype patient is a middle aged man, attends the emergency department by medical ambulance (either FFS or UCI) that is treated at the Polyclinic area without additional care, and whose final destination is discharged home. If you optimise outpatient care, there will probably be less need for referral to a hospital by the ambulance, optimising resources and reducing costs.

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ABSTRACT FINAL ID: W-37;

TITLE: Evaluation of field experiences of international emergency medicine fellows during fellowship training **ABSTRACT BODY:**

Abstract Body: Background: In June 2011, the Society for Academic Emergency Medicine listed 25 international emergency medicine (IEM) and global health fellowships in the United States. IEM carries a broad definition and programs can include emergency medicine system development, humanitarian relief, emergency medicine education and more. Fellowship training varies in length, scope, and emphasis. While there have been several recommendations for fellowship structure and curriculum no official consensus exists across all programs. The international field experience is the one unequivocal element shared by all fellowships.

Objective: This study's aims are to evaluate the field experiences of IEM fellows during fellowship training and to determine if the field experiences of IEM fellows are consistent with the educational goals suggested by current emergency medicine literature.

Methods: A literature search was performed to examine studies that have already been published relating to IEM fellowships and fellowship curriculum. Key terms used included: "International emergency medicine fellowships", "fellowship international emergency medicine", MeSH search "fellowship" + "international" + "emergency medicine" + "core competencies" + "core curriculum".

A web-based, self-administered survey consisting of multiple choice and fill-in questions was developed and entered into survey monkey. Using the Society for Academic Emergency Medicine (SAEM) website, we compiled a list of 25 international emergency medicine and global health fellowships in the United States. Fellowship directors were sent an introductory email with a brief description of the survey and study, and a request for the email contact information of their current and graduated fellows. Another introductory email was sent to these current and graduated fellows with an attachment for the survey.

Conclusion: To date, there are no studies in the literature that have investigated the international field experience component of IEM fellowship training. This study evaluates this aspect of fellowship training from the perspective of current and graduated fellows.

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ABSTRACT FINAL ID: W-47;

TITLE: latrogenic tracheobronchial laceration

ABSTRACT BODY:

Abstract Body: latrogenic tracheobronchial lacerations can result from closed trauma (23%), penetrative trauma (77%) or have iatrogenic origins.

D.C., 60 years old, arrived in shock room at 21:04 accompanied by the anaesthetist for dyspnea associated with cervical subcutaneous emphysema. In the afternoon, the patient had undergone orthopaedic surgery under general anaesthetic. The anaesthetist noted the appearance of dyspnea following extubation. In the shock room: patient agitated, dyspnoeic, PA 170/90 mmHg, FC 110 bpm, Sat O2 96% with FiO2 60%. Objectively, bilateral supraclavicular subcutaneous and neck emphysema. A chest x-ray was taken: soft tissue emphysema in the left clavicle, shaded thickened area in top right paratracheal; on the fibrobroncoscopy: presence of haematic traces in trachea; at around 6-7 cm from glottis to around 1.5 cm from the glottis floor, longitudinal fissuring of the trachea. Time 21:55: a chest CT scan is conducted with confirmation of the clinical picture: extensive pneumoneck with detachment of the oropharyngeal and tracheoesophageal wall; concomitant pneumomediastinum in the presence of right anterior pneumothorax with thickness of 3 mm as well as in the right upper mediastinal lung with thickness of 4 mm. In the sub-diaphragm, presence of micro air bubbles which through the pillar for the esophageal hiatus are taken into the abdomen visible in the perigastric region; Time 22:50: patient sedated, eupneic, haemodynamically stable, she was admitted to intensive care, transferred on the second day for chest surgery, she was discharged home on the seventh day. The treatment was of the conservative type. Conclusions: the clinical suspicion played a fundamental part in these injuries and it was later confirmed with the appropriate diagnostics; in fact, in a third of patients, the diagnosis is not made for lack of evidence of radiological signs, but above all for the scarce indications of the clinical suspicion; this could lead, in the long-term, to a persistent atelectasis from re-absorption of a pulmonary segment, consequent to the obliteration and to fibrosis of the air section affected by the trauma, leading to the syndrome of respiratory obstruction. AUTHORS/INSTITUTIONS: A. Iori, L. Trabucco, E. Burani, A. Ferrari, , Dipartimento Emergenza- Urgenza, ASMN, Reggio Emilia, ITALY;

ABSTRACT FINAL ID: W-135;

TITLE: Validation of non-invasive hemodynamic monitoring with Nexfin in critically ill patients

ABSTRACT BODY:

Abstract Body: Introduction: Thermodilution (TD) is a gold standard for cardiac output (CO) measurement in critically ill patients. Although transpulmonary thermodiluation is less invasive than Swan-Ganz, it still requires an arterial and deep venous line. This study will compare intermittent bolus transpulmonary TDCO with continuous CO (CCO) obtained by pulse contour analysis (PiCCO2 Pulsion Medical Systems) and non-invasive CO (NexCO) measurement via finger cuff using Finapres technology (Nexfin BMEYE).

Methods: Prospective study in 45 patients (42 mechanically ventilated, 32 male). Age 57.6±19.4, SAPS II 51.5±16.9, APACHE II 25.3±10.3 and SOFA score 9.4±3.3. In an 8 hr period, simultaneous CCO and NexCO measurements were obtained every 2 hrs while simultaneous TDCO and NexCO were obtained every 4 hrs. The CCO and NexCO values were recorded within 5 min before TDCO was determined. Statistical analysis was performed using Pearson correlation and Bland-Altman analysis.

Results: In total, 585 CO values were obtained: 225 paired CCO-NexCO; 135 paired CCO-TDCO and 135 NexCO-TDCO. 35 pts received norepinephrine at a dose of 0.2±0.2ug/kg/min (range 0.02-1). TDCO values ranged from 2.4 to 14.9 l/min (mean 6.6±2.2), CCO ranged from 1.8 to 15.6 l/min (6.4±2.3) and NexCO from 0.8 to 14.9 l/min (6.1±2.3). Pearson correlation coefficient comparing NexCO with TDCO and CCO was similar with an R2 of 0.68 and 0.71 respectively. Bland and Altman analysis comparing NexCO with TDCO revealed a mean bias ± 2 SD (limits of agreement, LA) of 0.4±2.32 l/min (36.1% error) while analysis of NexCO vs CCO showed a bias (±LA) of 0.2±2.32 l/min (37% error). TDCO was highly correlated with CCO (R2 0.95) with bias 0.2±0.86 (13.3% error). Conclusions:Our preliminary results indicate that in unstable critically ill patients CO and MAP can be reliably monitored noninvasively with Nexfin technology. Although TPTD remains a gold standard for the measurement of CO in the ICU, Nexfin non invasive monitoring may provide useful information in the emergency or operating room when an arterial or CVL are not readily available.

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ABSTRACT FINAL ID: W-92

TITLE: Process Mapping of the Emergency Departments at UMMC and UMCU: A Comparative Descriptive Study

ABSTRACT BODY:

Background – Emergency medicine (EM) is the practice based on care for the acute emergencies of patients of all ages. The emergency department (ED) in the USA is advanced after 40 years of existence, while the ED in the Netherlands is still in an early stage of development. To maintain the quality of emergency health care, it is necessary to understand the operations and processes in the ED, and this is best done through process mapping.

Study objectives – The mean objectives of this study are (1) to collect and compare process maps done in University of Maryland Medical Centre (UMMC; Baltimore, Maryland, USA) during the last 10-15 years to see the changes over time, and (2) to compare the UMMC maps with those done in University Medical Centre of Utrecht (UMCU; Utrecht, the Netherlands in 2009-2010).

Methods – A descriptive comparative analysis about process mapping on the emergency department of UMMC and UMCU was performed. UMMC and UMCU both are level-1, tertiary care hospitals. Process maps and data were collected from both departments and were analyzed.

Results – A limited amount of process maps were made on the ED of UMMC and UMCU; only one process map from 2010 and one proposed map, and one process map from 2009 could be used, respectively.

The most significant changes that will be implemented in the ED of UMMC involve triage/intake and the physical floor plan. For triage/intake there will be immediate bedding, a triage team, a sub-waiting room, Qreg and Qtr, and bedside registration and triage. The physical floor plan will change from four areas into two. Minor changes will be made in diagnostic processes and disposition mechanisms. At UMCU the triage process is the same as the current process at UMMC. UMCU has also two, but different areas compared with UMMC. The biggest difference in diagnostic process is seen in the turnaround time of laboratory tests and the performance of EKG's. Only minor differences are seen in the disposition process between the two emergency departments.

Conclusion – The overall point of process mapping is improving quality of care, enhancing patient safety, and increasing patient satisfaction. These goals can be achieved by improving the three steps of the flow through an ED: input, throughput, and output.

AUTHORS: Eefje van den Berg, Janne Goossens, Terrence Mulligan

ABSTRACT FINAL ID: W-62;

TITLE: Mortality rates of suspected out-of-hospital cardiac arrest patients after introduction of a lay rescuer program **ABSTRACT BODY**:

Abstract Body: Background

Mortality rates of out-of-hospital cardiac arrest (OHCA) patients may be reduced by improving early bystander cardiopulmonary resuscitation (CPR) or automated external defibrillator (AED) use. The aim of this study is to assess the mortality rates after the introduction of a lay rescuer program (AED-alert) that actively mobilizes lay rescuers alongside emergency care services (EMS).

Methods

Ambulance dispatchers use AED-alert when OHCA is suspected, by transmitting an SMS message to trained lay rescuers with the location of the incident or the nearest AED. Included were all suspected OHCA patients over 18 years within AED-alert site Twente (east of the Netherlands). Mortality rates two years before (n=969) and two years after (n=1,104) the introduction of AED-alert in April 2008 were compared.

Results

Overall, AED-alert decreases the mortality rates measured one day after the incident from 58.8% to 54.9% (crude hazard rates (HR) 0.93; 95% confidence interval [CI] 0.82-1.04). Decrease in low urbanized areas was more evident, from 63.1% to 55.1% (HR 0.86; 95% CI 0.72-1.03). Also, for response time ≥ 8 minutes mortality rates decreased from 62.2% to 57.0% (HR 0.91; 95% CI 0.74-1.11). The 90-day crude HR was 0.95 (95% CI 0.88-1.09) which seemed to disappear after adjusting for sex, age, location of arrest, response time, arrival time and urbanization level (90-day HRadj 1.00, 95% 0.89-1.11).

Conclusion

The program AED-alert initially appears to be associated with a decreased one-day mortality rate, although it may be less effective in the long-term. Further in depth analyses and research is needed. The effect of AED-alert on mortality rates was mostly noticed in low urbanized areas and if ambulance response time was ≥ 8 minutes. Mobilizing lay rescuers with AED-alert seems to be most effective for those incidents associated with a delayed EMS response, for example due to travel distance.

AUTHORS/INSTITUTIONS: J. Smid, M.J. IJzerman, J.G. van Manen, <u>C. Doggen,</u> Health Technology and Services Research, University of Twente, Enschede, NETHERLANDS; W.E. van der Worp, , Ambulance Oost, Hengelo, NETHERLANDS; G. van Houwelingen, , Dept of Cardiology, Medisch Spectrum Twente, Enschede, NETHERLANDS;

ABSTRACT FINAL ID: W-21;

TITLE: Craniocerebral injuries in a rural Greek district hospital

ABSTRACT BODY:

Abstract Body: Craniocerebral injury is one of the most significant health problems throughout the world .Aim of this study was to describe the initial management and outcome of case with craniocerebral injuries admitted to a rural district hospital during a 4 year period (2003,2004,2005,2006). A retrospective analysis was performed in all of the case notes of consecutive cases of burns. 158 individuals (120 men-75,9%, 38 women- 24,1%, median age 35 years) presented to the outpatient department and 38 were admitted (24%). The average length of stay was 7 days. The major parts of the cases were caused by road accidents and work accidents. Accurate initial support for brain injury patients appears to be necessary during the hospital permanence.

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ABSTRACT FINAL ID: W-22;

TITLE: Pediatric Injuries in primary health care

ABSTRACT BODY:

Abstract Body: Pediatric injuries is such a significant healthcare problem Pediatric trauma is the leading cause of pediatric mortality and potential years of life lost. Aim of this study was to describe the management and outcome of cases with pediatric injuries to a rural district hospital during a 6 year period (2002,2003,2004,2005,2007,2008). A retrospective analysis was performed in all of the case notes of consecutive cases of pediatric injuries. 78 individuals (range 1-14, 61 boys-78, 2 % , 17 girls – 12,8 % , median age 7 years) presented to the outpatient department and 18 were admitted (23 %). The average length of stay was 6 days. The major parts were caused by accidents. Accurate support for burn patients appears to be necessary during the hospital permanence. The pediatric injury prevention includes education and instruction

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ABSTRACT FINAL ID: W-23;

TITLE: Knowing How to Act During an Internal Emergency: An Untoward Release of an Irritant Gas in the Hospital **ABSTRACT BODY:**

Abstract Body: Internal emergencies can happen at any time and any part of a hospital. Not only planning, but also training and exercises are the top priorities in response to the internal emergency situations. All hospital staff should be trained regularly to recognize a sudden incident and activate the hospital emergency management system. Before the response of the incident management team, maintaining the health and safety of staff and others is of paramount importance. Training and exercises also encourage staff to act in competence and confidence during an untoward incident and contribute to lessen or avert the threat of the catastrophe. Here we present the clinical features of 12 cases presented to the emergency department after the exposure of a potent pulmonary irritant gas of chlorine, released after inflaming of two dozen of plastic boxes of sodium dichloroisocyanurate granules in a cardboard box, left beside a portable radiator at the office of an housekeeping staff and unfortunately moved to the entrance hall of the hospital.

AUTHORS/INSTITUTIONS: C. Oktay, A. Sayrac, S. Isik, N. Korkmaz Sayraç, E. Senay, M. Kavasoglu, , Akdeniz University School of Medicine, Antalya, TURKEY;

ABSTRACT FINAL ID: W-136;

TITLE: HARE??

ABSTRACT BODY:

Abstract Body: INTRODUCTION: There is a new hospital concept in Spain called "HARE", High Resolution Hospitals. The workload is played by Emergency Physicians, they dont have any support of other specialists like Surgery, Cardiólogy, Intensive Care, Radiology from three oclock onwards. This requires that HAREs Emergency Physicians must be almost perfectly trained at the control of the content of different specialties.

OBJECT: To recognize the pacients sociodemographic variables rated at a Hare Polyvalent Unit.

MATERIAL AND METHODS: Cross- Sectional study. There were included the patients that went to the Emergency Service off a HARE wich serves a population of 65.000 habitants. Were assessed 53193 patients of the patients that went to Emergency Service in the year 2010.

RESULTS: Served around 53193 emergencies, The hospital admission rate was 6.73% (3581 patients), women 54%, men 46%, the average age was 59 years old, > 85% were older than 45 years old, the most frecuent illness in decreasing order was: cardiology, digestive, respiratory and other specialities; transfers to other hospital 4.59% (2441), Most of patients went by own initiative 91.81% (48835), 7.66 %, (4077) were shunted by primary care. CONCLUSIONS: The greater percentage of patients attended at a HARE come by own initiative. A low percentage of patients attended require hospital admission and a very little fraction require transfer to another hospital. The emergency physician is the most appropriate to work at this kind off hospitals.

AUTHORS/INSTITUTIONS: <u>I. Aguilar Cruz, M. Lopez Perez, B. Amini Shervin, F. Parrilla Ruiz, D. Cardenas Cruz, J. Hortal Carmona, Hospital Alta Resolución de Guadix, Granada, Granada, SPAIN;</u>

ABSTRACT FINAL ID: W-162; TITLE: Objective of a box of critical

ABSTRACT BODY:

Abstract Body: INTRODUCTION: Critical box, is the Emergency Service room reserved to take care of the patient with emergent pathology.OBJECTIVE:To analyze the patients who have been taken care of at our High Resolution Hospital at critical box during twelve months 2010. METHODOLOGY: We completed an individual file for each one of the patients taken care of at the critical box, which contains all the variables that we want to analyze. It has been used a descriptive and bivariant analysis by chi-square test or Fishers exact test used for qualitative variables and tstudent and Perasons correlation or Spearman for quantitative variables.RESULTS: A total of 53193 emergencies were attended 2010, of which 1012 were attended at critical box, with an age average of 69±3 years, 61% men. To emphasis 16 patients below 2 years, mainly febrile convulsions. The consultation reasons were distributed: disnea 35% patients, thoracic pain 20%, palpitations 7%, fainting 4%, hematemesis 2%, politraumatism 3%, loss of forces 6%, fever 4%, convulsive crisis 2%, other 8%. Arrival time 45% in the morning, 37% in the evening and 18% by the night. The time took before being attended was of 25 seconds with p=0.347. Level of priority I(triage done by nurses) in all the cases. Average time of permanence in box was 37minutes with one p=0.357. Derivation:56% hospitalization,31% domiciliary discharge in less than 24 hours,13% transferred,or by nurse attended ambulance, medical ambulance or aerial medical transport. Average staying time 55±3 hours. Of the admitted patients 72% were discharged with complete study,24% transfered because of the resource shortage and 3% died.CONCLUSIONS:Critical box, can be considered the most important room of a hospital, the only place of the hospital where the schedule does not matter. The organization, synchronization and use of the resources must be perfect. It is the Medical Physician obligation to know and to dominate everything included in this room from medication to invasive mechanical ventilation. The Emergency Medical Physician is the one that gives the primary attendance to all serious patient.

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ABSTRACT FINAL ID: W-93; **TITLE:** CPR AND SCHOOL

ABSTRACT BODY:

Abstract Body: INTRODUCTION: The specialists in emergency Medicine, unfortunately and until the Speciality should be approved, live in the shadow of the remaining specialities. but when we use the Cardio-pulmonary resuscitation (CPR), the things changes, Now we are the tree that gives the shadow to remaining specialities.OBJETIVE: Teach students and teachers from a Universityl. And compare to six months their knowledge.MATERIAL AND METHOD: We use 2 classroom formed by 21 students and 3 teachers, for demonstrated and explain a basic Cardio-pulmonary resuscitation (CPR). We teach the new Algorithm of basic RCP with new recommendations. Included variables: age, sex, checking of unconsciousness, opening airway by the technique forehead-chin, breathing proof-reading by hearing and feeling, put the people into lateral safety position, and call 112, then locate and make thoracic compressions, with a rate of 30:2. Passed 6 months we made a new cycle to verify the aptitudes learned and supported in the time.RESULT: We teach a total of 120 students, with had 17.4 years on average divides in 58% of women and 42% of men. the 89% used algorithm without significatives mistakes, all of people could verify the unconsciousness, the 93% could realize correctly the technique forehead-chin, the 94% realized successfully breathing proof, the 90% realized correctly the technique forehead-chin other 90% could do lateral position of safety, the 91% remember call to 112, 93% could locate and made thoracic compressions. To 6 months, the rate of success in relation with learned and supported aptitudes was near to 75 %, with information to standing out; the mistakes were nearest the teachers than the pupils. CONCLUSIONS: Learning a new sport called "save lives" is easy like this study show, even is much easier with pupils of this age. The "curve of forgetting "in youngest people is lower that in adult, so the knowledge learning will be more durable. The CPR learning should be able in the high school with the time and will be a reduction in premature deaths. Basic RCP, minutes for the life!

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ABSTRACT FINAL ID: W-24;

TITLE: Hajj Mass Gathering Preparations Bolster Emergency Medicine Development: The Saudi Emergency Medicine Experience

ABSTRACT BODY:

Abstract Body: Emergency medicine is a new specialty in Saudi Arabia. It was first registered in 2000 and started by 6 board certified EM physicians. Now there are more than 70 specialists in the country, with 12 new graduates (average) each year and over 90 trainees in one joint program across the country. EM in Saudi Arabia is unique among Arab countries as the first to recognize emergency medicine as a specialty and has a well organized 4 year residency training program.

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ABSTRACT FINAL ID: W-25;

TITLE: Cervical spine injuries-Clinical evaluation and treatment

ABSTRACT BODY:

Abstract Body: Cervical spine injuries-Clinical evaluation and treatment N.Syrmos,Ch.Iliadis,G.Gavridakis, V.Valadakis,K.Grigoriou,D.Arvanitakis Neurosurgical Department –Venizeleio General Hospital,Heraklion,Crete,Greece

Most injuries that involve the cervical spine are the result of violent collisions that compresses the cervical spine against the shoulders. Aim of this study was to describe the clinical evaluation, the radiological evaluation, the management and the outcome of cases with cervical spine injuries admitted our hospital during a 5 year period (2006,2007,2008,2009,2010). A retrospective analysis was performed in all of the case notes of consecutive cases of cervical spine injuries. 56 individuals (40 men., 16 women., median age 41 years, range 12-91 years.) presented to the outpatient department and 54 were admitted. The average length of stay was 10 days. The major parts of the injuries were caused by accidents. Accurate support for patients with cervical spine injuries appears to be necessary during the hospital permanence.

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ABSTRACT FINAL ID: W-26;

TITLE: Thoracic spine injuries-Clinical evaluation and treatment

ABSTRACT BODY:

Abstract Body: Thoracic spine injuries-Clinical evaluation and treatment N.Syrmos, Ch.Iliadis, G.Gavridakis, V.Valadakis, K.Grigoriou, D.Arvanitakis Neurosurgical Department – Venizeleio General Hospital, Heraklion, Crete, Greece

Aim of this study was to describe the clinical evaluation, the radiological evaluation, the management and the outcome of cases with ,lumbar spine injuries admitted our hospital during a 5 year period (2006,2007,2008,2009,2010). A retrospective analysis was performed in all of the case notes of consecutive cases of cervical spine injuries. 16 individuals (16 men , median age 39 years , range 18-67 years) presented to the outpatient department and 15 were admitted. The average length of stay was 15 days. The major parts of the injuries were caused by accidents. Accurate support for patients with lumbar spine injuries appears to be necessary during the hospital permanence.

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ABSTRACT FINAL ID: W-27;

TITLE: Pneumoscrotum after chest tube insertion: a case report

ABSTRACT BODY:

Abstract Body: Introduction: subcutaneus emphysema of the scrotum due to pneumothorax is a rare medical situation and only a few cases are reported in the literature.

Case report: A 54 year old man presented to Emergency Department with a complaint of dyspnea. He was a known case of COPD and his dyspnea had been started 10 hours before admittion. After primary examination, the treatment began for the patient with diagnosis of bronchitis due to COPD exacerbation.

Salbotanol, Atrovent spray and Corton injection were administered for him. But on the 2nd day of hospitalization, his general condition worsened and he was intubated because of progressing respiratory distress. As his blood pressure decreased without any special reason and EKG was normal, emergency surgery consultation was done and bilateral chest tube was inserted for him and mechanical ventilation was started.

After 18 hours progressing scrotum edema and subcotaneus emphezyma from right flank to left flunk and scrotum occurred for him.

Conclusion:

Even though pneumoscrotum may be a benign, rare condition, its mere presence is enough to institute a work-up for severe, life-threatening disease process within the peritoneum or retroperitoneum. Actually, there are three ways to explain the phenomenon of pneumo-scrotum: subcotaneous or retroperitoneal air that dissects in to the dartos lining of scrotal wall, local gas production or air introduction, and movement of air from the intraperitoneal space in to the scrotum. Local air production usually suggests serious pathology, such as gas gangrene, requiring urgent surgical interventions

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ABSTRACT FINAL ID: W-48;

TITLE: Pre-Hospital Intubation in Trauma Patients With C-MAC Video-Laryngoscopy: A Multicenter, Observational Study

ABSTRACT BODY:

Abstract Body: Study objectives: Pre-hospital intubation in trauma patients has a high failure incidence[1]. In the present study at four physician-based air rescue centers, we evaluated the efficacy of the portable videolaryngoscope C-MAC® (Karl Storz, Tuttlingen, Germany)[2] during pre-hospital emergency intubations in trauma patients. Methods: The institutional review board waived requirement for written informed consent. Sixty-three consecutive trauma patients and the need for pre-hospital emergency intubation (age, median [range]: 35 [4-95]; bodyweight: 80 [20-150]; 22 female) that were treated by an emergency physician introduced in the use of the C-MAC were included in this study.

Results: Forty-five patients were intubated with a C-MAC blade size 3, 17 with a C-MAC blade size 4, and one child with a C-MAC blade size 2. A difficult airway (Mallampati 3 and 4, limited mouth opening, or maxillo-facial trauma) was seen in 24 patients. Muscle relaxation was used in 33 patients. Median time to successful intubation was 20 [min-max: 8-60] seconds; 49 patients were intubated on the first attempt, 12 on the second, and 2 on the third. A Cormack-Lehane class 1 view of the glottis was seen in 40 patients, class 2a view in 19, class 2b in 2, class 3 in 1, and class 4 in 1. Despite initial good videolaryngoscopic visualization of the glottis, 5 patients had to be successfully intubated in the same attempt using the direct laryngoscopic view of the C-MAC blade. Conclusion: All trauma patients were successfully intubated. Therefore, videolaryngoscopy with the C-MAC videolaryngoscope may be a safe alternative for pre-hospital emergency endotracheal intubations in trauma patients. A small proportion of patients could not be intubated by indirect laryngoscopy, and accordingly relied on the capability to perform conventional direct laryngoscopy.

Reference: [1]Cobas MA et al. Anesth Analg 2009;109:489-93; [2]Cavus E et al. Anesth Analg 2010;110:473-7. **AUTHORS/INSTITUTIONS:** V. Dörges, E. Cavus, Department of Anesthesiology and Intensive Care Medicine, University Hospital Schleswig-Holstein, Campus Kiel, Kiel, Schleswig-Holstein, GERMANY; B. Hossfeld, M. Helm, , Federal Armed Forces Medical Centre Ulm, Ulm, GERMANY; A. Callies, , Hospital Links der Weser, Bremen, GERMANY; S. Merz, , Schwarzwald-Baar Hospital Villingen-Schwenningen, Villingen Schwenningen, GERMANY;

ABSTRACT FINAL ID: W-125;

TITLE: Are Prehospital Emergency Medical Teams crucial in Portugal? – One year analysis of a single VMER **ABSTRACT BODY:**

Abstract Body: The Portuguese Prehospital Emergency Medical Vehicle, known as VMER, is a prehospital intervention car, with all the equipment necessary for Advanced Life Support and Pre-Hospital Trauma Life Support (Adults and Pediatrics), designed for the rapid transport of a Medical Doctor and a Registered Nurse to assist out-of-hospital critical ill patients.

The VMER SFX-CHLO, located at Hospital São Francisco Xavier (Lisbon) and inaugurated in July 1991, is now celebrating its 20th anniversary.

This pre-hospital emergency medical team is one of the four VMER that operate as "first responder" for all medical and trauma scenarios at Lisbon city, assisting an area of 850 000 inhabitants.

In 2010, our team attended 2249 patients, in an average of 6 patients a day. Our unit has a response time of 8 minutes and generally needs 20-25 minutes to assist and stabilize the patient out-of-hospital.

The majority of events are medical, about 79% and 21% are trauma occurrences.

155 patients were treated for out-of-hospital cardiac arrest, but only 29 (18,7%) were successfully resuscitated and transported to the hospital with return of spontaneous circulation (ROSC) by our prehospital emergency team.

The outcome of the Team actuation is that in 79% of the cases, the patient Maintained or Improved his condition, being accompanied to the Hospital about 66% of the cases.

Mean patients age, types of trauma mechanisms, main medical and trauma pathologies, medical procedures and patients outcome were all object of analysis.

In Portugal, the first responders in the prehospital setting with the skill to provide Advanced Life Support (ALS), in medical and trauma events are emergency medical teams (EMT) of one physician and one nurse working in a VMER (Emergency Medical Vehicle). The existence of these teams is fundamental and indispensable in order to achieve a successful Prehospital Emergency Medical System!

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ABSTRACT FINAL ID: W-28;

TITLE: Medication Needs in Sheltering for the First Week: Results of A Literature Review

ABSTRACT BODY:

Abstract Body: Problem: What medication(s) are most likely to be needed for care of a sheltered population. Methods: The authors reviewed available literature using a variety of online search techniques for medications required in the first week of sheltering in disasters to create a meta-analysis.

Results; Unsurprisingly, medications for chronic diseases were of primary importance in early sheltering. Although the classic upper respiratory diseases, measles, and gastrointestinal diseases were represented, elderly (and not so elderly) patients tended to leave behind essential medications for COPD, diabetes, heart disease, hypertension, and pain control. Psychiatric medications were also in high need.

Discussion: Responsible planners for disaster management should take into account the needs of sheltered populations and recognize that chronic disease medications must be provided for those survivors of the disaster who need formal sheltering.

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ABSTRACT FINAL ID: W-49;

TITLE: Comparison of the Karl Storz C-MAC Video Laryngoscope System to Direct Laryngoscopy for Tracheal Intubation in the Operating Room

ABSTRACT BODY:

Abstract Body: Background: To compare the success of direct laryngoscopy (DL) to video-assisted laryngoscopy (VL) in the operating room by using a device that has the capability to do both.

Methods: Patient selection was based on individual anesthesiologist preference. Patients age <18 and >89 were excluded. Anesthesiology residents and CRNAs, using a CMAC blade, attempted DL while the anesthesiology attending monitored the video image. CL grade of view was documented by both the resident and attending for comparison. In the event of DL failure, residents used VL as their first rescue device. Difficult airway predictors, if any, were noted and included: Mallimpati score of 3 or 4, small mandible, small mouth, short neck, large tongue, cervical immobility, obesity, history of COPD, history of diagnosed OSA, facial/neck trauma, blood in airway, vomit in airway, airway edema, history of difficult intubation, or other. Comparison was then made between differences in CL view between DL and VL.

Results: Difference in CL views obtained were compared; the view via videoscope was the same in 34 patients, better in 17 patients and worse in 3 patients (P = 0.0014, Wilcoxon matched-pairs signed-ranks test). While it seemed that patients with one or more difficult airway predictors were more likely to have a better VL view, the difference was not significant (P = 0.24, Mann-Whitney test). Of the 54 patients, 7 had to be rescued due to failure to intubate with DL. Of these seven, five were rescued with VL, one was rescued with a standard Miller blade, and one was rescued with a Miller 3 after attempt with the videoscope failed. Reason for failure of DL was due to inability to direct the tube in 2 cases and inability to obtain a view of the cords in the remaining 5 cases.

Conclusion: CL views obtained by VL are better than those obtained by Direct laryngoscopy. This may suggest that VL aids in intubation attempts and provide merits of including a video-assisted laryngoscope in the list of emergency airway devices.

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ABSTRACT FINAL ID: W-29;

TITLE: Disaster simulations exercises in hospitals located in ultra-peripheral and insular regions

ABSTRACT BODY:

Abstract Body: Introduction and Objectives

Hospital disaster simulation exercises are considered as a recommended measure for hospital disaster preparedness, despite persistence of limitations in designs and evaluation methods.

Main purpose of this study was to analyse and evaluate official reports of disaster simulation exercises carried out in a single hospital located in an ultra-peripheral, insular region.

Methods

Official reports of all hospital disaster drills performed during last decade, were reviewed and analyzed. Based on a systematic relevant literature review, main strengths and weaknesses of the hospital disaster response were identified.

Results

Improvements in design and definition of criteria for further evaluation were present in the hospital disaster simulation exercises performed more recently. Main weaknesses and strengths were reported.

Conclusions

Continuous assessment of this type of health professional training is essential in order to obtain a more effective and efficient hospital response. Particular considerations should be made in case of exercises carried out in single hospitals located in insular, remote regions, and further studies are need in this area.

Key words: disasters, hospitals, insular, preparedness, remote regions, simulation exercises **AUTHORS/INSTITUTIONS:** I.M. Pereira, Medical Emergency & Disaster Medicine, Hospital do Divino Espirito Santo de Ponta Delgada, EPE, Ponta Delgada, Azores, PORTUGAL;