

Balkan Academy of Forensic Sci

VERSITE

T.C. YENİ YÜZYIL ÜNİVERSİTESİ İstanbul

10th Annual Meeting of Balkan Academy of Forencis Sciences

18-21June 2014 Alexandroupolis Greece

10th Annual Meeting of BAFS Scientific Program

18 June 2014 (Wednesday)

Arrival to Alexandroupolis

19.30 – 22.00 Opening Ceremony Welcoming remarks

> Official opening of the art – exhibition **"Fingerprints"** Welcoming reception by the Mayor of Alexandroupolis

19 June 2014 (Thursday)

SESSION I (09:00 – 11:15)

TOXICOLOGY

Chair: Co-chair:	Prof. Dr. Sokrat Meksi University of Tirana Medicolegal Department Tirana, Albania Prof. Dr. Akif Inanici Marmara University Department of Forensic Medicine Istanbul Turkey
09:00 - 10:00	Round Table Discussion
"]	DRIVING UNDER THE INFLUENCE OF DRUGS"
	Yılmaz Baştuğ 1st Degree Chief Superintendent, Head of Traffic Planning and Logistics Department, Turkish National Police Ankara, Turkey
	Mehmet Emin Felek Deputy Inspector, Traffic Planning and Logistics Department, Turkish National Police Ankara, Turkey
	Serap Annette Akgür, MD, PhD Ege University, Institute of Drug Addiction, Toxicology and Pharmaceutical Sciences Izmir, Turkey

I. Ipek Bosgelmez, PhD Erciyes University, Faculty of Pharmacy, Dept. of Toxicology, Kayseri, Turkey

10th Annoual Meeting of Forensic Sciences

10:00 - 10:10	O1- ANALYSIS OF EVIDENCE - SYRINGES CONTAINING HEROIN: A PERIOD OF 12 YEARS (2000 TO 2012) IN SOFIA, BULGARIA Alexandra Anastassova, Valya Dzabarska Medical University, Aleksandrovska University Hospital, Department of Forensic Medicine, Sofia, Bulgaria
10:10 - 10:20	O2- USABILITY OF MOBILE DRUG TEST THROUGH TRAFFIC IN TURKEY <u>Harun Şener¹</u> , Fatma Çavuş ² , Gülten Rayimoğlu ² , Salih Cengiz ² ¹ Istanbul Police Crime Laboratory, Fatih, Istanbul, Turkey ² Istanbul University Institute of Forensic Sciences, Cerrahpasa, Istanbul, Turkey
10:20 - 10:30	O3- EVALUATION FOR SEASONAL CHANGES IN URINARY EXCRETION OF ARSENIC <u>Selda Mercan</u> , Murat Yayla, Salih Cengiz Istanbul University, Institute of Forensic Sciences, Forensic Toxicology Laboratory, Istanbul, Turkey
10:30 - 10:40	O4- ATTEMPTED SUICIDE IN A CHILD BRIDE CASE WITH TOXICOLOGICAL DATA Zeynep Türkmen ¹ , Işıl Bavunoğlu ² , Salih Cengiz ¹ ¹ Istanbul University, Institute of Forensic Sciences, Forensic Toxicology Laboratory, Istanbul, Turkey ² Istanbul University, Cerrahpasa Medical Faculty, Department of Emergency, Istanbul, Turkey
10:40 – 10:50	O5- RISK PROFILE OF MALE ATHLETES USING LEGAL AND BANNED PERFORMANCE-ENHANCING SUPPLEMENTS Kadir Daştan ¹ , M. Özlem Kolusayın ² , Fatma Çavuş ¹ , Gülten Rayimoğlu ¹ , M. Feyzi Şahin ³ , İlyas Duran ⁴ , E. Hülya Yükseloğlu ¹ ¹ Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey ² Istanbul University, Cerrahpasa Medical Faculty, Department of Forensic Medicine, Istanbul, Turkey ³ The Ministry of Justice, The Council of Forensic Medicine, Istanbul, Turkey ⁴ Medeniyet University, School of Medicine, Department of Biochemistry, Istanbul, Turkey
10:50 – 11.00	O6- INTOXICATION CASES IN ICU: A MEDICOLEGAL APPROACH Şefik Köprülü ¹ , Ş. Şebnem Özkal ² , Ersi Abacı Kalfoğlu ¹ ¹ Yeni Yüzyıl University, Medical Faculty, Istanbul, Turkey ² Yeni Yüzyıl University, Faculty of Arts and Sciences, Istanbul, Turkey
11:00 - 11:15	Discussion

SESSION II (16:00 – 18:00)

CRIMINALISTICS / FORENSIC GENETICS

Chair:	Prof. Dr. Ayşegül Topal Sarıkaya
	Yeni Yüzyıl University, Medical Faculty, Istanbul, Turkey
Co-Chair:	Prof. Dr. Dan Perju-Dumbrava
	Legal Medicine Institute of Cluj Romania

16:00-17:00 Round Table Discussion

'EMERGING NEW TECHNOLOGIES IN FORENSIC SCIENCES'

R1- Pristine, Challenged, Insulted, Degraded & Touched. How Fast and How Low Can We Go Reena Roy Associate Professor The Pennsylvania State University PA USA

R2- Forensic DNA Phenotyping - A new tool against crime

Leda Kovatsi Assistant Professor Aristotle University of Thessaloniki,Laboratory of Forensic Medicine and Toxycology, School of Medicine

R3- Technology on Trial: A Critical Approach

Sotirios Kalfoglou Leicester University, Department of Criminology, UK

17:00 – 17:10 O7- THE MICROBIOLOGICAL FACTORS THAT DECAYING THE BLOODY EVIDENCES Murat Öğdür¹, Hüseyin Çakan², F. Ekim Çevik² ¹Istanbul Crime Scene Investigation and Identification Unit, Istanbul, Turkey ²Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey 17:10 17:20 O9 IDENDE ANALYSIS IN EODENSIC CASEWORKS

17:10 – 17:20**O8-** IDSNPS ANALYSIS IN FORENSIC CASEWORKS
Özlem Bülbül, Tolga Zorlu, Havva Altunçul, Gönül Filoğlu
Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey

17:20 – 17:30**O9-** INTERPRETING THE MIXTURES ON VALIDATION
AND EXPERIMENTAL STUDIES
Tolga Zorlu, Özlem Bülbül, Gülten Rayimoğlu, Gönül Filoğlu
Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey

17:30–17:40 **O10-** FORENSIC ASPECT OF GENETIC DISEASES M. Özlem Kolusayın¹, E. Hülya Yükseloğlu²

¹Istanbul University, Cerrahpasa Medical Faculty, Department of Forensic Medicine, Istanbul, Turkey ²Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey

17:40 - 17:50	Discussion

17:50 – 18:00 *Coffee Break*

SESSION III

(18:00 - 18:30)

POSTER PRESENTATIONS I TOXICOLOGY

Chair:	Serap Annette Akgür, MD, PhD Ege University, Institute of Drug Addiction, Toxicology and Pharmaceutical Sciences, Izmir, Turkey
18:00 – 18:30	P1- EVALUATION OF SOME OXIDATIVE STRESS PARAMETERS IN ERYTHROCYTES OF ALCOHOL USE DISORDER PATIENTS <u>G. Güvendik¹</u> , İ.İ. Boşgelmez ² , N. Dilbaz ³ , M. Esen ⁴ ¹ Ankara University, Faculty of Pharmacy, Department of Toxicology, Tandoğan, Ankara, Turkey ² Erciyes University, Faculty of Pharmacy, Department of Toxicology, Melikgazi, Kayseri, Turkey ³ Üsküdar University, Neuropsychiatry Hospital, Üsküdar, Istanbul, Turkey ⁴ Family Medicine Center (Çukurambar), Çankaya, Ankara, Turkey
18:00 - 18:30	P2- A LOWER LEGAL LIMIT: DOES IT HELP TO COMBAT DRINK-DRIVING? <u>Linda Matua</u> ¹ , Besnik Jucja ¹ , Mirnela Cinije ² , Bledar Xhemali ² ¹ University of Medicine Tirana Faculty of Pharmacy, Albania ² Institute of Forensic Medicine, Tirana, Albania
18:00 - 18:30	P3- ALUMINIUM PHOSPHIDE, THE MOST FREQUENT POISON IN ALBANIA <u>Linda Matua¹</u> , Zija Ismaili ² , Bledar Xhemali ² , Besnik Jucja ¹ , Mirnela Cinije ² ¹ University of Medicine Tirana Faculty of Pharmacy, Albania ² Institute of Forensic Medicine, Tirana, Albania
18:00 - 18:30	P4- CANNABIS SATIVA THE MOST ABUSED DRUG AMONG ALBANIANS Linda Matua ¹ , Besnik Jucja ¹ , Mirnela Cinije ² , Bledar Xhemali ² ¹ University of Medicine Tirana Faculty of Pharmacy, Albania ² Institute of Forensic Medicine, Tirana, Albania

18:00 - 18:30	P5- NEW TREND PSYCHOACTIVE SUBSTANCES UNDER THE LENS: SYNTHETIC CANNABINOIDS <u>Harun Şener¹</u> , Fatma Çavuş ² , Salih Cengiz ² ¹ Istanbul Police Crime Laboratory, Fatih, Istanbul, Turkey ² Istanbul University Institute of Forensic Sciences, Istanbul, Turkey
18:00 – 18:30	 P6- ANABOLIC-ANDROGENIC STEROID USE IN YOUNG ATHLETES AND BODYBUILDERS <u>Kadir Daştan¹</u>, Itır Tarı Cömert², M. Özlem Kolusayın³, Fatma Çavuş¹, Gülten Rayimoğlu¹, İlyas Duran⁴, M. Feyzi Şahin⁵, E. Hülya Yükseloğlu¹ ¹ Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey ²Hasan Kalyoncu University, Psychology Department, Gaziantep, Turkey ³ Istanbul University, Cerrahpasa Medical Faculty, Department of Forensic Medicine, Istanbul, Turkey ⁴ Medeniyet University, School of Medicine, Department of Biochemistry, Istanbul, Turkey ⁵ The Ministry of Justice, The Council of Forensic Medicine, Istanbul, Turkey
18:00 - 18:30	P7- DANGEROUS DESIGNER DRUGS Münevver Açıkkol, Selda Mercan Istanbul University, Institute of Forensic Sciences, Forensic Toxicology Laboratory, Istanbul, Turkey
18:00 – 18:30	P8- DETERMINATION OF THE ELEMENTAL COMPOSITION IN GREEN COFFEE <u>Sevcan Semen</u> , Selda Mercan, Murat Yayla, Munevver Açıkkol, Salih Cengiz Istanbul University, Institute of Forensic Sciences, Forensic Toxicology Laboratory, Istanbul, Turkey
18:00 – 18:30	P9- DETERMINATION OF α-CYPERMETHRIN IN SOIL BY MICROWAVE-ASSISTED EXTRACTION AND HIGH- PERFORMANCE THIN-LAYER CHROMATOGRAPHY <u>Sevcan Semen</u> , Zeynep Türkmen, Selda Mercan, Münevver Açıkkol Istanbul University, Institute of Forensic Sciences, Forensic Toxicology Laboratory, Istanbul, Turkey
18:00 – 18:30	P10- A DEATH CASE OCCURED DUE TO ILLICIT DRUG USE INCLUDING SYNTHETIC CANNABINOIDS Mustafa Balkay ¹ , Akan Karakuş ² ¹ Ministry of Justice, The Council of Forensic Medicine, Samsun, Turkey ² Ondokuz Mayıs University, Faculty of Medicine, Medical Education Department, Samsun, Turkey
18:00 - 18:30	Discussion

POSTER PRESENTATIONS II CRIMINALISTICS / FORENSIC GENETICS

Chair:	Ş. Şebnem Özkal PhD Yeni Yüzyıl University, Faculty of Arts and Sciences, Istanbul, Turkey
18:30 – 19:30	P11- IDENTIFICATION OF BIO TRACES OF KNIFE IN A CASE OF MURDER – CASE REPORT <u>A.Alexandrov¹</u> , A. Christov ¹ , T. Kiryakova ¹ , D. Nikolov ¹ , P. Timonov ² , N. Stanchev ¹ , St. Hristov ¹ ¹ Medical University-Sofia, Medical Faculty, Department of Forensic Medicine and Deontology, Sofia, Bulgaria ² Medical University-Plovdiv, Department of Forensic Medicine and deontology, Plovdiv, Bulgaria
18:30 – 19:30	P12- FORENSIC IDENTIFICATION OF THE SHOES OF A PERPETRATOR OF MURDER BY ANALYSIS OF TRACE EVIDENCE – A CASE REPORT <u>A. Hristov¹</u> , A. Alexandrov ¹ , T. Kiryakova ¹ , N. Stanchev ¹ , P. Timonov ² , S. Hristov ¹ ¹ Medical University-Sofia, Medical Faculty, Department of Forensic Medicine and Deontology, Sofia, Bulgaria ² Medical University-Plovdiv, Department of Forensic Medicine and deontology, Plovdiv, Bulgaria
18:30 - 19:30	P13- A CASE OF DNA TESTING IN ALBANIA TO IDENTIFY THE BIOLOGICAL PARENTS <u>Alma Hazizaj</u> ¹ , Linda Matua ² , Armanda Deda ³ ¹ Institute of Forensic Medicine, Tirana, Albania ² University of Medicine Tirana, Faculty of Pharmacy, Albania ³ Department of Scientific Police, Tirana, Albania
18:30 - 19:30	P14- EXAMINATION OF AMNIOTIC FLUID BY DNA FRAGMENT ANALYSIS IN PATERNITY TEST- CASE REPORT A. Apostolov, C. Hristov, A. Hristov, E. Angelova Medical University, Faculty of Medicine, Department of Forensic Medicine and Deontology, Sofia, Bulgaria
18:30 – 19:30	P15- A PERSPECTIVE ON THE EPIGENETIC MECHANISMS FOR FORENSIC SCIENCES Fulya Eylem Yediay, E. Hülya Yükseloğlu Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey

	PLANT MATERIALS FOR CRIMINAL INVESTIGATION PURPOSES
	 FORFOSES Fatma Çavuş¹, Gülten Rayimoğlu¹, Kadir Daştan¹, M. Özlem Kolusayın², Itır Erkan³, Tolga Zorlu¹, <u>E. Hülya Yükseloğlu¹</u> ¹Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey ²Istanbul University, Cerrahpasa Medical Faculty, Department of Forensic Medicine, Istanbul, Turkey ³Yeni Yüzyıl University, Faculty of Health Sciences, Istanbul, Turkey
18:30 – 19:30	P17- THE BEST AID OF CRIME SCENE INVESTIGATION TEAMS: LUMINOL Fatma Çavuş ¹ , Yakup Gülekçi ² , Gülten Rayimoğlu ¹ , Kadir Daştan ¹ , Itır Erkan ³ , Tolga Zorlu ¹ , M. Özlem Kolusayın ⁴ , <u>E. Hülya Yükseloğlu¹</u> ¹ Istanbul University Institute of Forensic Sciences, Istanbul, Turkey ² Gayrettepe Service Building, Crime Scene Investigation and Identification Branch Office, Gayrettepe, Istanbul, Turkey ³ Yeni Yüzyıl University, Faculty of Health Sciences,Istanbul, Turkey ⁴ Istanbul University, Cerrahpasa Medical Faculty, Department of Forensic Medicine, Istanbul, Turkey
18:30 – 19:30	P18- IDENTIFICATION OF DISASTER VICTIMS: CONFIGURATION OF A FORENSIC SCIENCE DNA LABORATORY IN A POTENTIAL ISTANBUL EARTHQUAKE AND THE IMPORTANCE OF FORENSIC GENETICISTS Umut Kara ¹ , Alpen Ortuğ ² , Itır Tarı Cömert ³ , <u>E. Hülya Yükseloğlu²</u> ¹ The Council of Forensic Medicine, Department of Biology, Istanbul, Turkey ² Istanbul University Institute of Forensic Sciences, Istanbul, Turkey ³ Hasan Kalyoncu University Psychology Department GaziantepTurkey
18:30 – 19:30	P19- DISTINCTION OF IDENTICAL TWINS VIA A DNA ANALYSIS: HAS THE PROBLEM BEEN SOLVED? <u>E. Hülya Yükseloğlu¹</u> , Umut Kara ² , Muhammet Doğan ² , Kadir Daştan ¹ ¹ Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey ² The Council of Forensic Medicine, Department of Biology, Istanbul, Turkey
18:30 - 19:30	P20- THE CAUSES OF TRAFFIC ACCIDENTS IN THE DISTRICT OF DURRES, ALBANIA IN THE YEARS 2012 AND 2013 Alma Nushi, Arben Lloja, Gramoz Ylli <i>Kristal University, Albania</i>
18:30 - 19:30	P21- DIGITAL ANALYSIS OF PROFILES OF SUBJECTS ON

P16- THE ROLE OF DNA IN THE IDENTIFICATION OF

18:30 - 19:30

HUMAN TISSUES Ivan Stoyanov¹, William Dokov², Plamen Dimitrov¹

	¹ Multiprofile Hospital for Activ, Treatment, Department of Forensic Medicine, Russe, Bulgaria ² Medical university of Varna, Department of General and Clinical Pathology, Forensic Medicine and Deontology, Varna,
18:30 – 19:30	P22- ORGANIZATION OF FORENSIC SCIENCES AND EXPERTNESS IN TURKEY Melike Bilir ¹ , Melek Özlem Kolusayın ² , Gürsel Çetin ² ¹ Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey ² Istanbul University, Cerrahpasa Medical Faculty, Department of Forensic Medicine, Istanbul, Turkey
18:30 – 19:30	P23- DETERMINATION OF FORENSICALLY IMPORTANT INSECT SUCCESSION ON DOG CARCASSES (<i>CANIS LUPUS</i> <i>FAMILIARIS L.</i>) AT THREE DIFFERENT AREAS OF NORTH OF TURKEY <u>Meltem Kökdener¹</u> , Erdal Polat ² <i>'Samsun Ondokuz Mayıs University, Health High School,Samsun, Turkey</i> <i>'Istanbul University, Cerrahpasa Medical Faculty, Department of</i> <i>Microbiology and Clinical Microbiology, Istanbul, Turkey</i>
18:30 – 19:30	P24- TAKING BLOOD OVER REMOVABLE AND NON- REMOVABLE MATERIALS IN CRIME SCENE: A SAMPLE DIAGRAM Murat Öğdür ¹ , Hüseyin Çakan ² , F. Ekim Çevik ² ¹ Istanbul Crime Scene Investigation and Identification Unit, Istanbul, Turkey ² Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey
18:30 – 19:30	 P25- THE ROLE OF LABORATORY TECHNICIANS IN FORENSIC SCIENCE LABORATORIES Gülten Rayimoğlu¹, Fatma Çavuş¹, Kadir Daştan¹, Itir Erkan², M. Özlem Kolusayın³, Tolga Zorlu¹, <u>E. Hülya Yükseloğlu¹</u> ¹Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey ²YeniYuzyil University, Faculty of Health Sciences, Cevizlibag, Topkapı, Istanbul, Turkey ³Istanbul University, Cerrahpasa Medical Faculty, Department Of Forensic Medicine, Istanbul, Turkey
18:30 – 19:30	P26- THE ANALYSIS OF CHILD HOMICIDE NEWS IN NEWSPAPERS PUBLISHED IN 2009-2014: A RETROSPECTIVE STUDY Kadir Daştan ¹ , Itır Tarı Cömert ² , M. Feyzi Şahin ³ , Can Calıcı ¹ , M. Özlem Kolusayın ⁴ , Fatma Çavuş ¹ , Gülten Rayimoğlu ¹ , Yusuf Tunç Demircan ¹ , İlyas Duran ⁵ , E. Hülya Yükseloğlu ¹ ¹ Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey ² Hasan Kalyoncu University, Psychology Department Gaziantep, Turkey ³ The Ministry of Justice, The Council of Forensic Medicine, Istanbul, Turkey

	⁴ Istanbul University, Cerrahpasa Medical Faculty, Department of Forensic Medicine, Istanbul, Turkey ⁵ Medeniyet University, School of Medicine, Department of Biochemistry, Istanbul, Turkey
18:30 – 19:30	P27- USE OF GRAPHOLOGY AT FORENSIC SCIENCES Murat Öğdür ¹ , Hüseyin Çakan ² , Filiz Ekim Çevik ² ¹ Istanbul Crime Scene Investigation and Identification Unit, Istanbul, Turkey ² Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey
18:30 - 19:30	P28- FORENSIC SOIL ANALYSIS Filiz Ekim Çevik, Hüseyin Çakan, Vecdet Öz Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey
18:30 - 19:30	Discussion
	Free Evening

20 June 2014 (Friday)

SESSION V

(09:00 - 11:45)

FORENSIC ANTHROPOLOGY / FORENSIC NURSING

Chair:	Prof. Dr. Fatih Yavuz Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey
09:00-09:40	Key-Note Speaker
	Virginia A. Lynch, MSN, RN, FCNS, FAAN, FAAFS
	K1- "THE FORENSIC NURSE DEATH INVESTIGATOR AS A MEMBER OF THE MULTIDISCIPLINARY FORENSIC INVESTIGATIVE UNIT"
09:40 - 10:00	R4- HOSPITAL-BASED CHILD PROTECTION CENTERS IN TURKEY Assoc. Prof. Dr. Nursen Turan Yurtsever Marmara University, Department of Forensic Medicine, Istanbul Turkey
10:00 - 10.10	O11- MORPHOLOGIC AND OSTEOMETRIC ASSESSMENT OF SEX FROM THE SKULL IN YONCATEPE POPULATION Ayşe Acar

	Mardin Artuklu University, Department of Anthropology, Mardin, Turkey
10:00 - 10:20	O12- DISCUSSION OF "RACE" IN FORENSIC ANTHROPOLOGY Özge Ünlütürk Council of Legal Medicine, Istanbul, Turkey
10:20 - 10:30	O13- RIB HISTOMORPHOMETRY AND SAMPLING ERROR: A PILOT STUDY Julieta G. Garcia-Donas ¹ , <u>Despoina Nathena²</u> , Manolis Michalodimitrakis ² , Elena F. Kranioti ¹ ¹ University of Edinburgh, Edinburgh Unit for Forensic Anthropology, SCHA ² University of Crete, Department of Forensic Sciences, Greece
10:30 - 10:40	014- DENTAL ARCH AND SIZES VARIATIONS IN TURKISH MALES AND FEMALES <u>Feryal Karaman</u> , M. Yaşar İşcan <i>Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey</i>
10:40 - 10:50	O15- FORENSIC NURSING EDUCATION IN TURKEY Ş. Şebnem Özkal ¹ , Şefik Köprülü ² , Duygu Sezgin ³ , <u>Işık Saygın</u> ⁴ , İrem Nur Özdemir ⁴ , Canan Tuğçe Kaya ⁴ , Nesime Seynan Sarı ⁴ , Şeyda Saydamlı ⁴ , Gavril Petridis ⁴ , Ersi Abacı Kalfoğlu ² ¹ Yeni Yüzyıl University, Faculty of Arts and Sciences, Istanbul, Turkey ² Yeni Yüzyıl University, Medical Faculty, Istanbul, Turkey ³ Bezm-i Alem University, Faculty of Health Sciences, Istanbul, Turkey ⁴ Yeni Yüzyıl University, Faculty of Health Sciences, Istanbul, Turkey
10:50 - 11:00	O16- THE DEGREE OF AWARENESS ON FORENSIC NURSING AMONG PRACTICING NURSES Ş. Şebnem Özkal ¹ , Şefik Köprülü ² , Duygu Sezgin ³ , <u>Sinem Dereli</u> ⁴ , Duygu Koşar ⁴ , Eda Akova ⁴ , Bahar Kahya ⁴ , Melis Güneş ⁴ , Gavril Petridis ⁴ , Ersi Abacı Kalfoğlu ² ¹ Yeni Yüzyıl University, Faculty of Arts and Sciences, Istanbul, Turkey ² Yeni Yüzyıl University, Medical Faculty, Istanbul, Turkey ³ Bezm-i Alem University, Department of Health Sciences, Istanbul, Turkey ⁴ Yeni Yüzyıl University, Department of Health Sciences, Istanbul, Turkey
11:00 - 11:10	017- A CONCEPTUAL INQUISITION ON SEXUAL CRIMES Sinan Çaya Marmara University, Istanbul, Turkey
11:10 - 11:20	O18- EVALUATING CHILD NEGLECT AND ABUSE AWARENESS OF PARENTS Funda Ayra, Oğuz Özyaral

	Yeni Yüzyıl University, Vocational High School of Healthcare Services, Istanbul, Turkey
11:20 - 11:30	019- CREMATION OF HUMAN BONES IN FORENSIC CONTEXT Bahar Mergen University of Bitlis Eren, Department of Archaeology, Bitlis, Turkey
11:30 - 11:45	Discussion

SESSION VI

(16:00 - 18:00)

GENERAL

16:00-16.40	Key - Note Speaker:
Chair: Co-Chair:	Virginia A. Lynch Assoc. Prof. Dr. Hülya Yükseloğlu Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey

Ahmad Samarji PhD Forensic Science & Forensic Medicine Education College of Education Victoria University, Melbourne, Australia

K2- "FORENSIC SCIENCE EDUCATION FROM A DIGITAL AND INTERNATIONALISED LENS"

- 16:40 16:50 **O20-** SOME CRIMINOGENIC FACTORS OF HUMAN TRAFFICKING BASED ON COURT DECISIONS FOR THE PERIOD OF 2001-2005 IN ALBANIA Alma Nushi, Naim Tota, Arben Lloja *Kristal University, Albania*
- 16:50 17:00 **O21-** IN THE PRIME MINISTERIAL STATE ARCHIVES THERE ARE SEVERAL DOCUMENTS RELATING TO THE ILLEGAL TRAFFIC IN ANTIQUE ARTEFACTS Zeynep Emel Ekim *Mimar Sinan University, Institute of Social Sciences, Istanbul, Turkey*

17:00 – 17:10 **O22-** FORENSIC INTERPRETATION/TRANSLATION IN TURKEY Ümit Türe Yeni Yüzyıl University, Department of Interpretation and Translation, Istanbul, Turkey

17:10 - 17:20	O23- CYBERCRIME VICTIMS Vehbi Morina University FAMA – Gjilan Kosovo
17:20 - 17:30	O24- THE STORY OF A BOOKLET-WRITING BY A YOUNG ACADEMICIAN AT A LEGAL MEDICINE CHAIR Sinan Çaya <i>Marmara University, Istanbul, Turkey</i>
17:30 – 17:40	O25- THEORIES ON COLLECTIVE INFRACTION Sinan Çaya Marmara University, Istanbul, Turkey
17:40 – 17:50	O26- ASSISTED REPRODUCTION TREATMENT (ART) SERVICES IN TURKEY, LEGAL REGULATIONS AND ETHICAL ASPECTS Tevfik Yoldemir Marmara University, Department of Obstetrics and Gynecology, Division of Reproductive Medicine, Istanbul, Turkey

17:50 – 18:00 *Discussion*

SESSION VII

(18:00 - 18:30)

FORENSIC PATHOLOGY

Chair: Co-Chair:	Assoc. Prof. Dr. Arben Lloja Kristal University, Albania Prof. Reena Roy The Pennsylvania State University, PA, USA
18:00 – 18:10	O27- FORENSIC AUTOPSY- A RELIABLE CLINICAL AUDIT TOOL Beatrice Ioan ¹ , Marius Neagu ¹ , Andreea-Irina Ion ¹ , Teodora Alexa ² ¹ Gr. T. Popa University of Medicine and Pharmacy, Institute of Forensic Medicine, Iasi, Romania ² Gr. T. Popa University of Medicine and Pharmacy, Regional Institute of Oncology, Iasi, Romania
18:10 – 18:20	O28- AUTOEROTIC ASPHYXIA: A CASE REPORT AND REVIEW OF THE LITERATURE <u>Mylonakis Panagiotis</u> ¹ , Tsalikidis Christoforos ² , Zagelidou Eleni ¹ ¹ Medical Examiner's Office of Thessaloniki, Greece ² Laboratory of Forensic Medicine & Toxicology, Medical School, Aristotle University of Thessaloniki, Greece

18:20 - 18:30	O29- PARADOXICAL UNDRESSING AND TERMINAL BURROWING (HIDE AND DIE SYNDROME): ANALYSIS OF
	FOUR CASES INCLUDING HYPOTHERMIA OR CEREBRAL
	INJURY
	<u>Mylonakis Panagiotis</u> ¹ , Kaliva Eleni ¹ , Tsalikidis Christoforos ² , Milias Stefanos ³ , Mitselou Antigoni ⁴ .
	¹ Medical Examiner's Office of Thessaloniki, Greece
	² Laboratory of Forensic Medicine & Toxicology, Medical School, Aristotle University of Thessaloniki, Greece
	³ Department of Pathology, 424 Military Hospital of Thessaloniki, Greece
	⁴ Department of Forensic Medicine & Toxicology, Medical School,
	University of Ioannina, Greece
18:30 - 18:40	O30- MEDICOLEGAL CHARACTERISTICS IN HOMICIDES CASES IN ALBANIA DURING 2008 – 2018
	Bledar Xhemali, Zija Ismaili, Admir Sinamati, Linda Matua, Mirnela Cinije, Blerim Peli
	Institute of Forensic Medicine, Tirana, Albania
18:40 - 18:50	O31- STUDY OF SUICIDES IN CUSTODY ROOM OF DRUG
	ADDICTED SUBJECTS – AN EMERGING PHENOMENON Zija Ismaili, Bledar Xhemali, Linda Matua, Fatos Sinani Institute of Forensic Medicine, Tirana, Albania
10.50 10.00	
18:50 - 19:00	Discussion

SESSION VIII

(19:00 - 19:30)

POSTER PRESENTATIONS IV FORENSIC PATHOLOGY / CLINICAL FORENSIC MEDICINE

19:00 – 19:30	P29- A MORTAL ACCIDENT CAUSED BY A BROKEN TOILET SEAT COVER: CASE REPORT Yıldıray Zeyfeoğlu ¹ , M. Sunay Yavuz ¹ , Tarık Uluçay ¹ , M. Ziya Kır ¹ , <u>Faruk Aydın¹</u> , İlknur Kahraman ¹ , Gonca Tatar ¹ , Zafer Karadeniz ² , Mustafa Dalgıç ²
	¹ Celal Bayar University, Medical Faculty, Department of Pharmacology, Manisa, Turkey ² Ministry of Justice, The Council of Forensic Medicine, Izmir, Turkey.
19:00 – 19:30	P30- CLAIM OF UNILATERAL HEARING LOSS DUE TO NOISE OF FIRE GUN-CASE PRESENTATION Timuçin Yıldırım ¹ , Muhammed Nabi Kantarcı ¹ , Rukiye Yıldırım ² ¹ The Council of Forensic Medicine, Istanbul, Turkey ² Necmettin Erbakan University, Meram Medical School, Department of Forensic Medicine, Konya, Turkey

19:00 - 19:30	 P31- A CASE OF BROKEN SPINE IN THE LUMBAR REGION CAUSED BY A CAR SAFETY BELT M. Goshev, I. Brainova, A. Alexandrov, S. <u>Hristov</u> Medical University – Sofia, Department of Forensic Medicine and Deontology, Sofia, Bulgaria
19:00 – 19:30	P32- MEDICOLEGAL ASPECTS OF BONE INJURES DECOMPOSET BODIES FROM VIOLENT MEANS; (FORENSIC PATHOLOGICAL FINDINGS) A. Vako, A. Xhani, A. Kenuti, I. Robaj, G. Ylli, S. Meksi Institute of Forensic Medicine, Albania
19:00 – 19:30	P33- HANGING DEATHS IN CHILDREN (AGE 0-18) AUTOPSIES BETWEEN 2002 AND 2011 <u>M.Feyzi Şahin¹</u> , Safa Çelik ¹ , Mehmet Cavlak ² , Muhlis Yıldız ¹ , Muhammet Demir ¹ , Adem Gür ¹ , M.Cihat Gül ¹ , Ziyaettin Erdem ¹ , A. Necati Sanlı ¹ , Ayse Demirel ³ ¹ The Council of Forensic Medicine, 34196, Bahcelievler, Istanbul, Turkey ² Ankara Branch of The Council of Forensic Medicine, Ankara, Turkey ³ Istanbul University, Medical Faculty of Istanbul, Department of Public Health
19:00 – 19:30	P34- FALLING FROM HEIGHT AFTER ELECTROCUTION – A CASE REPORT Ilina Brainova ¹ , Metodi Goshev ¹ , <u>Stanislav Hristov¹</u> , Minko Minkov ² ¹ Medical University – Sofia, Department of Forensic Medicine and Deontology, Sofia, Bulgaria ² Medical University – Varna, Department of Anatomy, Histology and Embryology, Bulgaria
19:00 - 19:30	P35- CRIME OR RAIL TRAFFIC ACCIDENT? CASE REPORT <u>Claudia Pusta</u> , Camelia Buhaş, G.Mihalache University of Oradea, Faculty of Medicine and Pharmacy, Department of Morphological Disciplines, Romania
19:00 – 19:30	P36- SUDDEN DEATH CAUSED BY PULMONARY TROMBOEMBOLISM- CASE REPORT <u>Claudia Pusta</u> , Camelia Buhaş, Alina Bodea University of Oradea, Faculty of Medicine and Pharmacy, Department of Morphological Disciplines, Romania
19:00 – 19:30	P37- A CASE REPORT: STRANGULATION DEATH OF AN 8 YEAR OLD GIRL Mustafa Balkay ¹ , Akan Karakuş ² ¹ Ministry of Justice, The Council of Forensic Medicine, Samsun, Turkey ² Ondokuz Mayıs University Faculty of Medicine, Medical Education Department, Samsun, Turkey

19:00 – 19:30	P38- COMPLEX SUICIDE CASE: SELF-ELECTROCUTION <u>Tarık Uluçay</u> ¹ , M. Sunay Yavuz ¹ , M. Ziya Kır ¹ , Yıldıray Zeyfeoğlu ¹ , İlknur Kahraman ¹ , Faruk Aydın ¹ , Gonca Tatar ¹ , Mustafa Dalgıç ² , G. Pişkin Kesici ² ¹ Department of Forensic Medicine, Medical Faculty of Celal Bayar University, Manisa, Turkey ² Ministry of Justice, The Council of Forensic Medicine, Izmir, Turkey
19:00 - 19:30	P39- SUDDEN DEATH IN HYPERTROPHIC CARDIOMYOPATHY A. Xhani, A.Vako, I. Robaj, A. Kenuti, G. Ylli <i>Institute of Forensic Medicine, Albania</i>
19:00 – 19:30	P40- OESOPHAGOTRACHIAL FISTULA FORMED BY SWALLOWED ALKALİ BATTERY: A CASE REPORT <u>Hacer Yaşar Teke</u> , Tülay Renklidağ, Asude Gökmen, Mustafa Karapirli <i>Ministry of Justice, The Council of Forensic Medicine, Ankara, Turkey</i>
19:00 - 19:30	P41- CHYLOPRICARDIUM AFTER GUNSHOT INJURY: A CASE REPORT Tülay Renklidağ, <u>Hacer Yaşar Teke</u> , Mehtap Yöndem, Mustafa Karapirli <i>Ministry of Justice, The Council of Forensic Medicine, Ankara, Turkey</i>
19:00 – 19:30	P42- MYOCARDIAL INFARCTION CAUSED BY SHOTGUN INJURY <u>Ümit Naci Gündoğmuş¹</u> , Ali Tavaslı ¹ , Süleyman Yılmaz ¹ , Zeynep Yener ¹ , Kazım Beşirli ² , Feyzi Şahin ¹ , Dilek Şahin ³ ¹ The Council of Forensic Medicine, Istanbul, Turkey ² Istanbul University, Cerrahpaşa Faculty of Medicine, Cardiovascular Surgery Department, Istanbul, Turkey ³ Istanbul University, Institute of Oncology, Radiology Department, Istanbul, Turkey
19:00 – 19:30	P43- A QUESTIONNAIRE STUDY TO PROSECUTORS ABOUT FORENSIC MEDICINE PRACTICE Fatih Yağmur ¹ , Eyüp Kandemir ¹ , Cem Uysal ² , Süleyman Yılmaz ¹ , <u>Safa</u> <u>Çelik¹</u> ¹ The Council of Forensic Medicine, Istanbul, Turkey ² Dicle University, Diyarbakır, Turkey
19:00 - 19:30	P44- DECAPITATION AT THE GO-KART RACING <u>Erdoğan Kara</u> , Safa Çelik, Uğur Çom, Yiğit Sezer, Esra Ünal <i>The Council of Forensic Medicine, Istanbul, Turkey</i>
19:00 – 19:30	P45- BODYBUILDING, FAT BURNERS, DIETARY SUPPLEMENTS AND HEPATORENAL PATHOLOGY: A CASE REPORT AND REVIEW OF THE LITERATURE <u>Mylonakis Panagiotis</u> ¹ , Pappas Dimitrios ² , Milias Stefanos ²

¹ Medical Examiner's Office of Thessaloniki, Greece
² Department of Pathology, 424 Military Hospital of Thessaloniki,
Greece

19:00 – 19:30 Discussion

21 June 2014 (Saturday)

SESSION IX

(09:00 - 10:30)

ENVIRONMENTAL FORENSICS

- Chair: Gavril Petridis PhD Yeni Yüzyıl University, Faculty of Health Sciences, Istanbul, Turkey
- 09:00 09:20 **Key Note Speaker**

Georges Kremlis

Head of Unit ENV.D.1 European Commission Brussels/Belgium

K3- "ENVIRONMENT AND HEALTH"

09:20 – 09:30 **O32-** EVOLUTION OF THE EU ENVIRONMENTAL LAW. THE EU 7TH ENVIRONMENT ACTION PROGRAMME: «LIVING WELL WITHIN THE LIMITS OF OUR PLANET» Angeliki Kallia- Antoniou Attorney at Law, EU Law Expert Professor in the International Hellenic University

09:30 – 09:40 **O33-** IRREVERSIBLE NOISE INDUCED HEARING LOSS IN COMMERCIAL DRIVERS Gavril Petridis¹, Umur Alpay¹, Melis Başak Kösedağ¹, Tansu Akpunar¹, Ş. Şebnem Özkal², Ersi Abacı Kalfoğlu ³ ¹Yeni Yüzyıl University, Faculty of Health Sciences, Istanbul, Turkey ²Yeni Yüzyıl University, Faculty of Arts and Sciences, Istanbul, Turkey ³Yeni Yüzyıl University, Medical Faculty, Istanbul, Turkey

09:40 – 09:50 **O34-** THE RELATION OF CRIME TYPES AND URBAN PLANNING: THE EXAMPLE OF ISTANBUL Ersi Abacı Kalfoglou¹, <u>Christina Kalfoglou²</u>, Gülay Yedekçi Arslan² ¹Yeni Yüzyıl University, Medical Faculty, Istanbul, Turkey ²Yeni Yüzyıl University, Faculty of Engineering, Department of Architecture, Istanbul, Turkey

09:50 – 10:00 **O35-** THE USE OF RADIOACTIVE SUBSTANCES AT

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HOSPITALS AND THE ENVIRONMENTAL EFFECTS THEREOF

<u>Oğuz Özyaral¹</u>, Gülhan Kalmuk² ¹Yeni Yüzyıl University, Faculty of Pharmacy, Istanbul, Turkey ²Yeni Yüzyıl University, Vocational School of Health Sciences Istanbul, Turkey

- 10:00 10:15 Discussion
- 10:15 10:30 Coffee Break

SESSION X

(10:30 - 12:00)

POSTER PRESENTATIONS V BEHAVIORAL SCIENCES

- 10:30 12:00 **P46-** FORENSIC EXAMINATION AS CRUCIAL EVIDENCE IN CRIMINAL PROCEEDING Sedat Krasniqi^{1,2} ¹Scientific Centre of Criminalistics Research and Examination Prizren ²"FAMA" University in Kosovo
- 10:30 12:00 **P47-** FORENSIC EXPERTISE A KEY PROOF IN CRIMINAL CASES Sedat Krasniqi^{1,2} ¹Scientific Centre of Criminalistics Research and Examination Prizren

² "FAMA" University in Kosovo

10:30 – 12:00 **P48-** FORENSIC PSYCHIATRIC EVALUATION OF SEXUAL CRIME VICTIMS

M. Sunay Yavuz¹, <u>M. Ziya Kır¹</u>, Ş. Yalın Sapmaz², Erol Ozan³, Mahmut Aşırdizer⁴, Yıldıray Zeyfeoğlu¹, Tarık Uluçay¹, İlknur Kahraman¹, Gonca Tatar¹, Faruk Aydın¹
¹Celal Bayar University, Medical Faculty, Department of Forensic Medicine, Manisa, Turkey
²Celal Bayar University, Medical Faculty, Department of Child and Adolescent Psychiatry, Manisa, Turkey
³Celal Bayar University, Medical Faculty, Department of Psychiatry, Manisa, Turkey
⁴Yuzuncu Yıl University, Medical Faculty, Department of Forensic Medicine, Van, Turkey

10:30 – 12:00 **P49-** SUICIDE ATTEMPT WITH DRUG INTAKE DURING PREGNANCY: FIVE CASE REPORTS Tuğba Gürpınar¹, Kamil Vural¹, Bedirhan Ay¹, Gülay Yıldırım¹, <u>Faruk</u> <u>Aydın²</u>, Ercüment Ölmez¹, M. Sunay Yavuz² ¹Celal Bayar University, Medical Faculty, Department of Pharmacology, Manisa, Turkey

	² Celal Bayar University, Medical Faculty, Department of Forensic Medicine, Manisa, Turkey
10:30 - 12:00	P50- BULLYING AMONG TURKISH ADOLESCENCES: THE ROLES OF GENDER STEREOTYPES Eda Ermağan Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey
10:30 – 12:00	P51- POSTPARTUM DEPRESSION: A REVIEW Itır Tarı Comert ¹ , Zümra Özyeşil ² , Zerrin Pelin ³ , Rabia Yürük ⁴ , Dilek Salkım İşlek ⁵ , M.Özlem Kolusayın ⁶ , E. Hülya Yükseloğlu ⁵ ¹ Hasan Kalyoncu University Psychology Department, Gaziantep, Turkey ² Istanbul MEF University, Istanbul, Turkey ³ Hasan Kalyoncu University Health Sciences Department, Gaziantep, Turkey ⁴ Istanbul Arel University, Department of Psychology, Istanbul, Turkey ⁵ Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey ⁶ Istanbul University Cerrahpasa Medical Faculty, Department for Forensic Medicine, Istanbul, Turkey
10:30 – 12:00	P52- SEXSOMNIA: A REVIEW Itır Tarı Comert ¹ , Zümra Özyeşil ² , Zerrin Pelin ³ , Rabia Yürük ⁴ , Dilek Salkım İşlek ⁵ , M.Özlem Kolusayın ⁶ , E. Hülya Yükseloğlu ⁵ ¹ Hasan Kalyoncu University Psychology Department, Gaziantep, Turkey ² Istanbul MEF University, Istanbul, Turkey ³ Hasan Kalyoncu University Health Sciences Department, Gaziantep, Turkey ⁴ Istanbul Arel University, Department of Psychology, Istanbul, Turkey ⁵ Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey ⁶ Istanbul University Cerrahpasa Medical Faculty, Department for Forensic Medicine, Istanbul, Turkey
10:30 - 12:00	P53- THE RELATIONSHIP BETWEEN DOMESTIC VIOLENCE AND SELF-RESPECT AND DESPERATION LEVEL IN TEENAGERS Ayşe Arıkan ¹ , <u>Zeynep Belma Gölge</u> ² ¹ Bakırköy Family Court, Istanbul, Turkey ² Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey
10:30 - 12:00	P54- A CASE OF SEXUAL ABUSE WHERE THE CHILD IS ACTIVE Berna Şenel Eraslan, İbrahim Eray Çakı, Melek Özlem Kolusayın, Gürsel Çetin Istanbul University, Cerrahpaşa Medical Faculty, Department of Forensic Medicine, Istanbul, Turkey
10:30 - 12:00	P55- BLOOD TYPES AND SUICIDE RATES IN THE REGION OF PLOVDIV, REPUBLIC OF BULGARIA Marin Baltov

Medical University of Plovdiv, Bulgaria

10:30 - 12:00**P56-** ADOLESCENTS DATE RAPE: A REVIEW Itır Tarı Comert¹, Zümra Özyeşil², Zerrin Pelin³, Rabia Yürük⁴, Dilek Salkım İşlek⁵, Kadir Daştan⁵, E. Hülya Yükseloğlu⁵ ¹Hasan Kalvoncu University Psychology Department, Gaziantep, Turkey ²Istanbul MEF University, Istanbul, Turkey ³Hasan Kalyoncu University Health Sciences Department, Gaziantep, Turkev ⁴Istanbul Arel University, Department of Psychology, Istanbul, Turkey ³Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey 10:30 - 12:00**P57-** SPECIFICS OF COURT PSYCHOLOGICAL REPORT OF CHILD VICTIMS OF SEXUAL ABUSE: EVALUATION OF SPECIFIC BEHAVIORAL MARKERS Nikolina Angelova-Barbolova Regional Hospital of Psychiatry, Department of Forensic Psychiatry, Rousse Bulgaria **P58-** PSYCHOLOGICAL AND PERSONALITY ASPECTS 10.30 - 12.00AMONG PRISONERS Nikolina Angelova-Barbolova Regional Hospital of Psychiatry, Department of Forensic Psychiatry, Rousse Bulgaria **P59-** PARASOMNIA: A REVIEW 10:30 - 12:00Itır Tarı Comert¹, Zümra Özyeşil², Zerrin Pelin³, Rabia Yürük⁴, Dilek Salkım İşlek⁵, Kadir Daştan⁵, E. Hülya Yükseloğlu⁵ ¹Hasan Kalyoncu University Psychology Department, Gaziantep, Turkey ²Istanbul MEF University, Istanbul, Turkey ³Hasan Kalyoncu University Health Sciences Department, Gaziantep, Turkev ⁴Istanbul Arel University, Department of Psychology, Istanbul, Turkey ⁵Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey **P60-** CASE STUDY OF PATRICIDE PERPETRATED BY A 10:30 - 12:00MINOR Simona Damian¹, Carmen Lupusoru², Antoaneta Zanfirache³, Simona Ionescu⁴, Beatrice Ioan⁵ ^{1,5}University of Medicine "Gr. T. Popa" Iasi, Romania ^{2,3}Psychiatry Hospital Socola Iasi, Romania ⁴Institut Medico-Legal Iasi, Romania 10:30 - 12:00**P61-** PREVALENCE OF RISK FACTORS IN HOMOCIDAL **BEHAVIOR IN SCHIZOPHRENIC PATIENTS**

Ilda Aliko, Anila Kazaferi Institute of Forensic Medicine Rr. Dibres QSUT "Nene Tereza" Tirana, Albania

10:30 – 12:00 **P62-** MANUSCRIPTS CHANGED UNDER THE INFLUENCE OF PSYCHO- PHYSICAL FACTORS Hysen Kotri¹, <u>Sedat Krasniqi</u>² ¹Association of Forensic Sciences, Tirana, Albania ²Scientific Centre of Criminalistics Research and Examination, Prizren, Kosovo

10:30 – 12:00 *Discussion*

SESSION XI

(12:00 - 12:30)

POSTER PRESENTATIONS VI FORENSIC ANTHROPOLOGY / FORENSIC NURSING

12:00 - 12:30	P63- FOURTH MOLARS-HYPERDONTIA: A CASE REPORT IN MIDYAT/AKTAS Ayşe Acar Mardin Artuklu University, Department of Anthropology, Mardin, Turkey
12:00 – 12:30	P64- FORENSIC IDENTIFICATION CASE SOLVED THROUGH PHOTO SUPERIMPOSITION <u>N. Stanchev¹</u> , T. Kiryakova ¹ , A. Alexandrov ¹ , M. Minkov ² , M. Ankova ¹ , I. Dimcheva ³ , St. Hristov ¹ ¹ Medical University – Sofia, Department of Forensic Medicine and Deontology, Sofia, Bulgaria ² Medical University – Varna, Department of Anatomy, Histology and Embryology, Varna, Bulgaria ³ Private Dental Practice, Sofia, Bulgaria
12:00 - 12:30	P65- EVALUATION OF LESIONS FORMED DURING REMOVAL OF SKELETONIZED REMAINS M. Feyzi Şahin, Özge Ünlütürk <i>The Council of Forensic Medicine, Istanbul, Turkey</i>
12:00 - 12:30	P66- THE CRETAN COLLECTION: A MODERN REFERENCE COLLECTION FROM GREECE M.S. Madentzoglou ¹ , D. Nathena ¹ , M. Michalodimitrakis ¹ , E.F. Kranioti ² ¹ University of Crete, Department of Forensic Sciences, Faculty of Medicine, Heraklion, Greece ² University of Edinburgh, Edinburgh Unit for Forensic Anthropology, SHCA, Scotland, UK
12:00 - 12:30	P67- PRELIMINARY STUDY: AGE ESTIMATION BASED ON THE METAMORPHOSIS OF THE CLAVICLE IN GREEKS

M.S. Madentzoglou¹, D. Nathena¹, M. Michalodimitrakis¹, E.F. Kranioti² ¹University of Crete, Department of Forensic Sciences, Faculty of Medicine, Heraklion, Greece ²University of Edinburgh, Edinburgh Unit for Forensic Anthropology, SHCA, Scotland, UK

- 12:00 12:30 **P68-** CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN: AN ARCHITECTURAL APPROACH Gülay Yedekçi Arslan¹, <u>Kristina Kalfoğlu¹</u> ¹Yeni Yüzyıl University, Faculty of Engineering, Department of Architecture, Istanbul, Turkey
- 12:00 12:30 **P69-** THE TREATMENT SUSTAINABILITY OF CHILDREN WITH HEALTH PRECAUTION Elif Bağdatlı, Oğuz Özyaral Yeni Yüzyıl University, Faculty of Pharmacy, Istanbul Turkey
- 12:00 12:30 *Discussion*

ABSTRACTS

10th Annoual Meeting of Forensic Sciences

ORAL PRESENTATIONS

TOXICOLOGY

ROUND TABLE DISCUSSION "DRIVING UNDER THE INFLUENCE OF DRUGS"

Driving Under the Influence of Drug and Alcohol

Serap Annette Akgür, MD, PhD¹; İ.İpek Boşgelmez, PhD² ¹Ege University, Institute of Drug Addiction, Toxicology and Pharmaceutical Sciences, Dept. of Addiction Toxicology, 35100, Bornova, İzmir, Turkey ²Erciyes University, Faculty of Pharmacy, Dept. of Pharmaceutical Toxicology, 38039 Melikgazi, Kayseri, Turkey

The "road safety" contains not only safe vehicles and roads, but most importantly safe and nonrisky driving performances. The traffic accident-related deaths involving alcohol and drugs have been a major concern all over the world. Throughout this century, numerous studies have evaluated the Driving Under the Influence (DUI) of alcohol. Statutory limits of blood-alcohol concentration (BAC) as evidence of impairment of driving were introduced in all countries. Establishment of lower BACs may reduce the number of injuries, especially involving young people. However, besides alcohol, with the increase in drug/substance abuse, driving under the influence of drugs (DUID) became a course of concern. After alcohol, THC (delta-9-tetrahydrocannabinol), the active ingredient in marijuana, is the substance most commonly found in the blood of impaired drivers, fatally injured drivers, and motor vehicle crash victims. Therefore, several countries / EU member states have introduced or are preparing 'per se' laws and their application on DUID.

The current situation and developments as well as a precise comparison between countries will be introduced. In general, the main stages of the drug testing on drivers, the application of the legal issues, specimen collection, laboratory testing and interpretation of the results will be evaluated. The widespread individual and social problems related to drug use/abuse provoked the new developments for drug testing systems in the world. Drug testing is a complex issue which has technical/scientific, social and economic dimensions. As the need to screen drivers on an international basis grows, so does the need to improve and identify eligible opportunities for this complicated process. The issue will also be discussed interactively to get contributions and recommendations.

O1- ANALYSIS OF EVIDENCE - SYRINGES CONTAINING HEROIN: A PERIOD OF 12 YEARS (2000 TO 2012) IN SOFIA, BULGARIA

Alexandra Anastassova, Valya Dzabarska

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The use of chemical substances affecting man is as old as human history. Drug abuse is a problem, which has many aspects - medical, legal, social, criminological, etc. Drug addiction is a problem of main medical and social importance because the affected ones are mainly young people. In Bulgaria, after 1989, the levels of drug addiction and medico-social problems associated with it raise very quickly. In this research the results of the analysis of particular objects – 42 syringe. In Bulgaria, heroin is most commonly administrated intravenously. Heroin and tartaric acid are being boiled in a spoon then the liquid is being aspirated in a syringe, and after aspiration of blood into the syringe the mixture is injected into the vessel. Drug addicts make the solution isotonic, isothermal, and with neutral pH=7, with or without knowing why. The samples were tested with by gas chromatography NPD detector working on a gas chromatograph TRASE GC THERMO FINNIGAN capillary column Alltech 5/30 m at a temperature gradient of the column, with carrier gas nitrogen. The samples were injected into the chromatograph after liquid / liquid extraction or direct methanol dissolution. Depending on the retention time various substances were identified. Since 2012 (GC / MS) model Focus GC / ISQ has been used in the analysis and gas chromatography. The samples were injected into the chromatograph after extraction (liquid / liquid - extraction with chloroform, isopropyl alcohol (MERCK), or dissolved directly in methanol). The statistical analyses show presence of substances and impurities in the "street" heroin established in the objects syringes tested in for 12 years, examined in The Department of Forensic Medicine, Aleksandrovska Hospital in Sofia. The toxicological analysis show presence of the following substances and narcotic opiate alkaloids - acetyl codeine, 6-MAM (6monoazetilmorphine), caffeine, heroin, papaverine, narcotine, morphine and medicines: luminal, diazepam, paracetamol.

Key words: heroin, impurities, syringe, intravenous administration

O2- USABILITY OF MOBILE DRUG TEST THROUGH TRAFFIC IN TURKEY

Harun Şener¹, Fatma Çavuş², Gülten Rayimoğlu², Salih Cengiz² ¹Istanbul Police Crime Laboratory, Fatih, Istanbul, Turkey ²Istanbul University Institute of Forensic Sciences, Cerrahpasa, Istanbul, Turkey harunsener@hotmail.com

Traffic accident is a huge problem which causes looses of life, injuries and pcychological and economical damages both in the world and also Turkey. In recent years, the incidence of traffic crashes reports on drug use among young adults and especially those of driving age has increased considerably. Road side testing as with all on-site testing requires a simple but reliable test that can be carried out quickly and safely. Saliva or "oral fluid" has been presented as an alternative matrix in the establishment of drug exposure. Driver drug testing has been operating in Turkey since August 2013. This study is a survey of methods and approaches to driver drug testing found in the literature. Onsite oral fluid screening is an innovative drugs of abuse testing system which provides results in a matter of minutes. In addition to rapid results, the advantages include easy of collection, simultaneous detection of illicit drugs from a single sample, the results are clearly displayed on the screen as positive or negative and can be printed for a permanent record. Sufficient sample is collected by the system so that the remaining sample can be sent to a designated laboratory for confirmation of presumptive positives by Traffic Police Forces to identify Drivers under the Influence of drugs. In the last years, the scientific interest in driver drug testing technology is rapidly growing. And Road side testing with saliva must be sensitivity, specificity and accuracy. Road side tests are no need to be clinically trained to collect sample, no need to worry about adulteration, no need to worry about substitution, special facilities are not required, observed collection process guarantees sample authenticity, but it does not analyze the synthetic cannabinoid.

Key words: Traffic accidents, traffic control, on-site testing, forensic sciences

O3- EVALUATION FOR SEASONAL CHANGES IN URINARY EXCRETION OF ARSENIC

Selda Mercan, Murat Yayla, Salih Cengiz

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Chronic arsenic (As) exposure has become a worldwide public health problem. Consumption of contaminated drinking water, seafood etc. may cause accumulation of As in time. Climatic variations lead to seasonal changes in biological activity in the water column in temperate regions and these in turn lead to dramatic seasonal changes in the speciation of dissolved arsenic. The aim of the study is to evaluate the seasonal changes of arsenic excretion from urine. Last four months results including two seasons (winter and spring) were reviewed among routine 594 urine analysis conducted by Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) for elemental profiling. Limit of detection and limit of quantification of the method were found 0,03 and 0,1 ng/mL respectively. Correlation coefficient (R) was 0,999 with 0,2-100 ng/mL linear calibration range. Remarkable increasing of arsenic excretion was viewed especially in last two spring months (March and April). Seventeen results were found over the limited value (130 µg/g creatinine) in this period. Maximum and minimum results were 1424,3 and 131,0 μ g/g creatinine respectively, mean concentration was found 372,8 and median value was found 269,8 µg/g creatinine. We have in the opinion that, climatic changes and seasonal precipitation amount in season base may be effective on exposure and also on urinary excretion as well.

Key words: Arsenic exposure, seasonal changes, water sources, ICP-MS

O4- ATTEMPTED SUICIDE IN A CHILD BRIDE CASE WITH TOXICOLOGICAL DATA

Zeynep Türkmen¹, Işıl Bavunoğlu², Salih Cengiz¹

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Although regulated by international conventions and national laws, girls married under 18 is an event that is widespread throughout the world. A human rights violation is subjected by limiting their enough maturation and freedom in the choice of life partner.

It is reported that attempted suicide, sexually transmitted diseases, cervical cancer, mortality during childbirth or obstetric fistula (the formation of a torn between vagina and rectum wall) as a result of giving birth without medical intervention are most encountered health problems. Attempted suicide is cry for help in these cases. Case: 17 years old woman in 17 weeks of her gestation brought to the Emergency Department by her sister with some complaints such as tachycardia and mydriasis with 12 GCS. After performed gastric lavage (GL), urine, GL and serum samples were obtained at 16:00 and sent to forensic toxicology lab. The purpose of the current study is to present carbamazepine and its metabolite (iminostilben) determination with HPTLC and GC-MS in biological matrices of the related case with an overdose. Carbamazepine and its metabolite were found in biological matrices in both systems. After toxicological findings were obtained, the patient confessed that she had ingested 8-10 pills of a drug during family visit period in the afternoon around 14:00. According to Turkey Statistical Institute (TSI), it is reported that the number of child bride in Turkey is exceeded 181 thousands. It is known that child bride number is 21 times higher than child groom. Determination of a toxic substance especially among pregnant women cases under 18 should bring to mind the possible child bride trying to make herself heard.

Key words: Forensic toxicology, Carbamazepin overdose, Attempted suicide, Child bride

O5- RISK PROFILE OF MALE ATHLETES USING LEGAL AND BANNED PERFORMANCE-ENHANCING SUPPLEMENTS

<u>Kadir Daştan¹</u>, M. Özlem Kolusayın², Fatma Çavuş¹, Gülten Rayimoğlu¹, M. Feyzi Şahin³, İlyas Duran⁴, E. Hülya Yükseloğlu¹

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Performance-Enhancing Supplements (pess) are used in a widespread manner by those involved particularly in bodybuilding and athletics. Such supplements are used to replace meals, enhance weight loss and weight gain, or improve sports performance. Among the commonly powders, branched-chain used are protein amino acids (BCAA), glutamine, nitric-oxide related products, vitamins, essential fatty acids, creatine, carnitine and testosterone boosters. There is a general belief regarding the use of performance-enhancing substances (pess) does not fit the standard profile of substance use. This research study aims to clarify whether users of pess report a high-risk potential of drug and alcohol consumption and present risk behaviors related to questionable substance use. A sample of 30 male athletes and bodybuilders living in the city of Istanbul were chosen and a self-report questionnairy was administered. Subjects reported the use of a broad range of pess such as nutritional supplements, stimulants and peptides. 30 non-user control subjects were selected for the comparison of results. Drug abuse and dependence were also considered in order to establish the characteristics of pess users. The results of male athlete pess users were compared with the controls and it was noticed that the pess users were more problematic regarding the alcohol consumption and drug use. Pess users seemed to use tobacco products, marijuana, psychedelics, bonzai, cocaine, and over the counter drugs. Furthermore, pess users demonstrated a higher emotion- and problem-focused coping, sensation seeking and achievement motivations about alcohol drinking and marijuana use compared to non-pess users. Despite illegal pess does not exhibit a high risk of dependency potential, male athletes abusing such agents may present other problematic and controversial substance-use related behaviors. Most importantly and conspicuously, the pess users reported substance-use showed negative effects on athletic performance. More research studies should be performed on the use of pess in athletes.

Key words: Supplements, Athletes, Illegal Drugs, Abuse, Dependency

O6-INTOXICATION CASES IN ICU: A MEDICOLEGAL APPROACH

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Medical registeries could play an important role in providing basic data on the illnesses and injuries. The frequencies, the causes, the association between the various factors related, the quality of the health care services, etc. have been comprehensively analyzed and evaluated for epidemiology, health management and clinical purposes. This study aims to identify the types and the frequencies of the conditions admitted to the ICU in the Camlica Alman Hospital (Istanbul, Turkey), to specify the intoxication cases which might be suicide. The medical records of all admissions in the Hospital over a 2 year period were reviewed retrospectively. From the hospital's archive, 173 patients admitted to the ICU of Camlica Alman Hospital from Jan 1 2010 to Dec 31, 2012 were reviewed. Diagnoses were classified according to The International Classification of Diseases (ICD) codes. The data was analyzed in SPSS 17.0. The frequencies of the variables were calculated and the correlations were assessed. Intoxications were the most common diseases of the admissions to the ICU (84.4%). Female patients have significantly the higher frequencies of these (70.7%, p \leq 0.05). Particularly 18.5% of the patients were intoxicated by, adverse effect of and underdosing of nonopioid analgesics, antipyretics and antirheumatics. The significant point is that, ten of the patients poisoned by these substances were 1-5 year old children, whereas seven were 16-20 years old. The second common intoxication method is poisoning by, adverse effect of and underdosing of psychotropic drugs (15.6%). Intoxicated patients were transferred directly to the psychiatric units, showing another hint for the suicide attempts ($p \le 0.001$). The outcomes of 173 individuals admitted to the ICU showed that the suicide attempts are one of the common conditions that are treated within the intensive care units (ICU) of the hospitals or health care facilities. Thus the medical registries are also of great importance in forensic sciences in order to analyze the compare the intoxications most of which are intentionally occured, showing suicide attempts. Therefore the ICU clinicians, toxicologists, forensic scientists, pharmacists and even clinical psychologists have to work in a multidisciplinary approach to identify the situation, provide data and suggest a model to the policy makers for minimizing the intentional intoxications.

Key words: intensive care unit, intoxication, suicide, Turkey

CRIMINALISTICS / FORENSIC GENETICS

'EMERGING NEW TECHNOLOGIES IN FORENSIC SCIENCES'

R1- Pristine, Challenged, Insulted, Degraded & Touched. How Fast and How Low Can We Go? Reena Roy, PhD

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Since the start of DNA analysis on forensic samples, forensic scientists have been trying to obtain DNA profiles from pristine as well as compromised samples by using the most advanced technology available to them at the time. Although existing methodology allows forensic scientists to obtain highly discriminating DNA profiles from most samples, studies have been performed to enhance the extraction methods and amplification conditions for samples which contain less than the optimal amount of DNA needed for analysis. This research presentation addresses difficulties associated with biological samples that are highly degraded, may contain inhibitors and yield very little or low copy number (LCN) DNA. The focus of this presentation will be on the analysis of nuclear DNA from challenged, degraded, compromised, and environmentally insulted samples containing low template DNA. This research also includes generating DNA profiles from fingerprints developed by a unique method.

R2- Forensic DNA Phenotyping - A new tool against crime

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DNA typing used today for forensic purposes targets areas of DNA selected on the basis that no personal information is revealed through this process. When a suspect is available, the DNA profile obtained from the crime scene is compared to that of the suspect and then the suspect is either excluded or not excluded. On the other hand, when a suspect is not available, traditional DNA typing and generation of profiles from crime scene evidence is of limited help. Forensic DNA phenotyping (FDP) refers to the study of areas of DNA that provide information on the external characteristics of a person, such as eye, hair, or skin color. FDP can predict the perpetrator's appearance from traces of DNA recovered from crime scene evidence. It can therefore limit the number of suspects to be subjected to traditional DNA typing and save both time and money in the process of solving a crime. In the current lecture, the new applications of DNA analysis in crime scene investigation, also known as "DNA intelligence", will be presented.

R3- Technology on Trial: A Critical Approach

Sotirios Kalfoglou Leicester University, Department of Criminology, UK

The introduction of scientific methodology to legal issues is a very important progress. The use of technology links crimes and criminals with no doubt and this reduces the need for human testimony that seems to be quite unreliable by its nature. New techniques are introduced continuously to bring the excellence to the system. However the legal system is quite interdisciplinary and when the highly sophisticated scientific outcomes have to be used by non-scientists, a serious issue of interpretation comes out to be problematic. As a matter fact the problem is not the technology, but the way it will be presented to the court and be evaluated. Indeed the transition of new technologies into social settings always creates conflicts, controversies and misunderstandings. Following the adaptation of genetic polymorphism to forensic sciences, continuous advancements in interpretation have been experienced. Probability calculations served as a very important tool for that. However the court did not adapt easily the passage from biological sample to admissible court evidence. Soon DNA technology was introduced and it was believed to be the ultimate solution to all cases. This is partly correct, but as everything that is new, this technology brought its own interpretation difficulties. A serious effort for standardization made the admissibility possible and this technology is easily used today. However science continues to develop and scientists try to reach the best possible results. In this effort, trace amounts of material started to be evaluated and highly mixed samples are individualized today. Together with these advancements, concepts of trace DNA and touch DNA entered the etymology of the court. The legal interpretation of this terminology was not very promising. This time the issue is not the inability but the high ability of science in evidence typing. Science cannot be stopped from development. However at the moment what we have as scientific tool is limited in the sense of interpretation therefore we have to be cautious in the level of convicting people.

Key words: criminalistics, scientific evidence, admissibility of evidence

07- THE MICROBIOLOGICAL FACTORS THAT DECAYING THE BLOODY EVIDENCES

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DNA analysis can not applied to many biological evidence. Because, many evidences don't packaging, collect and store in a suitable environment correctly. We aimed to determine of microorganisms cause to putreficiation on bloody samples and learn role of temperature, kind of packet, waiting period of evidence in decay. We prepared evidence samples using five different surfaces and three packet types then waited the pocket in three temperatures during three period of times. We found that microbial growth increased longer waiting time of pockets. The putrefication is less in one week waited package than four week waited. The most decaying is seen in wall board. After wall comes respectively wood, sponge, fabric and the blade. The most microbiological growth is at 37°°C. The growths in room temperature were at least. The least reproduction have seen in paper envelope. Coagulase-negative Staphylococcus sp., Bacillus sp., Penicillium sp., Bacillus subtilis, S. aureus and E. coli was found during our examinations commonly. We recommend sending evidences to laboratory in short time and sending evidences after desiccation well. Scrapting of the blood helpful than solving by physiological saline. Putting evidences paper envelope useful than packaging in nylon or cloth packet. Finally, we advise that don't conservative the evidences in a refrigatory, carry box etc. because evidence does not dry indoor environment

Key words: Evidence, Blood, Microorganism

O8- IDSNPS ANALYSIS IN FORENSIC CASEWORKS <u>Özlem Bülbül</u>, Tolga Zorlu, Havva Altunçul, Gönül Filoğlu *Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey* <u>ozlembulbul00@gmail.com</u>

Recently DNA markers are being used for individual identification in forensic science based on STRs. It is common in forensic casework to encounter highly degraded DNA samples from a variety of sources and it is not possible to get the whole genotype especially while confronting a highly degraded samples. In these circumstances STRs are prone to fail. A rapidly developing approach for analyzing degraded DNA is the typing of single nucleotide polymorphism (SNPs). SNPs are the smallest unit of mutation (point mutation) which allows for their analysis in degraded samples, but have a low number of alleles present at each mutation point compared with STRs. To overcome this drawback. larger number of IDSNPs (Identification SNPs) need to be examined to get a discriminating potential similar to a minimal number of STRs. This is not a problem due to the abundance of SNPs located within the genome and the potential for automation with numerous analysis techniques. The most common SNP analysis technique used is single base extension. In this study, SNPs were carried out by performing 29plex on previously analyzed forensic casework. Successful results were obtained while interpretation of the peak patterns obtained on the ABI genetic analyzer. With the improvement in detection technology SNP analysis is likely to be easier and more sensitive with the generation of new methods and multiplex systems for a growing array of SNP markers. SNP analysis could have an application in anthropology and legal medicine where samples are ancient and often degraded.

Key words: IDSNPS, DNA, degrade DNA

O9- INTERPRETING THE MIXTURES ON VALIDATION AND EXPERIMENTAL STUDIES

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The profile probability approach presents the probability of the evidentiary DNA profile under a stated hypothesis, this hypothesis emphasized that the DNA profile is sourced from an unrelated person. Thus LR enables full use of the data including different suspects and preferred by most of the analysts. This study presents an assessment of the ability to detect components of mixed DNA samples. In this paper we present a simple approach to the resolution and analysis of mixed STR profiles resulting from the testing of mixed biological stains in forensic casework. For this purpose, DNA extraction was performed with QIAamp DNA Mini Kit. Extracts were amplified in triplicate with AmpFISTR® Identifiler®. In the experimental phase of the study, DNA extracted from mixtures were amplified by using AmpFlSTR® Identifiler®. In order to interpret mixtures, allele peak was designated on first step by calculating the Stutter %, Peak Height Ratios and detection thresholds with GeneMapper® ID-X Software. Then major and minor contributors will be interpreted on LRmix® and GeneMapper® ID-X Software. According to the results the commercially available kit AmpFISTR® Identifiler® can be used to amplify and type STR loci successfully from DNA obtained from human biological specimens. Furthermore, The scientist should consider certain criteria such as the number of peaks at a locus, approximate height of stutter products and peak height ratios of minor /major contributors for determining whether a sample is derived from a single source or from more than one contributor by validating their own laboratories.

Key words: Mixture interpretation, Likelihood Ratio, STR profiling

O10- FORENSIC ASPECT OF GENETIC DISEASES

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Diagnosis and analysis of genetic diseases have vital roles in prognosis and treatment. Failures in any working steps of these types of diseases which are inherited through generations will negatively affect patient' life quality and survival. If genetic diseases are classified in main features these are as follows; inherited metabolic diseases (phenvilketonuria, cystic fibrosis, Williams syndrome etc.), autosomal and gonosomal chromosome diseases, immunogenetical and pharmacogenetical diseases, genetic diseases occuringg after exposure to radiation and chemical agents and non-classical genetic diseases such as genomic imprinting, germinal mosaism, uniparental disomy and mitochondrial inheritage. Misinterpretation in evalution of analysis, failures and indications for relationship and paternity testings; pathological, histological, embriological and cytogenetical evaluations may let victim carry all these to the justice court. It is experienced through case files studied that many malpractise cases not only in clinical issues but also in laboratory analysis part of the mentioned diseases; an increase exists in making the patients' conscious of their rights. Thus it is adviced that experts working in field of genetic counselling should be experienced, careful and picky. Besides instruments in genetic diagnosis centers, academical divisions and laboratories should be calibrated and controlled periodically. All ethical issues about any information belonging to patients' should be kept and only shared with consultant experts. In this study, it is emphasized that any failures or misinterpretation through any type of genetic diseases will cause many problems in patients' life. If there is anything wrong with analysis, diagnosis, treatment of genetic diseases, patient has the right to apply the justice in order to protect their patient rights.

Key words: Genetic diseases, Forensic Sciences, Patient rights

FORENSIC ANTHROPOLOGY / FORENSIC NURSING

Key-Note Speaker Virginia A. Lynch, MSN, RN, FCNS, FAAN, FAAFS forensicns@aol.com

K1- "THE FORENSIC NURSE DEATH INVESTIGATOR AS A MEMBER OF THE MULTIDISCIPLINARY FORENSIC INVESTIGATIVE UNIT"

Death investigation is a complex process, one that involves accurate data collection, communication and documentation. The end of a human life is first a medical concern and secondly, a legal issue. As a science dealing in an objective assessment of death, the investigative process requires a degree of knowledge in human anatomy and physiology, psychology, basic chemistry and physics. A variety of disciplines are essential in order to accurately assess, interpret and correlate the various elements involved in decedent identification, cause and manner of death, support and encouragement to survivors, and to maintain channels of communication with additional investigative personnel.

Members of the multidisciplinary death investigative team have routinely included law enforcement agencies, crime laboratory personnel, and medical examiner and/or coroner (ME/C) investigators. Additional team members, include those specializing in forensic engineering, odontology, anthropology and the behavioral sciences. Forensic nurse death investigators (FNDI) have recently become valued members of death investigative systems and are increasing in many medical examiner jurisdictions. Where a shortage forensic physicians exist in vast rural areas the forensic nurse examiner, trained in death scene investigation, fulfill an important need representing the officiator of death. The educational requisites of the FNDI include specific aspects of each of these various forensic disciplines with which they regularly interface.

Forensic nurse examiners (FNE) in the United States are recognized for their clinical education and experience in the biomedical sciences. The FNE is accomplished in the application of scientific process to objective data collection, evaluation and interpretation of that data, including the implementation of methods essential to the investigation of suspicious deaths. Forensic nursing science requisite skills involve observation, documentation and assessment of objective data, human anatomy and physiology, basic chemistry and biochemistry, microbiology, physics and pharmacology. Familiarity with human psychology in response to both internal and external stressors helps to prepare the FNE for the task of death notification. In addition, an understanding of cultural family systems and available community resources is essential in order to provide direction and support to the bereaved. Thus the FNE is uniquely qualified to fill the role of the forensic death investigator.

Forensic pathologists who employ FNDIs appreciate the educational requirements for an individual to become a licensed healthcare professional as doctors are. Scientific based education and critical thinking skills allow the forensic nurse examiner to recognize and

recover physical and biological evidence with laboratory specification. The ability to identify specific human elements basic to normal physiological and psychological functions across the life span also assist the FNE in the identification of trauma in human remains.

Considering that the majority of all reported ME cases are comprised of natural deaths, the biomedical expertise of the FNDI provides for differentiation between disease process and suspicious deaths with reasonable certainty. One emerging application of the FNE in death investigation is providing postmortem sexual assault examination prior to autopsy. Forensic pathologist and the FBI criminal laboratory find the FNE exceptionally qualified as experts in the evaluation of sexual assault trauma and collection of biological evidence.

A question frequently asked is: What qualifies the Registered Nurse to participate in death scene investigations, postmortem procedures and provide expert witness testimony? To examine the evolution of a forensic specialist in nursing, one must first consider the initial education, which begins as a nurse matriculates through an accredited nursing program. Basic nursing curricula focus on a strong physical and psychological science base, including human anatomy and physiology, chemistry, biology, basic and advanced mathematics, physics, behavioral sciences, and general courses in the fine arts.

The scientific process is applied throughout all aspects of general nursing curricula; the basic sciences are correlated to various body systems and related natural disease. Legal and ethical issues are a major component of each course. Graduates are eligible to apply for licensure examination developed by the *National Council of State Boards of Nursing*. The successful candidate is awarded the designation of Registered Nurse and licensed to practice, independent of physician licensure. At this juncture, nurses with an interest in the forensic sciences seek out accredited forensic nursing science programs.

In recent years, undergraduate, graduate, and postgraduate programs in forensic nursing science have been developed and are continuing to develop across the US and abroad. These programs offer specific forensic curricula in the scientific investigation of injury and death, human abuse, forensic chemistry, crime scene/crime laboratory, forensic photography, toxicology, victimology, traumatology, sexual violence, human rights, psychosocial and legal aspects of forensic science, among others. Advanced forensic nursing curricula pursues pathophysiology, research, epidemiology, consulting, curriculum design and informatics. As generally happens, the greater desire for knowledge promotes higher academic goals. To date, four accredited United States universities offer doctorate level forensic nursing degrees. As principle research investigators and associates to forensic pathologists, it is believed that future advance practice forensic nurse examiners will assist in alleviating a global shortage in competent forensic services pertaining to the scientific investigation of death.

In tribute to the AAFS, forensic nursing was first recognized as a scientific discipline at the 43rd annual meeting in 1991 (Anaheim, California). The International Association of Forensic Nurses (IAFN), patterned after the AAFS, was founded in 1992. In 1995 the American Nurses Association (ANA) Congress of Nursing Practice bestowed formal

recognition to forensic nursing as an official nursing specialty, and in 1997, the IAFN published the **Scope and Standards of Forensic Nursing Practice** in conjunction with the ANA. IAFN board certification for the forensic nurse examiner in both adult and pediatric sexual assault examination and evaluation was implemented in 2001. Development of specific standards and national certification in biomedical investigation for the Forensic Nurse Death Investigator is currently in progress through the IAFN. This certification will include professional standards in postmortem sexual assault examination for those who practice in this field.

The utilization of the FNDI provides competent individuals skilled in the biomedical investigation of death. Where perpetrator prosecution may be indicated, successful resolution to questioned death related issues instills confidence in the health and justice systems and contributes to community mental health through social justice. This workshop will address the development of forensic nursing education programs, certification examination, role clarification, investigative case management, and multidisciplinary team relationships. Case examples are presented in which the FNDI's biomedical skills benefit the forensic pathologist in the analysis of fatal injuries and medical deaths. An overview of the foremost FNDI investigative program in the US will address the North Carolina Medical Examiners Investigative Unit comprised exclusively of Forensic Nurse Death Investigators whose title is District Medical Examiner. Discussion of the unlimited potential for FNDIs in developed and developing countries is previewed with data related to existing programs and those currently developing.

Key words: Death Investigation; Forensic Nurse Death Investigator (FNDI); Forensic Nurse Examiner (FNE); Forensic Nursing Science (FNS).

R4- Hospital-Based Child Protection Centers in Turkey

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The University Based Child Protection Center (UBCPC) aims to provide cooperation and coordination between the relevant departments within Marmara University School of Medicine. The centre provides an environment to identify, treat, protect and follow up on children who are in need of protection or who are being involved in crime; the centre also carries out the necessary implementations. UBCPC were founded in 8 universities of different provinces in Turkey from 2006 to 2012.

Child Protection Unit (CPU) works to protect children who apply to Marmara University Hospital, who are in need of protection or who are being involved in crime; the centre evaluates, identifies, treats, protects and follows up on these children.

The main departments involved are pediatric health and diseases, pediatric surgery, pediatric psychiatry, and forensic medicine. In addition to medical doctors, two psychologists, one nurse are working at the centre. All staff in the centre meets to discuss cases in team work within time periods.

The unit is decorated child friendly at a silent place of hospital. The unit contains an archieve room, a nurse/examination room, a meeting room, a waiting room, an interview room, a monitoring room, a psychologist room, a physician room and a secretary room. The waiting room contains game place and visual materials which is interesting child. A video camera and an audio system is mounted on the roof recording interview. The interview room is seperated from monitor room with a glass and mirror partition. The reports and all data are kept in the archieve room safely.

Approximately, 250 to 300 child sexual abuse and 80 serious neglect and/or physical abuse cases are evaluated at the centre annually.

O11- MORPHOLOGIC AND OSTEOMETRIC ASSESSMENT OF SEX FROM THE SKULL IN YONCATEPE POPULATION

Ayşe Acar

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Both forensic and archaeological sciences use metric and morphologic analysis of human skeletal remains for sex estimation of unknown individuals. Sex determination is the vital part of identification in forensic science. When the pelvis is unvaliable the skull is considered the second best indicator of sex. Morphological features and metric difference on sex determination are significant for adults. The purpose of this study was to apply morphologic and metric techniques on sex assessment from cranial dimensions. The study was done on human remains found in 6 tombs of Yoncatepe site (Van/Turkey) excaveted between 1998-1999. Morphological and metric techniques are used to determine sex by the skull. A total of 29 standard cranial measurements were taken from 11 male and 6 female skeletons in the population of Yoncatepe whose sex, age and demographic information were previously unknown. The measurements did not include adolescent skeletons. The measurements were taken in mm with a digital and sliding calipers and steel tape. The mean, minimum, maximum and standard deviation were calculated. Since the skeletal remains of archaeological series are very often poorly preserved and fragmentary, commingled numbers were measured from a number of bones of a number of skeletons. As a result all of the cranial dimensions were larger in males than females. The majority of males have narrow cranial structure. Both males and females have medium frontal width.

Key words: Skull, Assessment of sex, Yoncatepe Population

O12- DISCUSSION OF "RACE" IN FORENSIC ANTHROPOLOGY Özge Ünlütürk *Ministry of Justice, The Council of Forensic Medicine, Istanbul, Turkey* ozgeunluturk@gmail.com

Starting to develop in the 19th century, the science of anthropology has attempted to classify under races, groups having a certain physical characteristics, based on the phenotype characteristics of humans. However the concept of "race" has taken on a disgraceful meaning as cultural heritage always evolves much more rapidly than genetic heritage. With the development of colonialism, the first characteristic for the West that drew attention, of those others different from itself, namely the color of the skin, has been used as the first "scientific" criterion in this classification. In time this criterion became insufficient when compared with different societies, and other criteria were added. As these were also insufficient, genotype features were included in the classification and more than 50 races have been defined in this process. Races no longer have any validity in a biologic sense and have become categories constructed culturally. However as we enter the 21st century, developing forensic anthropology has once again headed towards research unique to inter-society differences. Classifications based on anthropometric measurements and morphologic differences remain valid in the field of forensic anthropology, despite all kinds of discussions. The aim of this presentation is; to discuss the current validity of the concept of "race" through a literature survey and following a brief examination of the conditions under which the concept was shaped; to discuss the criteria of this classification especially for positive identification in forensic anthropology and also to discuss which of the concepts such as race, ancestry, related to identification, should be included in the literature.

Key words: Forensic anthropology, race, ancestry affinity, morphologic differences

O13- RIB HISTOMORPHOMETRY AND SAMPLING ERROR: A PILOT STUDY Julieta G. Garcia-Donas¹, <u>Despoina Nathena²</u>, Manolis Michalodimitrakis², Elena F. Kranioti¹

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Bone histology has long been acknowledged as a valid method in age estimation of highly fragmented human remains. Most people have suggested methods based on the middle third of the sixth or the forth rib however is not very clear what is the margin of error when the sampling site is different. This pilot study aims to address this question. The sample used in this study consists of 6 complete left 4th ribs of known age (19-58vo) from the Cretan collection. The ribs were cut into 6 equal segments. A thin section was acquired from each segment. Four variables were calculated (cortical area, intact and fragmented osteon density and osteon population density) and age was estimated for each section according to Stout & Paine (1992) and Stout et al. (1994). Both equations underestimated age in all samples. The Stout et al. (1994) estimate was closer to the real age exhibiting, however, a larger error compared to the reported one. Independently of the fact that the equations classified almost all individuals as subadults the difference on the estimates based on the different segments (proximal, middle and distal third) were very similar. This pilot study suggests a) there is a need for population specific equations for the Greeks as the existing formulae have a high degree of underestimation b) the sampling site does not seem to affect significantly the estimate which means that any recovered fragment should be used. More research should be done to verify these preliminary results.

Key words: Histomorphometry, Age Estimation, Forensic Anthropology

O14- DENTAL ARCH AND SIZES VARIATIONS IN TURKISH MALES AND FEMALES Feryal Karaman, M. Yaşar İşcan

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One of the least studied aspects of human sexual dimorphism is the size variation in the mandible. Yet this feature has played an important role in both forensic anthropology and human evolution. The purpose of this paper is to examine these differences between the arches and dental dimensions in the mandible. To assess these characteristics an attempt is made to take 9 odontometric mandibular dimensions including length (defined as mesiodistal dimension - M1 to M2 length) and mandibular (P1 to P2) breadth in a contemporary Turkish sample. The t-test is used to analyze 83 males and 81 females. Only those dimensions that showed statistically significant are further analyzed. Results indicate that the mean age is 20 years for both sexes. Six out of nine dimensions are statistically greater in males. Explanation for this sexual dimorphism in the mandible may require a better understanding of population characteristics from which samples drive from diet, environment and genetics. Statistical analyses suggest that there are differences between the sexes in dental arch sizes. A similar study carried out by Scandinavien scientists (Lindsten et al. 2002) using mixed dentition. They have considered diet, orthodontic problems, carries, extraction and others explaining the apparent differences. To some extend similar observation is made in the present study. While dental size and arch dimensions differ between sexes. It is anticipated that future work will take into account sexual dimorphism by means of bony dimensions of the mandible in addition to dental size itself.

Key words: Dental arch, arch dimensions, multiple dental length, sexual differences

O15- FORENSIC NURSING EDUCATION IN TURKEY

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Forensic nursing education is recently considered within the curriculum of the undergraduate studies. In a preliminary survey we concluded that only 3 out of 21 nursing programs give the coise for a forensic nursing course. 86 % of the students graduate with no knowledge of forensic sciences whatsoever and they are expected to learn the practical aspects in ER surgery or gynaecology departments. Known the fact that, the number of the academics in the field is very limited we wanted to find out the course content and the degree of student awareness by a survey. We prepared a questioner which we gave to 90 fourth year students that took a related course and a control group that never did. Following questions information we asked question about the course and the instructor. We concluded that the courses are not instructed by forensic nurses, it is generally elected 40% of the students find the course duration inadequate whereas 36% of them believe that the course content was relevant and interesting. Most of them believe that they have to enhance their knowledge by either certificate programs or graduate studies

Key words: nursing program, forensic nursing, forensic nursing education, Turkey

O16- THE DEGREE OF AWARENESS ON FORENSIC NURSING AMONG PRACTICING NURSES

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Forensic nursing science is a developing discipline, very helpful for the issues in legal medicine. Although the first academic work in Turkey has been published in 1997, unfortunately the discipline did not achieve the expected level of application and appreciation. Nurses in our country are involved in the legal issues, they practice forensic nursing but certainly they are not aware of this fact. In this study we aimed to define the level of awareness of the nurses and the close environment in the field as for the forensic issues. Apart from nurses we included doctors in the health care facilities, health care managers, and the police in the hospitals as well as the paramedics in ambulance. We primarily included the ER, surgery and gynecology departments in the study. The basic aim was to understand what nurses know and how much the system uses the nurses in that aspect. We prepared a questionnaire that included socio-demographic as well as educational information together with forensic science issues. The validation and the pilot study of the questioner were done in two university hospitals by 37 nurses and 10 doctors. We included private, university and state hospitals to the survey. The overall number of the nurses included to this point is 148. The preliminary outcomes of the study show that the nurses are not informed about forensic sciences in none of the educational levels of their life. The information that they have comes from personal experience. The older nurses are even more conservative about the subject and they do not want to be involved scaring from the probable responsibility that will be added to their present roles. They are not in a position to understand that they are already involved to that just by performing in an ER unit. There is 100% lack of standardization as to the tackling of forensic issue in the hospitals. Doctors themselves do not know how they can use the nurses once they actually they do not know what is the meaning of preservation of evidence. It is evident that awareness rising is essential not only to the nurses but to the health care system as a total.

Key words: Forensic nursing awareness, health care system, Turkey

O17- A CONCEPTUAL INQUISITION ON SEXUAL CRIMES Sinan Çaya *Marmara University, Faculty of Engineering, Istanbul, Turkey* sinan.caya@gmail.com

In this article; the starting point comprises the general philosophy of sexuality. In this light, sexual crimes are taken into consideration. Rape seems to be the most common type of sexual crimes. The topic of sexual offences (milder crimes) in the legal framework is further developed. While a general survey is preferred, peculiarities due to Turkey as a separate country with its own cultural history, are also alluded to in appropriate places, along the course of debates.

Key words: Crime, offence, deviance, sexuality

O18- EVALUATING CHILD NEGLECT AND ABUSE AWARENESS OF PARENTS Funda Ayra, Oğuz Özyaral

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Convention on the rights of the children was unanimously adopted at the General Assembly of the United Nations on November 20, 1989. The Convention is an international agreement, which is adopted by all countries and primarily targets highest possible benefit of all children. This study primarily aimed to reveal out child abuse awareness level of the parents. The study also aimed to make family members know what they accidentally or consciously do to improve and influence health (physical, mental, social) and development of the child in the communication / interaction with the child and to establish education & training programs to support and enhance the awareness. Data of the study was collected with survey forms applied to parents of students attending to privately owned schools at Kadıköy district of Istanbul (Anatolian Side), one privately owned school in Florya District of Istanbul (European Side) and one state primary education school at Gaziantep. The study population, including 82 mothers and 66 fathers, was randomly sampled. Parents filled in 15-item "Child Abuse Awareness Level of Parents Scale" survey form, which is prepared by the investigator based on a preliminary study (the focus group). Study data was analyzed with SPSS statistical software pack (v.11.5). Based on answers given by parents, attempts are made to conclude whether behaviors of parents include approaches, which influence physical, emotional and mental development of the child. The item "The child frequently complaining about the mother and the father is suggestive of child neglect" was refused by 54.9% of the mothers (n: 45) and 62.1% of the fathers (n: 41). This figure thought-provoking in terms of parents' educational views and their perspective on the children. It is found that parents act more responsibly and consciously, when educational level increases. The violent behaviors are not approved, even if they aim training. In conclusion, the study revealed out significance and necessity of informing and increasing awareness of family members on child neglect and abuse.

Key words: Child development, child neglect and abuse, parent, training, awareness, child health

O19- CREMATION OF HUMAN BONES IN FORENSIC CONTEXT Bahar Mergen University of Bitlis Eren, Department of Archaeology, Bitlis, Turkey

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The burning is a deteriorate process in the macro and microstructure of the bones which smash into pieces in great deal. It is a kind of taphonomy occures in both premortem and postmortem inerval of death. The experimental, descriptive and actualistic studies done showed that the bone was already dried when exposed to fire, fissuring and twisting would probably be negiligle and less calcination could be observed. The purpose of the study is to analyze an temporal of adult male burned bone expose to heat in a forensic context. The bone material was unhearthed from a grave which is dated to the classical ages from Enez, Edirne, Turkey. It is temporal part of skull belongs to adult male. The dehydration, decomposition, inversion and fusion are currently describe the stages of heat process. Though macroscopic analysis it has found out that the changes burning of the bone occured about 285-525"C. Calcination is not observed and less fussiring is noted. The heat induced changes could be categorised in different groups and the temperature could be reliable for predicting these changes. In fact the typical influences become recognizable rather than being dismissed as a confusing mass of data in a forensic case.

Key words: Enez, burning, human, bone, heat

GENERAL

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K2- "FORENSIC SCIENCE EDUCATION FROM A DIGITAL AND INTERNATIONALISED LENS"

In a digital and internationalised world, forensic science cannot escape the effective integration of ICT across its education, training programs, and everyday practice. The effective use of ICT goes beyond the use of technology to conduct the "know how" forensic transactions. Forensic science educators and practitioners are expected to employ ICT to promote understandings and share experiences around the "know why" scientific concepts underpinning the forensic transactions of ICT to prompt sharing of forensic science knowledge, exemplars, and experiences. This presentation will showcase examples on how ICT can be effectively employed in forensic science education and everyday practice to prompt essential forensic science skills: communication skills, problem solving, and critical thinking. The presentation will conclude by exploring examples on how ICT can promote intercultural and cross-cultural forensic skills in a globalised connected world.

O20- SOME CRIMINOGENIC FACTORS OF HUMAN TRAFFICKING BASED ON COURT DECISIONS FOR THE PERIOD OF 2001-2005 IN ALBANIA Alma Nushi, Naim Tota, Arben Lloja *Kristal University, Albania* nushialma@yahoo.com

Criminal Etiology or the factors onto criminality have to do with the resources, knowledge, roots and the criminality's defining circumstances of human trafficking. These issues are studied and analyzed by criminal etiology, which has been considered until lately as the main part of criminology. Criminal Etiology or the felonious factors are considered as an important section in studies and researches onto human trafficking criminality. Criminal Etiology analyses and studies cause connections between circumstances and different factors, and human trafficking criminality. In this study, through criminal etiology have been studied and researched the causes and the circumstances that deal with all the criminal behaviors and other occurrences in the society; i.e. the objective and subjective factors which are involved in recognizing, defining and analyzing the criminality's factors, causes, resources and roots within a country. Sexual exploitation trafficking remains the widest category that compounds this crime, for the simplest reason that this kind of service will always generate the biggest incomes for the traffic dealers. While the other trafficking means such as; becoming part of a criminal network and organ donating continue to rise, the fact remains that exploiting a young female and children in the sex industry in the richest countries, generates much more incomes than exploiting human beings as working labor or an instant full payment of removing a kidney. This study consists of answering the question which is always asked when discussing about human beings' criminality "Why do crimes occur and what are the reasons and feature causes of human beings' criminality in Tirana during the period from 2001 to 2005.

Key words: human beings' trafficking, traffic dealers, victim, felonious factors (push-factors, pull-factors, objective, subjective), character, temper, motives, etc.

O21- IN THE PRIME MINISTERIAL STATE ARCHIVES THERE ARE SEVERAL DOCUMENTS RELATING TO THE ILLEGAL TRAFFIC IN ANTIQUE ARTEFACTS Zeynep Emel Ekim *Mimar Sinan University, Institute of Social Sciences, Istanbul, Turkey* zeynepemelekim@gmail.com

Regulations for the protection and preservation of cultural and natural treasures under the Ottoman Empire were initiated in 1874 by the implementation of what was known as Asar- 1 Attika Nizamnamesi. In 1914 a second step followed with the implementation of Muhazafa- i Abidat Nizamnamesi. Further efforts under the Turkish Republic to solve the problems connected with antiques smuggling resulted in laws and regulations passed in 1951, 1973, 1983 and 2004. During the course of my researches in the Prime Ministerial Ottoman Archives, I discovered some documents from the years between 1902 and 1914 which demonstrated the implementation of procedures against the smuggling of antiques. The examples I list here cover the following: Legal procedures carried out against specific persons engaged in such smuggling; precautions to prevent artefacts found on Ottoman soil from being smuggled out to Europe following the denunciation of such people; precautions agains t the smuggling of ancient artefacts; a ban on unauthorized excavation of any kind in places where such artefacts had been found; and, finally, authorization to hand over to the judiciary anyone found engaging in such activities. I present these documents to show the incidence of antiques smuggling in the past and the regulations in force against it, and to see what kind of an evaluation can be arrived at from such information.

Key words: Ottoman State, Smuggling of Antique Artefacts, Documents, Law and Regulations

O22- FORENSIC INTERPRETATION/TRANSLATION IN TURKEY Ümit Türe Yeni Yüzyıl University, Department of Interpretation and Translation, Istanbul, Turkey umit.ture@yeniyuzyil.edu.tr

Translation and interpretation are of high importance in international or multinational crime cases, where rendering testimonies, evidences or questionable documents is sometimes key to solution. From this point of view, court room interpreting and forensic translation—examined as a subfield of forensic linguistics—get on the stage. There are numerous factors that are influential on this process such as register, terminology, culture-bound problems, etc. Taking into consideration all these factors, the main purpose of this paper is to examine in detail the translation process regarding the specific regulations to manage the process, training programs to prepare the translators for the process and certification system to authorize the translators. All these three factors will be examined to see how the process functions in Turkey. However, bearing in mind the amendments in Turkish legal system in the process of EU accession, these factors will also be examined in European countries, especially in Germany and Switzerland as our legal systems resembles those of the mentioned countries. The present system has some defects regarding the reliability of these translations, and these problems sometimes appear on news. Some of these examples will also be included in this study to illustrate the possible system-bound problems. In conclusion, this analysis will provide concrete data to compare Turkish system, and a draft to resolve problematic issues in Turkish court room interpreting system.

Key words: Court room interpreting, forensic translation

O23- CYBERCRIME VICTIMS Vehbi Morina University FAMA – Gjilan Kosovo morinavehbi@gmail.com

The aim of this study is searching of internet impact at a global level, causing cybercrime victims. Through a general glance, based on the development of this phenomenon from 2005 until now. This specific research it's designed based on the findings and evidences of criminal offenses of computer crimes. The data show that the impact of internet is almost basic for growing of the kind of crime. Based on the findings it is suggested on rising awareness of minors and adults for its consequences that causes cybercrime. It is suggested to justice authorities to handle these cases in the best possible way that they can to prevent this phenomenon.

Key words: computer crime, internet, impact, victimization

O24- THE STORY OF A BOOKLET-WRITING BY A YOUNG ACADEMICIAN AT A LEGAL MEDICINE CHAIR Sinan Çaya *Marmara University, Faculty of Engineering, Istanbul, Turkey* <u>sinan.caya@gmail.com</u>

This article is basically the story of the writing process of a booklet on toxicology at the legal medicine department of a faculty of medicine. With a view to postmodernist considerations; the article depicts which motives may drive a young individual in his attempts to realize a scientific activity while it also verifies that scientific interests are of a selective nature and are closely related to personality and former life experiences. At the end of the article the mentioned toxicology booklet is also roughly introduced.

Key words: Legal Medicine, poison, poisonous, toxicology, scientific curiosity

O25- THEORIES ON COLLECTIVE INFRACTION

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This review article derives on an article containing thorough information on psychosocio-criminological theories about mass criminal activities or collective misdemeanor; as compiled and formulated by a Turkish scholar and (now retired) supreme judge; *Sami Selçuk*. The valuable work got published in French, in the journal of the Department of Political Science of Ankara University. Related views of *Sighele*, *Tarde*, *Le Bon*, *Mac Dougall*, *Freud*, *Jung*, *Adler*, *Espina* and *Reiwald* are considered in some detail. Sociological approaches by *Geiger*, *Kautsky*, *Lippman*, *Dewey*, *Allport* and above all *Durkheim* are also highlighted concisely. Even prominent classical crime-novelists' names are not neglected to be cited at the end of the text.

Key words: Crime; criminality; infraction; culpability; collectivity; crowd; mass; mob; throng; society; individual

O26- ASSISTED REPRODUCTION TREATMENT (ART) SERVICES IN TURKEY, LEGAL REGULATIONS AND ETHICAL ASPECTS Tevfik Yoldemir

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The initial legislation introduced in 1987, entitled 'By-law on Centres for Assisted Procreation' was superseded by the 'By-Law Concerning Treatment Centres for Assisted Procreation' on 19 November 1996. This legislation detailing definitions, prohibitions and all necessary requirements for assisted reproductive practice was subsequently updated a further four times -twice in January 1998, once in March 2001 and once in July 2005. Later in March 2010 a new version of the regulations, the 'Legislation Concerning Assisted Reproduction Treatment Practices and Centres' was introduced. This latest version gives insight to the changes in the way assisted reproduction is practised in Turkey. The legislation provides the following definition for 'Assisted Reproduction Treatments': Procedures, accepted as treatment methods by modern medicine, which involve assisting the fertilization of the prospective mother's egg with her husband's sperm in various ways, enabling them to fertilize outside of the body when necessary, and transferring the gametes or the embryo back to the prospective mother's genital. Apart from this statement, until the amendments of 2010, neither the assisted reproduction legislation nor any other item in Turkish law specifically addressed the use of donor spermatozoa, donor eggs or surrogacy, nor made any provisions for penalties or consequences for engaging in such activities. However, the 2010 version of the legislation, alongside a range of other restrictions to assisted-reproductive-technology practice, also contains three new items specifically related to this matter. Following item 18.4 which outlines the prohibitions on all third-party reproductive assistance, item 18.5 sets out the legal ramifications that will result if third-party assisted reproduction is practised by a Turkish clinic. According to the article 231 of the Turkish Penal Code, it is illegal to change or obscure a child's ancestry, with a punishment of 1-3 years of imprisonment.

FORENSIC PATHOLOGY

O27- FORENSIC AUTOPSY- A RELIABLE CLINICAL AUDIT TOOL Beatrice Ioan¹, Marius Neagu¹, Andreea-Irina Ion¹, Teodora Alexa² ¹Gr. T. Popa University of Medicine and Pharmacy, Institute of Forensic Medicine, Iasi, Romania ²Gr. T. Popa University of Medicine and Pharmacy, Regional Institute of Oncology, Iasi, Romania ioanbml@yahoo.com

The autopsy rate has sharply declined worldwide during the last decades mainly due to the progress in diagnosis of diseases. However, discrepancies between the clinical diagnosis and the diagnosis established after performing the autopsy still exist and have remained relatively constant over the last 50 years. The decreasing autopsy rate is also the result of other causes such as the financial constraints or the physicians' fear of legal consequences if a wrong diagnosis is proved. In this paper the authors present the results of a retrospective study which aimed to identify the concordance rate between the cause of death established in the hospital and the cause of death established after performing the forensic autopsy and to determine the factors that could influence the concordance rate. The sample included 280 patients who died in hospital and underwent the forensic autopsy according to Romanian legislation. The results revealed a concordance of 37,1% and a total discordance of 5.4%. The factors that influenced the rate of concordance are: duration of hospitalization, inter-clinic consultation, mechanism of death, laboratory and imagery investigations, and the clinic where the patients had died. The main conclusion of this study was that autopsy remains an essential tool for assessing the quality of care, which can highlight faulty aspects in the clinical investigation of the cases and also the vulnerability points of medical practice.

Key words: autopsy, cause of death, clinical diagnosis, concordance

O28- AUTOEROTIC ASPHYXIA: A CASE REPORT AND REVIEW OF THE LITERATURE Mylonakis Panagiotis¹, Tsalikidis Christoforos², Zagelidou Eleni¹

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The authors present a typical case of autoerotic asphyxia first mistaken by the law enforcement personnel that reached the scene of death as a case of suicide, despite the presence of abundant pornographic material and other sexual paraphernalia. The case report is followed by brief review of the literature. The death scene investigation and autopsy findings were used to determine the cause and manner of death of a 32-year-old male found hanged in his bedroom. Crucial findings on the scene of death such as pornographic material, women's lingerie and drugs, were particularly taken into account. The decedent's cause of death was attributed to cerebral anoxia due to hanging and the manner of death was classified as accidental. Hypoxyphilia is a paraphilia which is a subcategory of sexual masochism, also known by terms such as asphyxiophilia and autoerotic or sexual asphyxia. This potentially lethal sexual practice refers to sexual arousal that is produced while reducing the oxygen supply to the brain. Self-hanging is the most common method observed among fatal cases. This practice is intended to induce sexual pleasure and practitioners are usually aware of the risk that they could lose consciousness. Because of that, the individual is usually careful to use some kind of safety mechanism intended to prevent accidental death in the event of unconsciousness.

Key words: Autoerotic asphyxia, hypoxyphilia, cerebral anoxia, pornographic material, drugs.

O29- PARADOXICAL UNDRESSING AND TERMINAL BURROWING (HIDE AND DIE SYNDROME): ANALYSIS OF FOUR CASES INCLUDING HYPOTHERMIA OR CEREBRAL INJURY

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The authors present four cases of paradoxical undressing accompanied or not, by terminal burrowing behavior. While these phenomena seem to be strictly associated to hypothermia, two of the reported cases concern a death due to craniocerebral injury and another one due to encephalitis. Four different cases that presented with paradoxical undressing and were accompanied or not, by terminal burrowing behavior (hide and die syndrome) were analyzed concerning the cause and manner of death. Photographs from the death scenes together with autopsy, toxicology and histopathology findings were taken into account. The review of the literature associates paradoxical undressing and terminal burrowing behavior strictly to cases of hypothermia or other pathology due to which hypothermia has been induced, such as intoxication, drowning and chronic neurological or cognitive disease. For the first time the aforementioned phenomena are attributed directly to cerebral injury due to craniocerebral trauma or encephalitis.

Key words: Paradoxical undressing, hide and die syndrome, hypothermia, craniocerebral trauma, encephalitis

O30- MEDICOLEGAL CHARACTERISTICS IN HOMICIDES CASES IN ALBANIA DURING 2008 – 2018

<u>Bledar Xhemali</u>, Zija Ismaili, Admir Sinamati, Linda Matua, Mirnela Cinije, Blerim Peli *Institute of Forensic Medicine, Tirana, Albania* xhemalibledar@yahoo.com

Homicide it is a problematic issue in Albania as well as in all over the world. It is conditioned by different situation in the society. The aim of this study is to analyze the medico legal characteristics, frequency and other significant features related to this topic. A total number of 254 full autopsies in homicides cases were performed; according to that determination of the type of tool (fire arms, knife, sharp tools and explosives) used to cause death, ratio of male female subjects, age of the subjects, type of tissues deterioration, mechanism of death and laboratory (histological, toxicological and biological) examinations has been done. From the total amount of performed autopsies the fire arms were the most used tools of homicides and during the period of time taken under consideration there is an increment of cases. The group age 31 - 40 years old was has the highest number of homicide's subjects during the whole period taken under consideration. The most deteriorated tissue was brain, and among this period of time the number of male persons is higher than females (41 female, 213 male subjects). In most cases the cause of death has been traumatic hemorrhagic shock. This study shows an investigation of medico legal characteristics in homicide cases. The study doesn't reveal any increasing trends in the number of homicides. The fire arms tend to have an increasing trend, if we compare from the first year to the last one (exception does 2011 where the fire arms case's number is lower).

Key words: homicide, fire arms, explosive, knife, tissues deterioration, cause of death

O31- STUDY OF SUICIDES IN CUSTODY ROOM OF DRUG ADDICTED SUBJECTS – AN EMERGING PHENOMENON Zija Ismaili, Bledar Xhemali, Linda Matua, Fatos Sinani Institute of Forensic Medicine, Tirana, Albania ismailizija@gmail.com

The suicides in custody room of drug addicted subjects are an emerging phenomeno in Albania. One of the causes of the phenomenon is the isolation of drug addicted subjects. The aim of this paper is to sensitize the legislative to make changes in the law for illicit drugs artc 283 for narcotic substances from arrest in jail or custody room in detoxification centers, in order to avoid these kinds of fatalities. K.B a 27 years old male was found dead in the custody room in the department of Police. Apparently the young men had hanged himself. The subject was known from the policeman as drug addict and he also was condemned earlier for burglary. The policemen that has him under custody in the department pretended that the victim was still alive when arrived in the hospital, from the custody room and they had hidden the tool (the joggers) of hanging. A total autopsy was performed in the morgue. The autopsy revealed no signs of head bones deterioration. Medico legal diagnosis: mechanical asphyxia from the neck pressure with loop, mechanical asphyxia due to pressure of the neck with loop. The toxicological analysis revealed no presence of poisons (organophosphates, phostoxyn os organoclorinate substances) no presence of ethylic alcohol. In urine samples were detected opiate metabolites and benzodiazepines. Subjects dependent from drugs tend to commit penal offenses like burglary, mug, drug deals etc. From forensic point of view, drug addicted subjects are intoxicated and are in need of specialized medical help. The clinical symptoms during the abstinence are different, but the most principal one are anxiety and depression. In this condition these subjects when isolated have a high risk of attempts and committing suicide, this is the reason that isolation can bring to fatal episodes.

ENVIRONMENTAL FORENSICS

Key - Note Speaker Georges Kremlis Head of Unit in the Directorate General Environment Unit D1 "Enforcement, Cohesion policy and European Semester" European Commission Georges.Kremlis@ec.europa.eu

K3- "ENVIRONMENT AND HEALTH"

The Treaty on the functioning of the European Union (EU) stipulates in Article 191.1 that the policy of the EU on the environment shall contribute to the achievement of the following objectives:

- preserving, protecting and improving the quality of the environment,

- protecting human health,

- prudent and rational utilisation of the natural resources,

-promoting measures at international level to deal with regional or worldwide environmental problems, and in particular combating climate change.

According to Article 4.2 of the above Treaty, the shared competences between the Union and its Member States concern the following main areas:

••••

e) environment;

••••

k) common safety concerns in public health matters, for the aspects defined in this Treaty.

Thanks to Article 11 of the Treaty, the environment is a key horizontal policy of the EU: Environmental protection requirements must be integrated into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development.

Therefore, the environmental requirements are integrated in the public health policy of the EU (Article 168) as well. Reciprocally, Article 168.1 states that in the definition and implementation of all the policies and activities of the EU, "a high level of human health protection shall be ensured", introducing thus a similar, health this time, integration principle. The action of the EU in the public health - which complements the national policies - aims, inter alia, to the improvement of public health and the prevention of physical ... illness and diseases, and obviating sources of danger to physical...health". The 7th Environmental Action Programme (EAP) to 2020, entitled "Living well, within the limits of our planet" establishes a list of actions and priorities among which several are linked to the quality of life and wellbeing of the citizens thanks to a clean and healthy environment. It is interesting to read in that respect recital 25 of the decision establishing

the 7th EAP: "environmental problems and impacts continue to pose significant risks for human health and wellbeing, whereas measures to improve the state of the environment can be beneficial".

Indeed, the assessment of the 6th EAP has showed that unsustainable trends still persist in all four priority areas of that programme: climate change, biodiversity, environment and health, sustainable use of natural resources and management of waste. There is well established scientific evidence that a polluted environment can have strong health implications for the local populations but also in some cases transboundary ones that can affect populations in neighbouring countries, e.g. red mud accident, Chernobyl, etc. A WHO report, entitled "Capacity building in Environment and Health project" (Regional Office for Europe, 2013), explains that many European countries face great challenges in environment and health (EH). It estimates that in the European region well-tested EH interventions could reduce total death by almost 20%. The range of disability-adjusted years of life lost varies up to fourfold across this Region. The lowest levels of risks are found in northern and western European countries, while high risk levels are reported for some countries of Eastern Europe. The said WHO capacity building project provides continuous training in environment and health to further qualify environmental and health experts and with regular replication to allow access to new students/participants. (http://www.euro.who.int/en/health-topics/environment-and-health/health-impactassessment/publications/2013/continuous-training-in-environment-and-health-capacitybuilding-in-environment-and-health-cbeh-project).

In addition to this report, the 7th EAP foresees a dedicated priority objective which identifies the problems and proposes actions: *Priority objective 3: To safeguard EU citizens from environment-related pressures and risks to health and wellbeing; according to point 44,* EU environment legislation has delivered significant benefits for the health and wellbeing of the public. However, water, air pollution and chemicals remain among the general public's top environmental concerns in the EU. The WHO estimates that environmental stressors are responsible for between 15 and 20 % of all deaths in 53 European countries. According to the OECD, urban air pollution is set to become the primary environmental cause of mortality worldwide by 2050.

All the actions of the programme have a health dimension, as improving the environment has a causal link to human health. Nevertheless the Decision of the EAP clearly refers to human health in some parts of it. For example recital 15 refers to the agreement to "achieve levels of air quality that do not give rise to significant negative impacts on and risks to human health and the environment". Air pollution is indeed the highest factor of mortality. Recital 16 requires "that chemicals are used and produced in ways that lead to the minimisation of significant adverse effects on human health and the environment", whereas recital 17 refers to the protection ... "of human health by preventing or reducing the adverse impacts of the generation and management of waste..." The Decision in its turn stipulates in Article 2 (c) among the objectives to be attained: "to safeguard the Union's citizens from environment-related pressures and risks to health and well-being".

The priority objective 3, mentioned above identifies also the following:

45. A substantial proportion of the EU's population remains exposed to levels of air pollution, including indoor air pollution, exceeding WHO recommended standards... Action is especially needed in areas where people, particularly sensitive or vulnerable groups of society, and ecosystems are exposed to high levels of pollutants, such as in cities or in buildings.

46. Access to water of satisfactory quality remains problematic in a number of rural areas in the EU, while ensuring the good quality of Europe's bathing waters benefits both human health and the EU's tourism industry. Adverse consequences of floods and drought for human health and economic activity are being experienced more frequently, partly due to changes to the hydrological cycle and land use.

47. The failure to fully implement existing policy is preventing the EU from achieving adequate air and water quality standards. The EU will update targets in line with the latest science and more actively seek to ensure synergies with other policy objectives in areas such as climate change, biodiversity and the marine and terrestrial environment. For example, reducing certain air pollutants can make an important contribution to climate mitigation. Further work in this direction will be informed by a comprehensive review of EU air quality legislation and by the implementation of the Blueprint to Safeguard Europe's Water Resources.

48. Tackling pollution at source remains a priority and the implementation of the Industrial Emissions Directive will further reduce emissions from major industrial sectors. Achieving the goals set out in the Roadmap to a Single European Transport Area will also lead to more sustainable mobility in the EU, thereby addressing a major source of noise and local air pollution.

49. An estimated 65 % of the EU's population lives in major urban areas with high noise levels, and more than 20% to night time noise levels, above the recommended WHO levels, at which adverse health effects occur frequently

(noise being an important cause of mortality after air pollution).

50. Horizontal chemicals legislation (REACH and the Classification, Labelling and Packaging Regulations), as well as legislation on biocidal products and plant protection products, provides baseline protection for human health and the environment... However, there is still uncertainty about the impacts on human health and the environment of the combined effects of different chemicals (mixtures), nanomaterials, chemicals that interfere with the endocrine (hormone) system (endocrine disruptors) and chemicals in products. In recent years, more information has come to light on the need for action to deal with these challenges, especially if the EU is to attain the goal agreed at the World Summit on Sustainable Development in 2002, and reaffirmed at the Rio+20 Summit, to have ensured 'the minimisation of significant adverse effects' of chemicals on human health and the environment by 2020 and to respond to new and emerging issues and challenges in an effective, efficient, coherent and coordinated manner. The EU will further develop and implement approaches to address combination effects of chemicals

and safety concerns related to endocrine disruptors and set out a comprehensive approach for minimising adverse effects of hazardous substances, including chemicals in products, supported by a comprehensive chemical exposure and toxicity knowledge base. The safety and sustainable management of nanomaterials will be ensured as part of a comprehensive approach involving risk assessment and management, information and monitoring. Together these approaches will increase the chemical knowledge base and provide a predictable framework driving the development of more sustainable solutions.

51.

52. Climate change will further aggravate environment problems by causing prolonged droughts and heat waves, floods, storms and forest fires, and new or more virulent forms of human, animal or plant disease....

53. In addition, the measures to enhance ecological and climate resilience, such as ecosystem restoration and green infrastructure, can have important socioeconomic benefits, including for public health. The synergies and potential trade-offs between climate and other environmental objectives, such as air quality, need to be adequately managed. For example, fuel switching in response to climate or security of supply considerations could lead to substantial increases in particulate matter and dangerous emissions.

54. In order to safeguard EU citizens from environment-related pressures and risks to health and wellbeing, the programme shall ensure that by 2020:

(a) Outdoor air quality in the EU has significantly improved... (Reference to WHO levels and guidelines);

(b) Noise pollution in the EU has significantly decreased... (Reference to WHO levels);

(c) Citizens throughout the EU benefit from high standards for safe drinking and bathing water;

(d) The combination effects of chemicals and safety concerns related to endocrine disruptors are effectively addressed, and risks for the environment and health associated with the use of hazardous substances, including chemicals in products, is assessed and minimised;

(e) The use of plant products does not have any harmful effects on human health;

(f) Safety concerns related to nanomaterials are effectively addressed as part of a coherent approach across different legislation;

(g) Decisive progress is made in adapting to climate change impacts.

This requires, in particular:

(i) Implementing an updated EU policy on air quality, aligned with the latest scientific knowledge, and measures to combat air pollution at source...;

(ii) Implementing an updated EU noise policy aligned with the latest scientific knowledge, and measures to reduce noise at source...;

(iii) Boosting efforts to implement the Drinking Water Directive, in particular for small drinking water suppliers, and the Bathing Water Directive.

(iv) Continuing to implement REACH in order to ensure a high level of protection of human health...

(In a nutshell, developing an EU strategy for a non-toxic environment, supported by a comprehensive chemical exposure and toxicity knowledge base and conducive to innovation of sustainable substitutes).

(v).....

(vi) Agreeing and implementing an EU climate adaptation strategy, including the integration of climate change adaptation and disaster risk management

considerations into key EU policy initiatives and sectors.

Another relevant objective for environment and health is *Priority objective 5: To improve the evidence base for environment policy*

There are still significant gaps in knowledge, some of them relevant to the 7th EAP priority objectives. Investing in further research to fill these gaps is therefore essential to ensure that public authorities and businesses have a sound basis for taking decisions which fully reflect true social, economic and environmental benefits and costs.

Four gaps stand out:

- There are still uncertainties surrounding the human health and environmental implications of endocrine disruptors, mixtures, chemicals in products and nanomaterials. Filling these gaps can accelerate decision-making and enable the further development of the chemicals *acquis* to better target areas of concern, while stimulating more sustainable use of chemicals. An improved understanding of the environmental factors affecting human health would allow preventive policy actions to be taken.

In conclusion, the EU policy on the environment, complemented by its policy on public health, and its policy on research, and based on the thorough EU environmental legal framework as further strengthened by the 7th EAP provides the tools and guarantees that environment and human health go hand in hand and have to be protected and improved. Of course the environment has no borders and in that respect the transboundary dimension needs to be taken into consideration and is covered by relevant EU legislation to a large extent.

O32- EVOLUTION OF THE EU ENVIRONMENTAL LAW: THE EU 7TH ENVIRONMENT ACTION PROGRAMME: «LIVING WELL WITHIN THE LIMITS OF OUR PLANET» Angeliki Kallia- Antoniou *Attorney at Law, EU Law Expert Professor in the International Hellenic University* ankallia@auth.gr

The evolution of the legislation on the Protection of the environment and on sustainable development, during the last forty years in the European Union, is examined. The analysis is focused on the recently adopted 7th Program of the European Commission on the Environmental policy and law, which defines the environmental measures to protect the environment up to 2020.

O33- IRREVERSIBLE NOISE INDUCED HEARING LOSS IN COMMERCIAL DRIVERS

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Jurisprudence and Forensic Medicine evaluates the ratio of loss of working capacity in order to calculate compensation and legal responsibilities. Workers and working capacity is not only endangered by occupational accidents but also by environmental factors. While many new regulations and measures are being implemented to manage and prevent occupational diseases the progress seems to be very slow. Bus drivers in Turkey, a subgroup of the commercial drivers are subject to hearing loss because of environment related hazard sources. A clinical investigation was run on 2546 bus drivers, with the purpose to determine whether their hearing is damaged or not. Audiometric test was performed to determine the frequency and the depth of the possible hearing loss. The results revealed acoustic trauma in left or in the right or both of the ears for the frequencies of 4000Hz and 8000Hz and in a seriously depths measured as dB units and the 80% of drivers determined to have trauma. A thorough descriptive data collection was done including driving frequency and related general workload. The source for the noise pollution that inflicted the acoustic trauma according to the data collected seems to be both long driving hours in the traffic under the noise of the machine of the bus. That leads directly to environmental factors of the occupation that can be taken under control in order to prevent hearing loss but furthermore it means that compensation laws and ratio of loss of working capacity must be done according to environmental factors.

Key words: loss of working capacity, hearing loss, bus drivers, Turkey

O34- THE RELATION OF CRIME TYPES AND URBAN PLANNING: THE EXAMPLE OF ISTANBUL

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Urban design and proper planning is an important element in developing crime prevention strategies. It is true that fear of crime affects people's quality of life. Certainly the role of law enforcement is important, but equally important is the strategies for crime prevention. Within the various ways that are practically applied for crime prevention, improving urban environment will seriously reduce the criminal opportunity even in very big and overpopulated cities. Once it may be possible to achieve crime prevention through urban space design, it has to be included in the strategies of city planning. Istanbul is a mega polis with a population approaching 20 millions, a well known city of centuries that served as capital of empires and continues to be the most important city of Turkish Republic. It is very difficult to re-plan this historic city but in reality it is dynamic and it changes continuously. Therefore urban planning with the aim to reduce the crime rate is possible and essential. Based on the fact that crime rates are very much culture dependent and environment affected, in this study we aimed to evaluate two crime types in an old and big district of the city of Istanbul called Zeytinburnu (293.228 inhabitants as for 2011). We collected data for burglary and prostitution from the law enforcement database for a period of one year and we mapped them. The results showed that the crime rates vary significantly between different suburbs. Following this information we tried to figure out the characteristics of urbanization, the building statute and to evaluate them in terms of building design and lighting in the above mentioned area. In our case, the very well protected 'housing complexes' had lesser burglary cases as expected. However the over protected residential areas were the most preferable for prostitution, because the technical equipments serve as information delivering system for prostitution protection

Key words: Crime prevention, urban design, Istanbul

O35- THE USE OF RADIOACTIVE SUBSTANCES AT HOSPITALS AND THE ENVIRONMENTAL EFFECTS THEREOF <u>Oğuz Özyaral^{1,}</u> Gülhan Kalmuk²

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Within the context of nuclear forensic science, it is important to include the understanding of the effects of radioactive wastes from healthcare facilities that are used for human health. Wastes of medical institutions that contain radioactive substances include unused excess liquids for radiotherapy or laboratory research purposes, contaminated glassware, packages or absorbing papers, radioactive sources without protective packaging, wastes that are extracted from patients kept in protective packaging such as urine and/or stools, and other sources of similar nature. This study was carried out as a descriptive study with the aim to identify the compliance of radiation safety in our country with national and international laws, legislations, and regulations as well as the awareness of radiation safety among health personnel, by means of surveys carried out with the personnel of hospitals and imaging centers located in the province of Istanbul along with other provinces. Through random sampling, we selected 200 employees among the personnel working at radiology units, nuclear medicine centers, angiography departments of certain public or private hospitals or at private imaging centers located in Istanbul or other provinces of Turkey, and carried out surveys about 'Socio-demographic Characteristics' and 'Personnel's Awareness Level about the Use and Wastes of Radioactive Substances'. Cronbach's Alpha value, as the scale's reliability coefficient, was .948 for the overall scale, and varied between .907-.922 for the three subfactors. The obtained data were assessed by means of number-percentage calculations, arithmetic means, and standard deviation comparisons, along with independent group Ttests and Chi-Square tests.

Key words: Radioactive Waste, Radiation, Environment

POSTER PRESENTATIONS

TOXICOLOGY

P1- EVALUATION OF SOME OXIDATIVE STRESS PARAMETERS IN ERYTHROCYTES OF ALCOHOL USE DISORDER PATIENTS G. Güvendik¹, İ.İ. Boşgelmez², N. Dilbaz³, M. Esen⁴

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Alcohol use disorders (AUD) and related negative consequences are among challenging issues worldwide. Excessive alcohol consumption has been linked to a variety of hematological changes including macrocytosis and has been shown to induce oxidative stress. Therefore, the objective of this study was to evaluate some oxidative stress parameters with regard to presence or absence of macrocytosis. In this context, levels of malondialdehyde and hydroxyalkenals (MDA+HAE), thiol status (total thiols, total glutathione, reduced and oxidized glutathione) in erythrocyte hemolysates of patients (AUD, n=30), social drinkers (SD, n=15) and non-drinkers (ND, n=15) were investigated. The results exhibited an increase of MDA+HAE levels in the samples of patients (AUD) as compared with ND and SD groups, while total thiols declined. Total glutathione and reduced glutathione (GSH) levels were only different in macrocytosis(+) patients. Oxidized glutathione (GSSG) levels were elevated in AUD groups (overall and subgroups). A general tendency to fall in GSH/GSSG ratio in patients was observed. Acknowledgements: Ankara Numune Hospital, Alcohol and Drug Addiction Treatment and Research Center (AMATEM-Ankara, Turkey), and Ankara University (Project No: 09.B.3336004) are acknowledged.

Key words: Alcohol use disorders, oxidative stress, erythrocyte, macrocytosis.

P2- A LOWER LEGAL LIMIT: DOES IT HELP TO COMBAT DRINK-DRIVING?

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Alcohol is still the most prevalent psychoactive substance found in drivers. Drivers involved in accidents often have a higher Blood Alcohol Concentration. The legal BAC limit established in most European countries is 0.5 g/L. The same legal limit was applied in Albania too, till 2012. The law on driving under influence of alcohol has been changed in Albania from January 2012, and a "zero tolerance" law is applied since more than one year. Toxicological investigation were performed for drivers involved in car accidents during the year 2011 and the next year after the new law was applied, that is 2012. Blood sampling was done shortly after the accident. All blood samples from people involved in accidents were analyzed for alcohol. Quantification of alcohol was done by gas chromatography (GC-HS) in the Institute of Forensic Medicine. From 107 persons involved in road accidents in 2011, 44% of them were found alcohol positive according the old law. But, there was an increment of the number of accidents in 2012, to 142 cases, and 49% of them were driving under the influence of alcohol. We cannot conclude that lowering the legal limit of alcohol on driving has helped in reducing the number of fatal accidents and in drunk drivers too. May be some other countermeasures should be applied too. Further studies are needed to evaluate the real importance of changing the law and lowering the legal limit to zero alcohol during driving in Albania.

Key words: lower legal limit, drink-driving

P3- ALUMINIUM PHOSPHIDE, THE MOST FREQUENT POISON IN ALBANIA

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Acute poisoning with metal phosphides, particularly aluminum phosphide, is a worldwide problem but most encountered in developing countries like Albania. Aluminum phosphide is a solid fumigant, most commonly used grain fumigants. They are formulated as compressed discs, gray color, around 3gr. The mortality is very high, in almost 100% of cases because the absence of a specific antidote. There are analyzed biological samples (stomach, gastric content, vomiting and blood) from all poisoned people during a period of six years all over the country. Confirmation was done by Silver Nitrate Test. Phosphine released (phosphorus trihydride PH₃) which is the active metabolite gives a black color to filter paper impregnated with silver nitrate. From 217 suicide persons, 87% of them were poisoned with aluminum phosphide. They were all fatal cases, and in most of them there were found unsolved tablets in the stomach. The odor of garlic was also present. Acute aluminum phosphide poisoning from ingestion is the most encountered one among people in Albania. This is because of its very rapid action, extremely lethal and the facility of finding everywhere without any restriction in selling it and in very low price.

Key words: Suicides, Aluminium phosphide, Albania

P4- CANNABIS SATIVA THE MOST ABUSED DRUG AMONG ALBANIANS

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Drugs of abuse have become popular in recent years in Albania. One of the duties of forensic toxicology is to analyze the samples taken from arrested people who use illicit drugs in Albania, respecting the Albanian law "zero tolerance" in consuming drugs of abuse. This study aims to detect drugs of abuse used in our society, to help developing new strategies to combat drugging all over the country. Urine samples have been analyzed in laboratory of Toxicology of the Institute of Forensic Medicine, applying immunoassay methods for screening of these groups of drugs: cocaine, opiates, cannabinoids, amphetamines, meth-amphetamines, MDMA and methadone. A second step of confirmation of results was made applying thin layer chromatography methods, for each positive group found. Close to 1300 persons, during a period of five years, were included in this study examined for drugs of abuse: the 76% of total number resulted marijuana consumers, especially the young people. There has been a tremendous increment of drug abusers year by year. This study shows that Cannabis sativa is the most popular drug in Albania and largely consumed from young people. This is related to low price, easy way to find it, and the fact that this plant is largely cultivated in our country.

Key words: Drugs of abuse, Cannabis sativa, Albania

P5- NEW TREND PSYCHOACTIVE SUBSTANCES UNDER THE LENS: SYNTHETIC CANNABINOIDS

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In recent years, there has been a huge upsurge in novel psychoactive substances, also known as "legal highs", "designer drugs", "herbal highs" or "research chemicals". Since 2004, synthetic cannabinoids (SC) have become available on the market and they have become popular with those seeking a "legal high". For this reason, in this study, synthetic cannabinoids, were examined in terms of forensic science. Thereof are declared to be purely herbal, but exhibit strong cannabimimetic effects after smoking because they have been adulterated with SC receptor agonists. SC 's related issues are discussed and interpreted by making literature. "UNODC, World Drug Report 2013 "according to herbal blends whose labels do not mention the added SC, are often legally sold in head shops and smart shops, because of their natural material content. However, their popularity has spread via Internet, allowing for the distribution of these products on the international market. After 2004, the synthetic cannabinoids activate the drug traffic regulations regarding the production of these substances, trafficking and possession is limiting. To overcome this prohibition to market the drug traffickers are constantly offering new SC analogues. Because of the lack of specific regulations and widespread use of products with unknown composition in terms of components and dosages, the growing consumption of SC as designer drugs of abuse has become a significant trouble for public health institutions, of these substances for the prevention of supply and demand studies indicate that more weight should be given. The development of rapid and efficient analytical tools for the identification of these compounds is important to confirm drug exposures and to further pharmacokinetic and pharmacodynamic testing of these compounds. SC 's on a reliable, fast and inexpensive testing of these substances and the lack of dynamic, unpredictable structures, in terms of prevention of drug trafficking poses serious problems.

Key words: Legal highs, synthetic cannabinoids, drug traffic, forensic sciences.

P6- ANABOLIC-ANDROGENIC STEROID USE IN YOUNG ATHLETES AND BODYBUILDERS

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Oral and injectable anabolic-androgenic steroids (AAS) are a group of drugs that include testosterone and its synthetic derivates. Steroid based drugs are synthesized for human and/or veterinary use and seem to be widely abused for the purpose of performance enhancement in sports or to improve physical appearance, physical strength, stamina and recovery. AAS use is more prevalent in bodybuilders, weightlifters, wrestlers and athletes compared to other sportsmen. AAS can easily be obtained and purchased illegally through gyms, competitions and mail order website operations. The use of such drugs can produce serious adverse effects including medical and psychiatric ones. These drugs may cause severe psychological and psychiatric adverse effects including violent behaviors and aggression. The objective of this study is to determine the rate of AAS use between such sportsmen and to identify the socio-demographic, dependence and abuse characteristics in AAS users. Fifty male athletes and bodybuilders living in Istanbul City were included in this study. Subjects completed a self-report questionnaire for sociodemographic features, abuse and dependence characteristics of such drugs. DSM-IV research criteria of drug abuse and dependence were also considered to establish the characteristics of AAS users. The preliminary results show that more than 50% of those sportsmen had used AAS within the last 1 year. Most of them were still using drugs at the time of the interview. Almost half of AAS users met at least one DSM-IV criteria for abuse and dependence. Withdrawal, which is mainly characterized by the presence of depressive disorders and moods, seems to be the most frequently reported symptom. AAS use is shown to have become widespread among sportsmen. The use of these drugs may induce abuse and dependence problems among the sportsmen. The abuse of AAS is especially observed among bodybuilders and weightlifters. This worrying problem is unfortunately neglected in Turkey and the research studies look like unsatisfying and inadequate. Systematic researches are required to be carried out regarding the use of AAS. Clinicians and researchers interested in dependency should give more thought into this problem. The Turkish Ministry of Health and the pharmaceutical companies should consider the marketing strategies of those drugs and the Ministry of Customs and Trade should take repressive measures against the clearance of those illegal agents.

Key words: Anabolic-Androgenic Steroid, Athletes, Abuse, Dependency, Illegal Use

P7- DANGEROUS DESIGNER DRUGS

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Drug abuse refers to the hazardous or harmful use of illicit drugs like marijuana, cocaine, morphine, etc. and also prescription or non-prescription drugs. Substances described as synthetic or designer drugs are highly preferred compounds since their "precursors" are easily provided and can be produced in simple places such as kitchens with low costs. These psychoactive agents have a broad and complex pharmacological and toxicological effect. Properties and effects of these designer drugs are similar to stimulant, depressant, hallucinogenic or narcotic drugs; they may also be referred to as controlled substances analogues and have become a major cause of addiction and overdose deaths. Synthetic cannabinoids often marketed under the guise of herbal incense or potpourri (e.g., JWH-018, JWH-073, JWH-200); stimulants (e.g., phenethylamines - 4-MTA, PMMA); cathinones marketed under the name of "bath salts" (e.g., mephedrone, methylone, α -PVP) and hallucinogens (e.g., tryptamines- DMT, DET; piperazines- BZP, TFMPP) are the new generation of designer drugs. The marketing of designer drugs has ushered in a new area of drug distribution. These substances are sold openly on the shelves at gas stations, convenience stores, head shops or via the internet from both domestic and international sources. Under the light of this knowledge, administrative control and scheduling actions have to be increased and the responsibilities of the scientific staff should be expanded.

Key words: Designer drugs, synthetic cannabinoids, synthetic cathinones, piperazines, phenethylamines

P8- DETERMINATION OF THE ELEMENTAL COMPOSITION IN GREEN COFFEE <u>Sevcan Semen</u>, Selda Mercan, Murat Yayla, Munevver Açıkkol, Salih Cengiz *Istanbul University, Institute of Forensic Sciences, Forensic Toxicology Laboratory, Istanbul, Turkey* <u>sevcansemen@gmail.com</u>

Coffee is highly consumed worldwide and one of the most important food commodities. The term green coffee beans refer to unroasted coffee seeds. Generally, coffee is consumed as roasted ground coffee or instant powder with different preparing techniques. But nowadays, green coffee is so popular because of its beneficial effects on metabolism for weight loss due to a compound called chlorogenic acid. Thus, green coffee is preferred increasingly by the people, who wish to reduce their weight. Coffee is acknowledged as a rich source of essential elements, as well as toxic ones that the plant takes up from a polluted soil, water and/or during industrial operations. As the consumption of green coffee is getting increased, the levels of essential and toxic elements have to be known and kept under control in terms of its safety. For this purpose, inorganic profile of ground green coffee, that commercially available in Istanbul, Turkey was determined using Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) after wet digestion. Twelve ground green coffee samples were purchased from different herbalist and coffee stores. Prior to analysis, 0.5 g of samples was accurately weighed into a vessel and 7 mL of HNO₃ (65%) and 1 mL of H₂O₂ (30%) were added. Decomposition of samples was carried out in a microwave digestion system. The total inorganic contents were analyzed by ICP-MS. Minimum and maximum levels of Li, Cr, Co, Ni, As, Se, Mo, Cd contents in samples were found as 2-27, 93-355, 80-221, 120-462, 5-62, 22-199, 43-137, 2-6 ng/g, respectively and Al was found 2.93-40.2 µg/g. Be, Sb, Hg, Tl, Pb and Th were also found <LOQ levels. Significant differences were not detected between individual mineral concentrations of samples.

Keywords: Green coffee, Trace elements, Microwave-assisted digestion, ICP-MS

P9- DETERMINATION OF α-CYPERMETHRIN IN SOIL BY MICROWAVE ASSISTED EXTRACTION AND HIGH-PERFORMANCE THIN-LAYER CHROMATOGRAPHY

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Pesticides are substances or mixtures of substances intended for preventing, destroying, repelling or controlling any pest. The widespread use of pesticides may cause environmental pollution and acute/chronic human poisoning. Also, a low-level long-term pesticides exposure can lead to cancer and other genetic disorders. α-Cypermethrin is a widely used type II synthetic pyrethroid insecticide, which is classified as a moderately toxic chemical and possible human carcinogen. It has a strong tendency to adsorb to the soil particles. In our study, a sensitive and robust high-performance thin-layer chromatography (HPTLC) method for the determination of α -cypermethrin in soil has been developed and validated. The method involves microwave-assisted extraction (MAE) with hexane-dichloromethane (1:1, v/v) followed by development of extracts on HPTLC silica gel plates with hexane-toluene (1:1, v/v) mobile phase system and quantitation by UV scanning densitometry at 220 nm. The linearity range was between 12.5 and 1000 ng/spot with $r^2 = 0.998$, the limit of detection was 2.1 ng/spot, the limit of quantification was 6.4 ng/spot, and the recovery was 91%. The reported method was found to be sensitive, rapid, and suitable for the analysis of α -cypermethrin in soil and it was successfully applied to the real soil samples collected from a treated agricultural field. α-Cypermethrin was detected in all soil samples at concentrations ranging from 78.9 to 708.7 ng g^{-1} .

Key words: α-Cypermethrin, Soil, Microwave-assisted extraction (MAE), Highperformance thin-layer chromatography (HPTLC)

P10- A DEATH CASE OCCURED DUE TO ILLICIT DRUG USE INCLUDING SYNTHETIC CANNABINOIDS

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Drug abuse is threatening public health and still causing death in Turkey. The dimensions of the problem and harmful effects of these lethal chemical compounds must be known by public and also doctors for designing prevention strategies. We present a twenty year old man who was death because of inhaling a mixture of chemicals including synthetic cannabinoids. According to witness's statement the man was inhaled a mixture of chemicals which they called Jamaica for three minutes. In crime scene, plastic caps (5 and 2,5 liter capacity) were found. Autopsy findings revealed pulmonary hemorrhage. In toxicological analyzes, MDMA (3,4-methylenedioxy-N-methylamphetamine) 5.01 ng/ml, jwh-073 21,7 ng/ml, jwh-018 22,4 ng/ml were found in the blood, MDMA, MDA (3,4-Metilendioksiamfetamin), THC (Delta 9 Tetra Hydro Cannabinol), jwh-073, jwh-018 were found in the urine. According to crime scene investigation and autopsy findings, we decide that the death was occurred due to intoxication of illicit drugs. Recent scientific studies stated that substance abuse can cause neurological changes in the brain of the addicted person. It has lethal heath effects and causes fatalities especially in young age. For preventing this problem, educational and legal efforts must be initiated for decreasing the number of fatalities caused by substance abuse.

Key words: Forensic science, child abuse, ocular findings, optic nerve sheath hemorrhage autopsy

CRIMINALISTICS / FORENSIC GENETICS

P11- IDENTIFICATION OF BIO TRACES OF KNIFE IN A CASE OF MURDER – CASE REPORT

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A case of murder with multiple stab-incised and incised wounds in different parts of the body is presented. The murder weapon was not found at the crime scene. Material and Method: Investigation of the crime scene, full forensic medical examination of the body and the knife with experimental comparing. Defensive incised injuries were detected on the hands. The stab-incised wounds on the body were two types: one caused by a weapon with two sharp edges, and the others - by a weapon with a sharp edge on one side and a wide ", Π "-shaped "back" on the other. Subsequently a severely burned knife and parts of clothes were found in an improvised fireplace, which made it impossible for identification by DNA analysis. The investigation of the knife showed that at the area of the tip the knife had two sharp edges on both sides and the rest of the blade had a sharp edge on one side and a wide "II"-shaped "back" on the other. A forensic examination was performed consisting in comparing the characteristics of the knife with the stab-incised wounds on the body and the damages the alleged weapon made on a specific surface. The analysis was performed by the superimposition and comparison of their general configuration and specific elements using digital photographs and Adobe Photoshop®. The stab-incised wounds found during the forensic autopsy correspond to be caused by the knife with above mentioned specific characteristics.

Key words: Biological traces, stab incised wounds, stab incised weapons

P12- FORENSIC IDENTIFICATION OF THE SHOES OF A PERPETRATOR OF MURDER BY ANALYSIS OF TRACE EVIDENCE – A CASE REPORT <u>A. Hristov¹</u>, A. Alexandrov¹, T. Kiryakova¹, N. Stanchev¹, P. Timonov², S. Hristov¹ ¹Medical University-Sofia, Medical Faculty, Department of Forensic Medicine and Deontology, Sofia, Bulgaria ²Medical University-Plovdiv, Department of Forensic Medicine and deontology, Plovdiv, Bulgaria

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A case of murder with a blunt object is presented. Two homeless men had a guarrel and one of them inflicted multiple hits to the other (leading to his death) and left the crime scene. Material and Method: Investigation of the crime scene, full forensic examination of trace evidence with experimental comparing. The deceased was found on the floor on linoleum which was covered with great quantity of blood. On the pieces of linoleum seized as evidence from the crime scene were discovered numerous traces of blood forming complex line-ups appearing as slurs, elements of wiping, blood splatter, as well as partial prints with specific shape. Also, parts of the prints with specific shape consist of elements with stable configuration, without superimposing static or dynamic overlays or alterations. In addition, on one of the prints was observed an element representing a reflex image of the number ten. The analyses of the specific prints on the linoleum led us to the conclusion that these prints were from shoe soles. The shoes of the suspect were seized and an analysis was carried out. Crime scene and experimental traces were photographed and with the help of Adobe Photoshop ® the images were superimposed. After unification of their scales and software processing a matching between parts of the grapple pattern of the shoe sole of the left shoe of the suspect and the specific blood prints on the linoleum was discovered.

Key words: blunt trauma, grapple, traces of blood, trace evidence

P13- A CASE OF DNA TESTING IN ALBANIA TO IDENTIFY THE BIOLOGICAL PARENTS

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A 10 year-old girl lived with her non biological parents (Albanian) in another country, where the girl was registered as their own daughter because they were immigrants. The non-biological parents were her uncle (father's brother) and his wife. During the years the biological parents, who lived in Albania needed to have documents of recognition of the child. Blood samples from the girl, the biological and non -biological parents were taken to be examined, standard serums from three systems where used according to the approved laboratory protocols. The used systems are the ABO, the Rhesus system and MN system, after that DNA test was performed. During the analysis 16 biological markers were used: D8S1179, D21S11, D7S820, CSF1PO, D3S1358, THO1, D13S317, D16S539, D2S1338, D19S433, vWA, TPOX, D18S51, D5S818, FGA and amelogenin. The individual determination was not complete with these systems so the genetic profile was required. Since for every marker the child carries a couple of alleles, one from the mother and the other from the father, a comparison of profiles was done, so the correct determination of biological parents was obtained. The determination of children's DNA using maternity and paternity tests is a field of forensic biology. Nowadays the importance of forensic biology and DNA analysis is increased in helping the investigation in criminal and civil cases; forensic biology is an application of biological knowledge and laboratory practice.

Key words: paternity test, maternity test, genetic profile, serologic serum, genetic marker, amelogenin

P14- EXAMINATION OF AMNIOTIC FLUID BY DNA FRAGMENT ANALYSIS IN PATERNITY TEST- CASE REPORT

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We present a case of a genetic paternity test with DNA extraction from amniotic fluid (AF) with a gestational age of the fetus 15 weeks. Fetal DNA could be extracted from amniotic fluid supernatant (AFcffDNA) and used for genetic researchs, as paternity tests. For DNA isolation from the AF we removed the supernatant and used material derived from the sediment. Two different methods for DNA extraction were used for total extraction of DNA from the amniotic fluid. We performed amplification of the STRs markers using the product of Pharmacia Biotech "Ready.To.GoR" PCR Beads. The used PCR product "Ready.To.GoR" showed good quality and inhibition of the non-specific products in samples with isolated DNA for both methods used for DNA extraction from the sediment of the amniotic fluid sample. The results indicate the possibility for successful paternity tests with this PCR product. In the presented case the compared man was excluded as a biological father of the unborned child. The presented case demonstrates the applicability of the used PCR product "Ready.To.GoR" PCR Beads in paternity tests performed using DNA extracted from sediment of the amniotic fluid sample. This result rises research, ethical and social questions in prenatal determination of the parentage.

Key words: DNA, pathernity testtings, amniotic fluid, PCR.

P15- A PERSPECTIVE ON THE EPIGENETIC MECHANISMS FOR FORENSIC SCIENCES Fulya Eylem Yediay, E. Hülya Yükseloğlu *Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey* feylemy@gmail.com

DNA sequences have been used as the most useful markers to identify the individuals in forensic casework. Besides investigations based on DNA sequence, researchers have tended to look for the new tools like epigenetics. Epigenetic mechanisms are heritable changes in DNA regulation that involve DNA methylation and histone modification without any differences in the DNA sequence itself. These mechanisms are applied for many purposes such as determination of parental origin of the alleles, resource of body fluids, monozygotic twins and on the circadian clock studies. Particularly, identification of DNA methylation patterns can be helpful for crime scene materials. The applications of epigenetic for forensic investigations are presented in this review. Epigenetic approaches will be substantial for forensic sciences by increasing research studies on this area and developing reliable and stable epigenetic markers in future. The aim of this study is to highlight and create awareness on epigenetic mechanisms for forensic sciences.

Key words: Epigenetic markers, DNA methylation, Body fluids

P16- THE ROLE OF DNA IN THE IDENTIFICATION OF PLANT MATERIALS FOR CRIMINAL INVESTIGATION PURPOSES

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Plants are used in forensic sciences as evidence sometimes as part of the crime and sometimes as means to find the perpetrator who committed the crime. The fact that plants provide sound information on the victim, suspect or culprit enables them to be considered "acceptable criminal evidence" in a direct or indirect way. Additionally, the identification of the origin of plants especially used for obtaining sedatives and drugs for criminal purposes is of great importance with respect to the drug traffic in the world. There are no significant and accredited studies in the criminal laboratories in Turkey in relation to the methods that are often used for the purposes of plant identification in many laboratories across the world in relation to the field of forensic sciences. For that reason, our study aims to obtain preliminary information for the optimization and development of forensic science and assurance of methodological standardization. In this study, the DNA of the cannabis sativa obtained from the Istanbul Police Department by way of example was isolated by means of the method CTAB (cetyltrimethylammonium bromide) developed in our laboratory. The concentrations of the isolated DNAs were measured using the fluorometric method and the DNAs obtained were multiplied by means of the PCR method. After that, the DNA bands were made visible using the agarose gel electrophoresis. The image of the DNA bands separated using electrophoresis was obtained in the UV-Analyzer device. When the DNA bands imaged using the electrophoresis was checked, it was seen that they were qualified enough to be used for the identification of the origin of plants that are important for forensic sciences and that the method we implemented could conveniently be used for further similar studies. Although a high number of studies have been performed in various laboratory environments using morphological, chemical and biochemical methods conducted on plants and plant residues important for forensic sciences, these analyses were not adequate in some situations for the identification of the origin. Knowing the first origin before the plants were sent to the distribution center and the user would enable the identification of the origin of the drug traffic. For that reason, methods related to the plant DNAs need to be taken into account; it should be ensured that they are optimized and developed and the methods need to be standardized.

Key words: DNA, forensic sciences, plant, profiling, identification of origin.

P17- THE BEST AID OF CRIME SCENE INVESTIGATION TEAMS: LUMINOL Fatma Çavuş¹, Yakup Gülekçi², Gülten Rayimoğlu¹, Kadir Daştan¹, Itır Erkan³, Tolga Zorlu¹, M. Özlem Kolusayın⁴, <u>E. Hülya Yükseloğlu¹</u>

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Blood sample ranks the first among the most important evidence that aid in the investigation of a crime. However, the removal by cleaning of the blood found in the crime scene makes it difficult to detect the crime. For that reason, the experts have always paid great attention to studies conducted on the blood samples left in the crime scene. Even though several test kits are available especially for the identification of blood that is wiped off, the luminol kit is the one that is commonly used. Reaction in the luminol kit takes place via the addition of the hydrogen peroxide (H_2O_2) (Fig 1.). As it is known that hydrogen peroxide is able to react with other substances that contain Fe(II), which may be present in the environment, during the reaction, this study aimed to investigate which materials that may potentially be present in the crime scene luminol may interfere with.

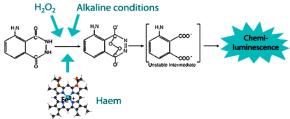


Fig 1. Reaction of luminol with the Fe (II) ions and H_2O_2 .

The way in which substances such as iron rust, potato juice, tomato juice, brickdust, bleach, soil, detergent powder, kale, etc., which may be present in the crime scene and contain Fe(II) ions, may cause an interaction with the luminol reagent was investigated. The samples prepared in this line were treated with luminol in a dark environment and the reactions that occurred in the initial seconds were recorded. While the bright blue appearance emerging as a result of reaction is most probably expected to be a blood stain, a positive reaction was observed in our study in the samples of kale, detergent power, brickdust, iron rust, potato juice, tomato juice, soil and bleach. Since the substances containing the iron atom give false positive results with the luminol reagent, it is necessary that the results obtained with this reagent be supported by blood test reagents to check other possibilities. However, since luminol and similar kits may distort the structure of RNA and DNA in the blood samples found on the crime scene, it is very important to develop and use new compounds as an alternative possibility in forensic sciences in order to eliminate this negativity completely.

Key words: Luminol, Criminal, Chemiluminescence, False positivity, Hydrogen peroxide

P18- IDENTIFICATION OF DISASTER VICTIMS: CONFIGURATION OF A FORENSIC SCIENCE DNA LABORATORY IN A POTENTIAL ISTANBUL EARTHQUAKE AND THE IMPORTANCE OF FORENSIC GENETICISTS Umut Kara¹, Alpen Ortuğ², Itir Tarı Cömert³, <u>E. Hülya Yükseloğlu²</u> ¹The Council of Forensic Medicine, Department of Biology, Istanbul, Turkey

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DVI term was a previously used abbreviation from the experts who are working on the disaster victim identification field to describe the procedure yet nowadays it is become very common referenced term in the area of forensic sciences. All applications; including identification and classification of all kinds of data during disaster and procedure of delivery to relatives of the lost person should be considered in the scope of this concept. In this study, in-depth interview technique was used with two experts who were involved in the procedure of identification in 1999 Marmara Earthquake and the problems that were experienced via the identification procedure discussed with content analysis. Keywords were determined from the interview texts for quantitative analysis then similarities and differences of issues that two experts mentioned were identified. Problems associated about the work that were held on the conditions of Turkey in 1999 were identified and precautions should be taken in case of a probable Istanbul earthquake is emphasized. Nevertheless, a DVI protocol is developed about the procedure, from the beginning of sample collection from crime scene to determination of the DNA typing methods. Developing a DNA analysis method with proper chain which is an effective identification method; is the first and most important aim of identification at an earthquake disaster with mass deaths. However; in Turkey, forensic geneticists only involve in the procedure of DNA laboratory work at a mass disaster. For this reason, in order to speak of a mass disaster identification team in real meaning, forensic geneticists should reflect their knowledge, skills and experiences in order to become a part of this team

Key words: DVI, DNA identification, Istanbul earthquake

P19- DISTINCTION OF IDENTICAL TWINS VIA A DNA ANALYSIS: HAS THE PROBLEM BEEN SOLVED?

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DNA analysis, which is considered as the most accurate-most reliable (gold standard) method by many researchers has acquired an important role in the field of forensic sciences since 90s. As in all identification methods, DNA analysis also has some limitations. Ranking the first among these limitations is the analysis regarding identical twins. For example, it is not possible to distinguish between identical twins using the Short Tandem Repeat (STR) method, which has come to be used at a significant extent in the forensic DNA analysis in recent years – apart from very rarely observed mutation incidences. This situation is even more complicated when it comes to the paternity tests where these twins are at stake. The reason is that it is not enough to only observe a mutation for paternity to be established, it is also necessary for this mutation to have occurred in reproductive cells, namely, transmitted to the child. To devise a solution for this long-known problem in the field of forensic genetics, several researchers put forward various ideas. In the year 2012, Krawczak et al. theoretically expressed that it was not possible for nearly 3.1 billion base pairs in identical twins to be completely the same. Inspired by this study, Jacqueline Weber et al. not only showed this difference in the DNAs of identical twins via SNP analyses done using the New Generation Sequencing (NGS) method last year, they also demonstrated in experimental studies that the identical twins were able to transmit this difference they had to their future progeny, as well. This study is aimed at assessing the theory of this study, which was conducted on identical twins and to provide a new perspective for the forensic sciences.

Key words: Identical twins, DNA, Forensic sciences

P20- THE CAUSES OF TRAFFIC ACCIDENTS IN THE DISTRICT OF DURRES, ALBANIA IN THE YEARS 2012 AND 2013 Alma Nushi, Arben Lloja, Gramoz Ylli *Kristal University, Albania* nushialma@yahoo.com

This study starts from a concrete reality; the presence in the daily lives of overwhelming part of the nowadays societies, of cases of traffic accidents caused by / from the motor vehicles. The study is statistical and retro, analyzing traffic accidents by motor vehicles, in the district of Durres, for the years 2012 and 2013. The purpose of this study is the identification of the causes of the accidents that have occurred in the district of Durres, which is also the largest coastal district of our country, such as how much have affected drugs and alcohols, the infrastructure of roads and signals, weather conditions, etc., the negligence of drivers. The data are taken from statistics of Institute of Forensic Medicine in Durres district, as well as the District Police Directorate, Durres. Finally, besides the conclusions drawn from the analytical treatment of the data, especially that regarding the identification of causes (such as narcotics, alcohol, medication intoxication, negligence, state of infrastructure and signage, weather conditions etc.), this study has come up with a group of conclusions such as: the number of accidents is in a very high proportion considering the population; the number of accidents has been increasing from year to year; The main cause was the speed above the permitted limits, which is in a greater number, it is showed that drivers were under the effects of alcohol and other prohibited substances; considering the terms of age, the age groups were from 20 to 45 years old, with the largest number of cases occurred during the spring and summer, according to the days of the week are Monday and Saturday, in the end, prevail early hours of the day.

P21- DIGITAL ANALYSIS OF PROFILES OF SUBJECTS ON HUMAN TISSUES Ivan Stoyanov¹, William Dokov², Plamen Dimitrov¹

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Digital examination of profiles of subjects acting on human tissues is developed using material consisting lots of human tissue's characteristics –Petrolatum. This material gives an opportunity to take an exact print of profiles of different objects, used to apply blows to human tissue, and also other effects of the objects. The setting gives an opportunity to provide a print at different force of impact of the object on the test material. The next level is making digital pictures of damage to human tissue obtained from profiles of the objects. Metric indicator is used necessarily. This is done by making experimental setup that requires a certain way of shooting, lighting, distance of objects, metric indicator. The processing of these findings and research is carried out by computer programs, which helps to achieve very accurate comparison. The methodology allows the force of impact of the object to tissues to be determined. The practical value is that it can provide data for the used items that can minimize the number of collected evidence and minimize the number of objects that will participate in future research evidence such as DNA, fingerprints , etc. New possibilities for more precise elucidation of the mechanism of causing damages are uncovered.

Key words: Petrolatum, Digital analysis

P22- ORGANIZATION OF FORENSIC SCIENCES AND EXPERTNESS IN TURKEY Melike Bilir¹, Melek Özlem Kolusayın², Gürsel Çetin²

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In Turkey, there are institutions that provide education, conduct research in the field of Forensic Sciences and also act as expert witnesses for Public Prosecution Offices and Courts and offer Scientific Opinion to parties on an individual basis. Expertise service is also provided by experts registered in the list of experts created by the Justice Commission of Jurisdiction in the provinces in the field of forensic sciences. The Head Department for Forensic Science of the Ministry of Justice is the most important institution in Turkey provides both forensic science expertise for physicians and provides expertness service for Courts in the field of forensic science. The head office of this institution is based in Istanbul and it has Group Presidencies in different cities and Branch Directorates commonly in cities. This institution conducts a significant part of the expertness service offered in Turkey in the field of forensic science. The Criminal Laboratories of the Police and the Criminal Laboratories of the Gendarmerie are the institutions that undertake very important tasks especially in the phase of preparation in criminal acts and conduct a great part of the expertness service in the field of forensic science. These laboratories are spread around various cities depending on the need. In Turkey, the relevant departments of universities act as official experts in the field of forensic science. Furthermore, there are also three Institutes set up in the body of different universities, which offer Master's and PhD education in forensic sciences and also conduct expertness services. Head Departments for Forensic Medicine under the Schools of Medicine of different universities are present and these departments not only teach students of medical schools, but they are also active in expertness services. The Forensic Medicine Institution Laboratories, Police Criminal Laboratories, Gendarmerie Criminal Laboratories and Istanbul University, Institute of Forensic Sciences' Laboratories are members of ENFSI (European Network of Forensic Science Institutes). This study aimed to offer brief information on the organization of forensic sciences and expertness in Turkey.

Key words: Turkey, Forensic Sciences, Configuration

P23- DETERMINATION OF FORENSICALLY IMPORTANT INSECT SUCCESSION ON DOG CARCASSES (*CANIS LUPUS FAMILIARIS L.*) AT THREE DIFFERENT AREAS OF NORTH OF TURKEY

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After death, corpse pass physical, chemical, biological changes and decomposing bodies is attractive to species of insects. Insect colonize the carrion in a predictable sequence. Information on pattern of insect succession on carcass decomposition are especially important for postmortem intervals. The aim of this study is to document the entomofauna and its succession pattern in relation to the decomposition stages of dog carcass in Samsun, Turkey. This field study was conducted on decomposition and insect succession at three contrasting locations in Samsun province in North of the Turkey, between June 2009 and June 2010. Twelve dogs (Canis lupus familiaris, Linnaeus 1758) were used as human models for applications in our experiments. Five decomposition stages were observed: fresh, bloated, active decay, advanced decay and dry stage. Carcasses attracted 29 species of insect (9 species of Diptera, 20 species of Coleoptera). Among Diptera, species of Calliphoridae, Sarcophagidae, Fanniidae and Hellomyzidae family were observed during study. Species of Calliphoridae were dominant and the first dipteran colonizers in all habitats and all seasons. Species of Staphylinidae, Cleridae, Dermestidae, Histeridae, Silphidae families were recorded at all study area. Members of Staphylinidae were the first coleopteran colonizers in all habitats and seasons. Carcasses placed in Taflan between study area attracted a more diverse assemblage of insects than other study area. This paper reports the first results of research on the arthropods which are associated with carrion in North of Turkey, in order to create a Turkey database on forensic entomology.

Key words: Forensic entomology, insect succession, dog carcass, Samsun, Turkey

P24- TAKING BLOOD OVER REMOVABLE AND NON-REMOVABLE MATERIALS IN CRIME SCENE: A SAMPLE DIAGRAM Murat Öğdür¹, Hüseyin Çakan², F. Ekim Çevik²

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It is very important collecting, packaging and transporting methods of bloody evidences for protection from harmful microorganism. Blood and bloody materials are the most important and common biological evidences. In our study, it is aimed to create a diagram about transportation and preservation methods for blood stains and bloody materials taken from the crime scenes. We prapared 90 different evidence modules on five board then packaged them in three kind of bags. The bags stored at three different temprature during two time periods. After waiting time the bags were opened and analyzed. According to types of evidence, a diagram was prepared about evidence collection and preservation process. We believe that it would be better drying the evidences in drying cabine or rooms. After drying, the evidences must protected in paper envelopes and sending in the shortest time to laboratory as soon as possible. The bags must not be stored at closed ambient like refrigerator, carrying box etc. Especially, the evidence should not put in the refrigerator. The blood collection procedure is not unalterable in every scene. It can be changeable from case to case. For this reason we thought prepare a sample diagram. In this diagram, we divided the bloody stains into four category including "Blood drops, Blood pools, blood stains on portable material and blood stains on unportable material" This procedure is thought to contribute to the preservation of evidence.

Key words: Evidence, Microorganism, Blood

P25- THE ROLE OF LABORATORY TECHNICIANS IN FORENSIC SCIENCE LABORATORIES

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Forensic sciences is a science that brings together several multi-disciplinary branches of such as physics, chemistry, biology, pharmacology, biochemistry, pathology, anatomy, microbiology, law, engineering, public health, etc. under the same umbrella. One of the most recent fields of work for forensic sciences is the profession of forensic laboratory technician. A laboratory technician in the field of forensic sciences is a technical member of staff who performs the analysis deemed required by the expert in various laboratories. For that reason, this study explores the duties, authorities and responsibilities of the laboratory technician in the forensic science laboratory and to scrutinize this concept with respect to forensic sciences. A literature review was conducted in relation to the profession of laboratory technician, who receives education in subjects such as serology, toxicology, narcotics and hemogenetics with the forensic science ranking the first and is obliged to provide services in line with the parameters of forensic sciences; consequently, the subject was assessed and discussed. According to the literature review that was performed, the laboratory technicians working in the forensic science laboratories related to forensic sciences are responsible for receiving the samples in the laboratory, recording them, performing preliminary tests on biological evidence, cleaning, disinfecting and maintaining the laboratory equipment, preparing the solutions necessary for analyses and tests, preparing samples from secretions, fluids, cells, tissues and body organs by using techniques such as staining and fixation and making the preparations for searching the cells in the stained preparations and swabs in the context of forensic cases. For a laboratory technician who is educated in various subjects to be able to offer more quality service, it is required to raise awareness of this profession and to determine their responsibilities in the framework of quality standards.

Key words: Laboratory technicians, forensic sciences, criminal, judicial case

P26- THE ANALYSIS OF CHILD HOMICIDE NEWS IN NEWSPAPERS PUBLISHED IN 2009-2014: A RETROSPECTIVE STUDY

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In order to have a better understanding, and ultimately prevent, in infant and child homicide, it is compulsory to more thoroughly enlighten the conditions and circumstances regarding such cases. The aim of our study was to make a preliminary study of how the child homicide news were conveyed to the public in Turkey. Therefore, three daily best-seller newspapers with the highest circulation published between 1st of January 2009 and 30rd of April 2014 were chosen to be studied. Data were used to shed light on the circumstances related to homicide among children, and to identify demographic groups that may be at increased risk. Key concepts about the child homicides and were defined. The nature of the published writings, newspapers which they were belonging, writers' characteristics, the writing style of the news, the meanings of the words in the news have been evaluated through content analysis method. From the data we obtained, we've noticed that the most of the news regarding child homicides were involved in the newspaper Hürriyet. Hürriyet is appealed to a mass audience becoming the best 3-selling and most-read newspapers. This indicates that the news is made for public disclosure requirement. We of course do not expect the media to make non-objective, unfair or prejudiced news, but in terms of the social sensivity and civic involvement, we expect them to raise awareness and try to create a collective consciousness in society.

P27- USE OF GRAPHOLOGY AT FORENSIC SCIENCES

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Law Enforcement Agency is a General Directorate establishment being branched out extensively and independently and rendering service in many fields from intelligence to public order and from security to criminal. Personnel selections in different units branched and non-branched of this organization have been performed after the course including two-stage; written exam and an interview as indicated in Security Services Class Branch Regulations. In principle, the exams for all selections do not vary. It is possible to analyze character by graphology (handwriting analysis method) which is often referenced in many private companies and intelligence agencies in Europe and USA. We consider graphology as an important method in both policing selections and vocational branching to determine the intelligence structure, tendencies in tempers and character (patient, pessimistic, antisocial etc.) of a person and to learn in which unit he/she can be successful according to his/her handwriting. However, if we consider that we can understand the character and psychological portrait of a person by analyzing his/her handwriting, the information obtained by the help of handwriting analysis of character will be valuable. Therefore, we believe that a new point of view will develop in regard to the applicability of Graphology science.

Key words: Forensic Sciences, Graphology, Handwriting, Character

P28- FORENSIC SOIL ANALYSIS Filiz Ekim Çevik, Hüseyin Çakan, Vecdet Öz Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey filiz.cevik@istanbul.edu.tr

The crime scene investigation and the evidence obtained as a result of this investigation are of great importance for clarifying criminal cases. Hence, the importance of physical evidence for the solution of the events increases. One of the physical evidences is soil. Soil is a substance with a complex structure. Due to the complex structure of the soil, different analysis techniques and many devices can be used. Soil forming factors: climate (humidity, temperature), bedrock, topography, living organisms and time. These five factors affecting soil formation usually create different effects in different places, therefore the soil gains great diversity. Since the microbial distribution of soil is highly variable, we can benefit from microorganisms in identification of soil. Bacterial species in the soil can be used to determine their metabolic activities and to differentiate soil samples. Three microbiological groups of soil microorganisms make possible to determine the identity of soil and the similarities and differences between different soil samples. The comparison of fungi, bacteria, morphologies of actinomycetes colonies ensures the identification of the soil samples. Our study is a preliminary study regarding the resolution of criminal cases and it is planned to show the availability of microbiological evidences of soil for clarifying some events occurred in Istanbul and to ensure the modeling of the data obtained from Istanbul and to assess the importance of identification of microorganisms in soil in terms of forensic science.

FORENSIC PATHOLOGY / CLINICAL FORENSIC MEDICINE

P29- A MORTAL ACCIDENT CAUSED BY A BROKEN TOILET SEAT COVER: CASE REPORT

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Accidents that occurs in a home or around it are named as home accident and these are thought as a serious public health problem due to common related injuries. In this study, a case that end with death by a broken toilet seat cover is presented and it is aimed to review preventive measures to avoid these accidents. According to hospital records, a 36 vears old, 1.75 m in length, average weight man was brought to Izmir Bozyaka Training and Research Hospital by 112 ambulance at 01/07/2011, 21:20 PM with a injury caused by fracture of toilet seat cover when he was sitting. In the examination, a 20 cm length oblique section with active bleeding was seen at the right gluteal region and superior gluteal artery and vein injury was detected. Department of orthopedics controlled bleeding, patient admitted to intensive care unit but he was accepted as dead at 06:35 AM. Autopsy showed bleeding from superior gluteal artery and vein injury as the cause of death. Fatal home accidents have increased seriously in recent years. To prevent home accidents, with some behavioral changes, home equipments and products must be produced appropriately for home security. Preventing home accidents with essential measures will not only avoid lots of many injuries and deaths but will also avoid unnecessary economic losses in health expenditures.

Key words: Home accidents, forensic case, toilet seat cover fracture

P30- CLAIM OF UNILATERAL HEARING LOSS DUE TO NOISE OF FIRE GUN CASE PRESENTATION

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While hearing is normal in one of the ears in the patients with unilateral hearing loss, there is a sensorineural hearing loss 20dB or more in the other ear. There are many causes of unilateral hearing losses. In addition to congenital reasons, viral diseases and meningitis are among leading causes. Inner ear anomalies, head injury, use of ototoxic drugs and noise are the other causes. Unilateral hearing loss due to noise has been reported many times in the literature previously. As it was in our case, it has also been reported that unilateral hearing loss could develop due to noise of a gunshot. In our presentation, a 15-year-old girl was passing by a blank firing gun shooting in a circumcision wedding. In images related to the circumcision wedding, the gun was fired at least three times while the girl was walking approximately at 1 meter distance of the gun. Left side of the girl was facing to the gun fired. She was brought to the emergency room of the hospital due to tinnitus and hearing loss after the event. Hearing loss was determined in the right ear at the examination performed. Relatives of the patient filed a criminal complaint against the person firing the gun. The person firing the gun claimed that the hearing loss of the girl was present for a long time. Prosecution office requests a report about whether the hearing loss is due to the gun fired in the circumcision wedding or not. During the evaluation of the case in the Council of Fotensic Medicine, many etiological causes were considered. Medical records of the case were incomplete. Therefore, the sequela of an infectious disease was not eliminated. Additionally, there was noise due to a bevy of people dancing with loud-voiced music in the scene. Moreover, unilateral hearing loss developed in the right ear of the girl while her left side was faced to the gun. Because of all these reasons, it was not determined that whether the hearing loss was due to the gun in the scene or not.

Key words: Unilateral, Hearing Loss, Noise, Fire Gun

P31- A CASE OF BROKEN SPINE IN THE LUMBAR REGION CAUSED BY A CAR SAFETY BELT

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This is a case of an indirect fracture of the spine in the lumbar region of an overweight man, caused by the front seat safety belt. Crash site inspection, forensic medical examination. The inspection of the crash site showed that the car had collided with a roadside pillar. The driver was found dead in the driver's seat with the seat belt on. He was very overweight, therefore the lower part of the belt was in the inguinal region and the upper part was high on the chest, separated by the bulky midriff. The autopsy revealed a ruptured intervertebral disc between L1 and L2, with a forward-facing opening, a torn inferior vena cava, and severe intraabdominal bleeding. The bleeding was the immediate cause of death. The spine was fractured as a result of the seat belt holding the upper and the lower part of the body to the seat at two very distant points, while between them the bulky, heavy midriff continued to gain forward momentum, carrying with it the spinal cord. The lumbar lordosis was increased, the intervertebral disc was ruptured, the vertebral bodies were far apart, and the wall of the inferior vena cava was stretched and torn. The death resulted from the specific build of the victim. Due to the improper positioning of the seat belt, it failed to protect the driver from serious injury, and instead caused his death

Key words: safety belt; spinal cord fracture

P32- MEDICOLEGAL ASPECTS OF BONE INJURES DECOMPOSET BODIES FROM VIOLENT MEANS; (FORENSIC PATHOLOGICAL FINDINGS) A. Vako, A. Xhani, A. Kenuti, I. Robaj, G. Ylli, S. Meksi *Institute of Forensic Medicine, Albania* altinkenuti@yahoo.com

In this scientific work titles "Medicolegal aspects of bone injures from violent means" the authors has analyzes manly in a retrospective way all the autopsy's protocols performed in Institut of Forensic Medicine (Tirana) during five years period of time (2000-2004). There have been performed 1102 medico-legal autopsies, from which a number of 512 (47,8%) in fresh dead bodies have had partial and multiple injuries of bones. This is a high figure that shows a brutal intensity of criminal violence. Also, there have been studied 226 medicolegal cases in advanced decompsing bodies and skeletal remains taken from archive of Tirana medicolegal institute (2004-2011) and 95 decompsing bodies cases (exhumeited during 1999-2001 after Kosova war) refering autopsies reports of Pristina medicolegal institute. The main aim of the dissertation is to give a valuable information, as much as possible about epidemiological and pathmorphological aspects of fatal sceletal fractures -(including head, neck, corps, extremities) due to blunt, chop and gunshot force trauma. In addition, the authors have described all kinds of fractures according to plymorphological feature of sceletal trauma. Evidence of finding sceletal injuries are very important for handling of decomposed bodies and sceletal remains to determine the means, mechanisms, cause and manner of the death.

Key words: Bone injures of decomposed bodis, cause and manner of death

P33- HANGING DEATHS IN CHILDREN (AGE 0-18) AUTOPSIES BETWEEN 2002 AND 2011

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Hanging, firearms and toxic chemicals are the most used methods for suicide. Death in hanging usually develops by asphyxia via obstruction of airway tract, brain ischemia due to compression of neck vessels and sometimes by reflex stoppage of the heart because of vagal inhibition. But these mechanisms should not be thought independent of each other. Therefore, inhibition of respiration and circulation functions were thought to result in an acute ischemia of the brain and death. In this study, 183 hanging cases under 18 years of age were surveyed retrospectively from the 2002-2011 data of Morgue Department of Council of Forensic Medicine, Istanbul. One hundred and sixteen (63%) of the cases were male and 67 (37%) were female. Hanging cases were investigated regarding age, sex, weight, length, the place that he or she was found, ligature material, type of hanging and the features of the neck organs. The characteristics of the lesions on the neck organs were compared with the parameters such as type of the ligature material, type of hanging and evaluated for significance.

Key words: Hanging, Forensic Autopsy, Child deaths.

P34- FALLING FROM HEIGHT AFTER ELECTROCUTION – A CASE REPORT Ilina Brainova¹, Metodi Goshev¹, Stanislav Hristov¹, Minko Minkov²

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The cases of electrocution as cause of death are relatively common in forensic medical practise. Most of them are accidents and rarely suicides. In some rare cases it is possible the electrocution to be the cause of other sort of trauma, which leads to fatal outcome. Material and Methods: Examination of the accident scene; complete forensic medical examination. We present a case of 45-years old man who died due to falling from height after electrocution while working. The deceased was construction worker. Before the accident the man was working on the roof of a building. He used a driller which was probably faulty and got electrocuted. He was thrown away by the action of the current and fell down from the roof. During the examination of the accident scene the driller was found with its cable torn. The external and internal examination of the cadaver during the forensic autopsy revealed multiple severe traumatic injuries – complex trauma which was the cause of death. There was also coagulation necrosis of the palm surface of the third finger of the right hand. The latter was a sign of action of electricity in this area, which gave the basis of establishing the actual cause of falling down. In cases such as the described one, forensic examination not only of the cadaver but also of the accident/crime scene is essential to clarify the circumstances under which the fatal accident occurred.

P35- CRIME OR RAIL TRAFFIC ACCIDENT? CASE REPORT

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In the case of rail traffic accidents, the judicial inquiry and forensic autopsy have a very important role whereas those cases may be cases of suicide, may occur accidentally or may dissimulate a crime. Material and methods: We present the case of a young man at the age of 27 years, met with the diagnosis of schizophrenia, found dead on a railway bridge somewhere within Bihor County. Fragments of the body have been found within a radius of about 100 m. The investigation of police data, note that the young man was seen for the last time a week ago at a bar, where he was involved in a tussle with a group of residents. At the time of the forensic autopsy, the corpse was in the advanced state of decay. Results and Discussions: Necroptic examination revealed multiple traumatic injuries, all sides of the body: bruises, abrasions, wounds, fractures, damages of the internal organs. At the head we identified numerous bruising and hematomas of the soft tissues, the fractures of neurocranium and viscerocranium, cerebral dilacerations. The dilemma that exists in this situation is related to the mechanism of these injuries: the injuries occurred as a result of a rail traffic accident, or they have been produced by bumping with hard objects? Is it a case of rail traffic accident or dissimulation of crime? Forensic autopsy report brings us important information in support of Justice and brings clarifications in this regard.

Key words: rail traffic accident, necroptic exam, legal means of proof, crime

P36- SUDDEN DEATH CAUSED BY PULMONARY TROMBOEMBOLISM- CASE REPORT

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Pulmonary thromboembolism is an extremely common cause of sudden death, more frequent in women. In the majority of cases there is a predisposing factor such as trauma, surgical operation, confinement to bed or immobility from another cause. Material and methods: We present the case of a young woman, age 32 years, nurse, died at home. The history of events: in the evening she suddenly accuses dyspnea, pain in the chest region. Shortly, install cyanosis, anxiety, confusion, polypnea, fever, sweats, and chest pain. Death occurs suddenly, 40 minutes from the onset of symptoms. Requested medical crew finds young patient death. The family notes that the young woman had suffered surgery for treatment of deep vein thromboses of lower limbs, two months ago. Postoperative evolution was favorable. She attended the anticoagulant medication. The forensic autopsy shows the following modifications: pulmonary thromboembolism, acute pulmonary edema, pulmonary infarction areas in both lungs (more numerous in the lower lobes), pulmonary atelectasis, thrombus in the right heart, thrombus in the pulmonary trunk and pulmonary arteries (lobar and segmental), thrombus in the right femoral vein, and increased levels of the serotonin in the blood (laboratory exams). There are several thanatogenerator mechanisms: mechanical locking of the pulmonary arterial circulation, neuroreflex mechanism and the humoral actions of the serotonin.

Key words: sudden death, thrombus, pulmonary infarction, necropsy

P37- A CASE REPORT: STRANGULATION DEATH OF AN 8 YEAR OLD GIRL Mustafa Balkay¹, Akan Karakuş² ¹Ministry of Justice, The Council of Forensic Medicine, Samsun, Turkey ²Ondokuz Mayıs University Faculty of Medicine, Medical Education Department, Samsun, Turkey akanqk@yahoo.com

A report by WHO and UNICEF, is emphasized that more than 2000 children die every day as a result of unintentional or accidental injuries. Also, tens of millions children worldwide are injured and those injuries are resulted with lifelong disabilities. In present paper, we report an eight year old girl who was death because of hanging with a scarf attached to her second berth sleeper in her bedroom. Autopsy findings revealed strangulation mark on her neck. The cause of death was blunt force trauma to the head and the manner of death was listed as homicide. There wasn't any fracture in the hyoid bone, the thyroid, and the cricoid cartilages. No ecchymosis was found around the hyoid bone and cartilages. We decide that the cause of death was asphyxia due to strangulation. The World report on child injury prevention provides the first comprehensive global assessment of unintentional childhood injuries and prescribes measures to prevent them. It concludes that if proven prevention measures were adopted everywhere at least 1000 children's lives could be saved every day.

Key words: Forensic medicine, child death, accidental injuries, strangulation

P38- COMPLEX SUICIDE CASE: SELF-ELECTROCUTION

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Complex suicide is defined as using more than one suicide methods together. Using another method concurrently when the first one has the possibility of inefficiency is named as primary complex suicide, using another method to accelerate death when selected method becomes unsuccessful or goes slowly or gives much pain is named as secondary complex suicide. In this study, we aimed to discuss the case whose death occurred as result of complex suicide. At the autopsy of 57 years old male case who is found dead at his home, on external examination; it is seen that there are bare, plastic parts removed copper wires which is tied, and surrounds hand totally on the left hand palmar and dorsal faces. On the skin parts that wires contact, typical electric burns; on the palmar and dorsal faces of right hand, electric burns which surrounds totally; on the inner face of left wrist, six superficial lacerations which varies between 1.5 and 4 cm in length, involving skin-subcutaneous tissue and soft tissue that are smooth marginated detected. On toxicologic evaluation, any toxic substance were not detected. Lacerations on the left wrist was not fatal and it is understood that death caused from cardiac arrest linked to electric current. In complex suicide cases, as we can see traumatic lesions more than one that made by various methods; when determining origin, it will be the best approach to consider together medical records of case, information gathered from family, event scene and autopsy findings.

Key words: Complex suicide, electrocution, autopsy, homicide, electric burns.

P39- SUDDEN DEATH IN HYPERTROPHIC CARDIOMYOPATHY A. Xhani, A.Vako, I. Robaj, A. Kenuti, G. Ylli *Institute of Forensic Medicine, Albania*

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In this paper a case of sudden death is reported as regarding the determination of diagnosis and causis of death, after performance of autopsy. The deceased recorder is male. A particular attention has been paid of the age of deceaset. He was 47 years old. In morning of 20.04.2014, he is found dead in front of his proper dwelling. The medicolegal examination is performed in Albania Forensic Institute. The necropsy showed that no external factors has inflyennced in cause of death. After macroscopic description from miocardial tissue, we take part of them for the eventual mycroscopic egzamination. All macroscopic and hystopathologic findings are descripted in this paper.

Key words: Hypertrofic cardiomyopathy, sudden death

P40- OESOPHAGOTRACHIAL FISTULA FORMED BY SWALLOWED ALKALİ BATTERY: A CASE REPORT

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There is a limited amount of case presentation at literature related with esophagus burns and complications formed as a result of swallowing alkali battery. At our case, the main purpose is to discuss regarding literature the autopsy findings of late complications of swallowing alkali battery. At the chest radiography of a 9 months old boy who has a complaint of vomiting for three days, an opacity matches with a foreign substance at esophagus has been observed. At the end of esophagoscopy, the swallowed battery has been taken out. At the fifth day after operation, no complication has been observed so oral feeding has been started. At the sixth day of hospitalization, he has been discharged. Four days after discharge, he has been brought to hospital by blooded vomit complaint and he has been hospitalized again by chemical esophagus burn diagnosis. One day later, he has been dead. At the performed autopsy, esophagotrachial fistula, corrosive burn and GIS bleeding have been detected. As the dimensions of alkali battery increase, contact surface gets bigger and may cause increase in damage and toxicity. Besides, long contact period shall increase the toxic effect of the battery. It is considered that early diagnosis is an important factor in preventing late complications.

Key words: Alkali battery, Esophagotrachial fistula, Autopsy

P41- CHYLOPRICARDIUM AFTER GUNSHOT INJURY: A CASE REPORT Tülay Renklidağ, <u>Hacer Yaşar Teke</u>, Mehtap Yöndem, Mustafa Karapirli *Ministry of Justice, The Council of Forensic Medicine, Ankara, Turkey* <u>hacer.hgulderen2004@gmail.com</u>

The thoracic duct continues cephalad in a rightward position between the aorta and the azygos vein until it is close to the fifth thoracic vertebra where it crosses over the vertebral column behind the esophagus and continues its course in the left posterior mediastinum. Collection of chylous effusion in the pericardium is the rare cause of pericardiyal effusion. Chylopericardium may be primary (idiopathic) or, much more often, secondary. Chylopericardium usually occurs secondary to trauma, cardiothoracic surgery, radiation therapy, or neoplasm of the mediastinum. In our case it is supposed to discuss the chylopericardium resulted in the patient operated after gunshot injury among literature. A 16 years old man with gunshot wounds in the abdominal region taken to he hospital died after the incident despite all medical efforts. In the autopsy, there were collections of chylous effusion in the pericardium and bilateral torax cavity. There were also in the abdomen peritonitis, signs of infection in the lungs. Traumatic chylopericardium usually results from motor vehicle accidents but in our case chylopericardium occurs after gunshot injury. According to us, it is important chylopericardium should be taken consideration in the cases of gunshot injuries in the abdominal region.

Key words: Chylopericardium, Chylohemithorax, Gunshot Wound, Autopsy

P42- MYOCARDIAL INFARCTION CAUSED BY SHOTGUN INJURY

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As firing range increase in shotgun wounds, dispersion area of the pellets expands. In the same time, because kinetic energy of the pellet decreases, penetration of the pellet to the body decreases as well. Firings which are done from long distances result in nonfatal injuries by remaining pellets in an organ or a tissue due to decreased kinetic energy. Only acute life-threatening pellet injuries are operated surgically. However, other pellets in the body are not operated usually. A 34-year old male who was shot with more than 60 pellets by his back was taken to hospital. The patient was operated due to multiple perforations on his digestive system. Bilateral tube thoracostomy was applied on the patient because of hemopneumothorax. He was discharged from the hospital after 17 days. He admitted to hospital with chest pain, palpitation and dyspnea after 55 days from the injury. Tests in the hospital revealed narrowing and thrombosis in the right coronary artery due to a foreign body and infarct findings on the area of this artery supplies. Myocardial infarctions due to shotgun injuries can be caused by injury of coronary artery, embolization of shotgun pellet or direct injury of myocardium. Mechanism of injury with the help of radiological screening methods will be discussed in this case report.

Key words: Shotgun, myocardial infarction, wound

P43- A QUESTIONNAIRE STUDY TO PROSECUTORS ABOUT FORENSIC MEDICINE PRACTICE Fatih Yağmur¹, Eyüp Kandemir¹, Cem Uysal², Süleyman Yılmaz¹, <u>Safa Çelik¹</u> ¹The Council of Forensic Medicine, Istanbul, Turkey ²Dicle University, Diyarbakır, Turkey drsafacelik@gmail.com

Usage of common language and working in cooperation of prosecutors, law enforcement agencies and forensic specialists are very important in forensic applications. Therefore, it is necessary that partners should organize common meetings to share knowledge and experience. In these meetings partners also should express expectations from each other and offer solutions for problems. Forensic applications in service training programs are provided for prosecutors and law enforcement. Our study is a questionnaire study and performed to prosecutors during in-service training program in January 2014 in Antalya. All 94 prosecutors consists of 2 female and 92 male. Participants were assessed according to age, gender, place of work, occupation time, autopsy training and autopsy opinions and graduated university. In this study we aimed to discuss with the literature what issues should be emphasized to prosecutors who are competent in criminal cases in service training program.

Key words: Questionnaire, Prosecutors, Forensic Medicine Practice

P44- DECAPITATION AT THE GO-KART RACING <u>Erdoğan Kara</u>, Safa Çelik, Uğur Çom, Yiğit Sezer, Esra Ünal *The Council of Forensic Medicine, Istanbul, Turkey* erdkara@gmail.com

Go-kart racing is a popular and one of the fascinating entertainment among induviduals in adolescent and young adult age groups. Although these vehicles usually have more than one protective measures as the standard equipment, horrible accidents may have been occured.We performed an autopsy and requested toxicological analysis in The Council of Forensic Medicine in Istanbul. We discuss the pattern and mechanism of injury with literature. In our case, An 24-year-old woman was riding a go-kart when her long scarf's free end was reported to have become entangled in the rotating shaft of back wheels, resulting in progressive tightening of the scarf around her neck, pulling her right back from the neck and finally decapitation. There was no such an accidental case resulting with decapitation encountered in the literature. There was a case showing similarity in some respects but differ by the manner of the accident and the result. In the aforementioned case there was an 18-year-old man who suffered tracheal disruption after entanglement of his scarf in a go-kart engine with circumferential ecchymosis and epidermal shearing on the neck. There were a precaution list in the vehicle schematizing the prohibition (ban) of wearing long scarf during drive. This is an interesting and rare case in respect to the type of accident, mechanism of injury and manner of death in daily forensic practice. Mesenteric vessel, urinary and skeletal system injuries, injuries related to pancreas, vulva, pelvis, testis injuries have been reported in go-kart accidents. In most of the cases, steering wheel was shown to be the main reason for injuries

P45- BODYBUILDING, FAT BURNERS, DIETARY SUPPLEMENTS AND HEPATORENAL PATHOLOGY: A CASE REPORT AND REVIEW OF THE LITERATURE

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The authors present the case of a 29 year-old male bodybuilder with no previous medical history who died unexpectedly of cardiac tamponade due to rupture of the ascending aorta. For the last six years of his life he used to work out almost daily at the gym, mostly through weight lifting. On microscopic examination the liver revealed moderate degree of parenchymal pathology including steatosis, inflammation and fibrosis, while the renal histology revealed focal interstitial nephritis and slight changes of the glomerular structure. A thorough investigation of the descendant's medical history and life style during the last six years, through detailed information provided by his family confirmed a systematic and chronic consumption of fat burners, muscular mass gainers, proteins, creatine, aminoacids and energy drinks, and most importantly it did not exclude the use of anabolic steroids. Systematic alcohol intake was excluded. The history, autopsy, toxicology and microscopic results were all combined in order to conclude if the histopathology of the hepatic parenchyma is attributed to the systematic use of fat burners and other dietary supplements. Histology and special dyes excluded alcoholic, viral and bacterial causes of the decedent's hepatic and renal pathology, which was finally attributed to the prolonged intake and toxicity of fat burners and dietary supplements. The present case adds to the increasing number of reports of hepatotoxicity associated with dietary supplements and weight loss products. Fat burners are believed to raise metabolism, burn more calories and hasten fat loss. Despite the perception that herbal remedies are free of adverse effects, some supplements are associated with severe hepatotoxicity.

Key words: Bodybuilding, fat burners, dietary supplements, hepatic injury

BEHAVIORAL SCIENCES

P46- FORENSIC EXAMINATION AS CRUCIAL EVIDENCE IN CRIMINAL PROCEEDING Sedat Krasniqi^{1,2} ¹Scientific Centre of Criminalistics Research and Examination Prizren ² "FAMA" University in Kosovo sako_pz@hotmail.com

In a murder case, court has the duty to prove the fact and the purpose of the accused in the commission of the penal case. Sine there are often cases in practice where there is not always direct intent (dolus directus) of the perpetrator to kill the victim, it is important to establish his/her criminal responsibility. The issue that is treated in this study aims to show the importance for proposing and administrating the examination of forensic doctor, respectively neuropsychiatrist, clinical psychologist and psychiatrist as evidence in criminal proceeding of a murder case. Examination of the accused in a murder case at the psychiatric clinic is important to certify and prove the issue whether the accused person at the time of committing the offense was in a sound mental (psychological) state, was he/she able to understand his/her actions, whether he/she committed intentional murder or murder has occurred due to the strong mental shock - distress. Determining the mental state of the accused at the time of the offense helps the court to prove the doubts whether the defendant understands the significance and consequences of his/her actions, respectively it assists in making a fair judgment against the offender and in determining the factual situation. An examination in a concrete judicial case will be presented in this study to understand how forensic examination, as evidence, affects in making decisions in court proceedings.

Key words: murder, examination, neuropsychiatrist, evidence, judgment

P47- FORENSIC EXPERTISE A KEY PROOF IN CRIMINAL CASES Sedat Krasniqi^{1,2} ¹Scientific Centre of Criminalistics Research and Examination Prizren ² "FAMA" University in Kosovo geshk2012@gmail.com

In various criminal matters pertaining to the execution of criminal offenses, especially serious ones, by which the perpetrator of these criminal deeds has caused major damages to the injured with his actions or killed him, so it is difficult for the state court as a decision-making body to verify the factual situation of particular motives of the accused by leaving the question open to the "computable" affect of the perpetrator or even to essential reducing "spiritual computable" of the offender. In criminal proceedings on the evidence administration in order to verify the state attorney's claims as regarding the perpetrator of the offense- the accused, the forensic expertise proves the fact of the execution of offense in state of spiritual health or sickness of mental health (psychic) of the defendant. By proving the evidence for the spiritual health of the defendant in all criminal proceedings phases it is important procedural evidence, which as such, is very necessary especially for the murder criminal cases. Therefore in that direction, Prizreni District Court by administrating the test of the neuropsychiatric forensic expert pronounced a lower sentence of imprisonment to the accused, otherwise if it was not administered the relevant evidence, the accused would be more severely punished. Therefore the evidence of the forensic expert in application of positive law in science and practice plays its important role in terms of verifying the factual circumstances of the offense and as such serves to the trial court that by the occasion of sentence take as mitigation.

Key words: Department of Forensic Psychiatry, neuropsychiatric experts, clinical psychologists

P48- FORENSIC PSYCHIATRIC EVALUATION OF SEXUAL CRIME VICTIMS M. Sunay Yavuz¹, <u>M. Ziya Kır¹</u>, Ş. Yalın Sapmaz², Erol Ozan³, Mahmut Aşırdizer⁴, Yıldıray Zeyfeoğlu¹, Tarık Uluçay¹, İlknur Kahraman¹, Gonca Tatar¹, Faruk Aydın¹ ¹Celal Bayar University, Medical Faculty, Department of Forensic Medicine, Manisa, Turkey

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Sexual crimes are one of the most offensive crimes committed against individuals. Given that individuals from every age and both genders are affected from this actions. It appears as a serious problem that threaten society and preventive measures have to be taken against it. It is an undeniable fact that; mental health seriously affected by sexual assaulted or abuse. In this study, we aimed to evaluate forensic psychiatric examination reports of the cases that are send to examine whether or not any permanent psychiatric impairment after sexual assault or abuse. Findings from examination of cases which are sent to Department of Forensic Medicine, Medical Faculty of Celal Bayar University between October 2012 and February 2014 for determining permanent psychiatric impairment were evaluated. Number of examined cases were 55 and number of diagnosed cases were 33. The age range of cases were from 7 to 77 years (SD=20.39±13.17). Of the cases; 57.6% (n=19) were younger than 18, 87.9% (n=29) were women, 63.7% (n=21) were simple sexual assaulted or abused, in the 72.8% offender was known by victim, in the 24.2% (n=8) crime happened at the home of offender or victim. As a result of forensic psychiatric evaluation, in the %30.3 of cases (n=10) were detected permanent psychiatric impairment. Examination of cases has to be performed scrupulously because, permanent psychiatric impairment by sexual crimes, not only negatively affect victim his/her social environment but also it is a country's laws punishment-enhancing factor.

Key words: Sexual assault, sexual abuse, mental health, forensic psychiatry

P49- SUICIDE ATTEMPT WITH DRUG INTAKE DURING PREGNANCY: FIVE CASE REPORTS

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Though suicide attempts in the gestation period relatively low compared with other periods of life, taken drugs create risk to both mother and fetus. There are few studies about what types of drugs used during pregnancy for suicide. The aim of this study was to evaluate pregnant patients with oral intake of drugs due to suicidal attempts. Pregnancies with drug use during any week of gestation were retrospectively evaluated between the years 2010-2014. 514 pregnant women reports regarding teratogenic effects were studied. Five patients to commit suicide with oral medication intake were identified and these cases evaluated in terms of demographic characteristics, duration of pregnancy, medications taken as well as the effects of these drugs on fetal development. Suicide attempts during pregnancy with drug intake occurs in the second and subsequent pregnancies in all cases. The ages of patients ranged from 19-32, four cases attempted suicide in the first trimester with single drug intake and analgesics has been identified in the first place drug. Drug use during pregnancy, is one of the important obstetric issues because of the potential teratogenic effects on the fetus. Suicide attempt during pregnancy constitutes risky cases to evaluation and make decision for physician in terms of adverse effects of the drugs on both mother and fetus.

Key words: Suicide, drug, pregnancy, risk, teratogen

P50- BULLYING AMONG TURKISH ADOLESCENCES: THE ROLES OF GENDER STEREOTYPES Eda Ermağan *Istanbul University, Institute of Forensic Sciences, Istanbul, Turkey* ermagan.eda@gmail.com

Bullying has been described as unwanted negative behaviour, verbal, psychological or physical conducted by an individual or group against another individual or group repeatedly. It is a behavioural problem which affects the lives of thousands of school children and their families. The humiliation, fear, frustration and social isolation and loss of self esteem which children experience when bullied results in absenteeism from school, poor or deteriorating schoolwork, personality change, illness, depression and unfortunately sometimes suicide. Bullying can have variety of types. However, one of these types has been put forward by many social scientists in the last decade: prejudicerelated bullying. Children and young people can experience this kind of bullying for different reasons; where they live, their sexual orientations, gender, disability, the colour of their skin, what clothes they wear or what team they support. Thus, the aim of the study is to assess the influence of gender stereotypes, sexism and homophobia, on attitudes toward bullying. This present study was to examine the association of gender prejudice by examining stereotyped beliefs bullying bevaviour among adolescences aged from 15 to 17. Participants completed a questionnaire that included measures of bullying, bullying behaviours and gender stereotyped beliefs. The results of the study show that there is a strong association between sexism and bullying behaviour. Adolescents with higher gender stereotyped beliefs seem to support bullying than others who don't have these. In conclusion, the study underlines the risks and also importance of the issue, and also points out necessity of prevention programmes at younger ages.

Key words: gender stereotypes, bullying, adolescents

P51- POSTPARTUM DEPRESSION: A REVIEW

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Post-partum stress and depression (PPD) have a significant effect on child development and behavior. Depression is associated with hypercortisolism in humans, and the fluctuating levels of hormones, including corticosterone, during pregnancy and the postpartum, may contribute to PPD. The present study was developed to investigate the effects of high-level corticosterone (CORT) post-partum in the mother on postnatal neurogenesis and behavior in the offspring. Studies show us risk factors that contribute to the genesis of postnatal depression can be categorized into five categories:

1) individual characteristics,

2) characteristics of the partner,

3) pregnancy related,

4) infant related and

5) others, such as culture, financial difficulties and lack of social support. Diagnosis is based on the DSM-IV criteria for major depressive episodes and the Edinburgh Postpartum Depression Scale. Treatment options include pharmacological treatment with antidepressants or hormone therapy, psychological and psychosocial treatments, electroconvulsive therapy (ECT), bright light therapy and alternative methods such as acupuncture. Guidelines suggest non pharmacological treatment as first choice for mildto-moderate PPD and pharmacological treatment and ECT for severe and resistant cases. This Study is a review for postpartum depression. It is a brand new topic for forensic science for both ways. Pregnancy ED symptoms and past depression have an additive effect in increasing the risk for depression and anxiety perinatally. Screening at risk women for anxiety and depression in the perinatal period might be beneficial despite our knowledge on the high lifetime comorbidity rates between emotional disorders and ED, very few studies have tried to understand the relationship between past and active pregnancy ED and the perinatal course of depression and anxiety. Understanding whether active ED symptoms in pregnancy increase the risk for perinatal anxiety and depression over and above past history of affective disorders (i.e., whether pregnancy is a trigger for a relapse of affective disorders as such or causes new onset affective disorders in the perinatal period) can help us understand risk and develop relevant prevention strategies both for women and their infants.

Key words: Postpartum, Depression, Pregnancy

P52- SEXSOMNIA: A REVIEW

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This review attempts to assemble the characteristics of a distinct variant of sleep walking called sexsomnia/sleep sex from the seemingly scarce literature into a coherent theoretical framework. The fact that sleep is promptly reversible is probably the most important characteristic which differentiates it from most other states of altered consciousness. Sexsomnia is a disorder that is characterized by abnormal sexual behaviours during sleep and can vary from explicit sexual vocalizations to violent masturbation and complex sexual acts including oral, vaginal or anal penetration. This disorder has clinical, psychosocial and medico-legal consequences, both to the patient and the people that surround him. Despite the scarce literature and infrequent reports, there are some descriptions of violent behaviours, sexual assault and sexual involvement of minors. Common features of sexsomnia include sexual arousal with autonomic activation (e.g. nocturnal erection, vaginal lubrication, nocturnal emission, dream orgasms). Somnambulistic sexual behavior and its clinical implications, the role of precipitating factors, diagnostic, treatment, and medico-legal issues are also reviewed. This study is a review for sexsomnia. It is a brand new topic for forensic science for both ways. It is not unusual that after an all-night party single people sleep over at a friend's house, but, it has now become socially acceptable, in some cultures, for men and women to sleep together in the same room and even in the same bed, even if they have not known each other well. Thus, it is not surprising that an increasing number of criminal cases are coming before the courts where the interaction of sexual behavior and sleep is reported to have led to an offence, usually rape of or sexual misconduct with a child. In our review, sleepsex was far more injurious to the bed partner than to the person affected with parasomnia, although adverse psychosocial consequences were quite common in both patients and bed partners. Sequelae may also be accompanied by reactive emotional distancing that may lead to some marital estrangement with marriage counseling sometimes being sought.

Key words: Sleep Disorder, Sexsomnia, Sleepsex

P53- THE RELATIONSHIP BETWEEN DOMESTIC VIOLENCE AND SELF RESPECT AND DESPERATION LEVEL IN TEENAGERS Ayşe Arıkan¹, Zeynep Belma Gölge²

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This study aims to evaluate the self-respect and desperation level in teenagers who have been exposed to domestic violence, prevent violence and provide scientific contribution to the guidance to the guidance studies. The Research Group of this study is formed by the forty-six people aging between 12-18 who have come to the interviews to the Bakırköy Famiy Court as a result of the ongoing divorce lawsuits and who have been exposed to or have witnessed domestic physical, sexual or emotional violence. The Control Group consists of forty-seven people aging between 12-18who do not have any history of violence so far. In the study Interview Forms and Offer Self-Respect Scales ad Beck Desparation Scales have been applied. It has been found out that the scores of the desperation level in the Research Group are significantly high compared to the Control Group (t =2.44, df : 93; p < .02) It has been realized that Family Ralations Scale of the Self-Respect Scale in the Research Group (t :3.42, df: 93; p <.01) and scores of Psychological Health are significantly higher than the Control Group. At the end of our study, it has been identified that domestic violence has effects on self-respect and desperation level which are influential on the child's future planning, academic achievement and social life. Specifically, family relations and identification of the problems related to psychological health should be taken into consideration in planning strategies for preventing violence and guidance studies.

Key words: Domestic violence, self-respect, desperation

P54- A CASE OF SEXUAL ABUSE WHERE THE CHILD IS ACTIVE Berna Şenel Eraslan, İbrahim Eray Çakı, Melek Özlem Kolusayın, Gürsel Çetin Istanbul University, Cerrahpaşa Medical Faculty, Department of Forensic Medicine, Istanbul, Turkey drpoberna@yahoo.com

Child abuse is an important public health issue that has medical, legal and social dimensions. Sexual abuse, one of its types, is the abuse of a child who has not completed his/her psychosocial development by an adult for sexual arousal purposes. Acts ranging from rape, child pornography, exhibitionism, speeches that provoke sexuality, forcing to watch pornographic movies, stroking genitalia and oral sex are in the sexual abuse spectrum. It is a known fact that children of all ages and socioeconomic groups are sexually abused. Even though it is reported that 1/3 of children reported to be abused are male, it is also emphasized that male children may voice the abuse at a lesser extent due to the insinuations of homosexuality and stigmatizations. A 15-year old male case: A case of child abuse where a boy who quit school met a man aged 28-30 while looking for work and was aroused to reach erection at a hotel they went for work purposes, after which the defendant forced the boy to perform anal penetration. The case was referred to us to be assessed in terms of mental and physical health according to the Article 103 of the Turkish Criminal Code regarding child abuse based on court decision. Generally speaking, the victim in cases of sexual abuse is passive, however, he was made active in this case and the act of abuse thus took place. No findings were detected in the physical examination of the victim and his psychiatric examination demonstrated major depression and Post-Traumatic Stress Disorder. This case was found interesting in that the act of anal penetration was performed by the victim on the defendant in the form of an active act and it was discussed with respect to sexual abuse.

Key words: Child abuse, homosexuality, forced, victim

P55- BLOOD TYPES AND SUICIDE RATES IN THE REGION OF PLOVDIV, REPUBLIC OF BULGARIA Marin Baltov *Medical University of Plovdiv, Bulgaria* <u>dr.baltov@abv.bg</u>

The aim of the research is to study the relation between the blood types of suicides in the region of Plovdiv, Republic of Bulgaria, and the methods used by them for committing suicide, as well as the suicide frequency rate. The issue of the relation between the suicidal ideation and human blood types has been insufficiently studied and it is an object of discussion. No such research has been conducted in the Republic of Bulgaria and in the other countries on the Balkan peninsula. The method of choice is historical. The information used is courtesy of the Department of General and Clinical Pathology and Forensic Medicine of the Medical University in Plovdiv, and of the Department of Forensic Medicine at St. George University Multi-profile Hospital for Active Treatment EAD, Plovdiv. It has been established that "O" and "AB" blood type people commit relatively fewer cases of suicide in reference to their distribution among the population in the region. The relative share of the cases of jumping off heights, hanging and using firearms for committing suicide by "A" blood type people is higher than the distribution of the blood type among the population. The relative share of "B" blood type suicides is higher with suicides committed by poisoning, drowning and throwing themselves under passing trains, for the "O" blood type - in the cases of suicide committed by using cold weapon, and for the "AB" blood type – in the cases of throwing themselves under passing trains.

Key words: suicides, blood types, methods of committing suicide

P56- ADOLESCENTS DATE RAPE: A REVIEW

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Rape distorts one of the most intimate forms of human interaction. Those who rape do so for a number of reasons, but they basically involve the motives of anger, power, eroticized cruelty, and opportunistic mating. No single set of cognitive, psychodynamic, psychopathological, or neuropsychological factors has been identified in those who commit sexual assault, probably due to the heterogeneity of this offender group. It is thus important to understand the diversity of this crime category in order to devise more effective means of adjudicating, treating, and deterring it. Adolescents and young adults are four times more likely to be victims of sexual assault than women in all other age groups. In the vast majority of these cases, the perpetrator is an acquaintance of the victim. Date rape is a subset of acquaintance rape where nonconsensual sex occurs between two people who are in a romantic relationship. This Study is a review for adolescent's date rape. It is a brand new topic for forensic science for both ways. Abusive experiences during dating relationships may disrupt normal developmental processes, including the development of a stable self-concept and integrated body image during adolescence. This disruption manifests itself through thoughts, feelings, and behaviors. Consistent with other studies that have found higher rates of disordered eating behaviors and other psychological distress among adolescents who have been either sexually abused or physically abused by adults, or abused on a date. Date violence and rape are significantly associated with disordered eating behaviors, other risk behaviors, and psychological health

Key words: Date rape, Adolescent, sexual crime

P57- SPECIFICS OF COURT PSYCHOLOGICAL REPORT OF CHILD VICTIMS OF SEXUAL ABUSE: EVALUATION OF SPECIFIC BEHAVIORAL MARKERS Nikolina Angelova-Barbolova

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The article raises questions that the forensic psychological report of child victims of sexual abuse is more specific. Materials and Methods: Presents certain psychological methods to support the hypothesis that the child has been the subjected of sexual violence. Results and Discussion: Illustrated defined behavioral markers that issued presence of psychological trauma emotional space of the victims. The article is an example of working methods that indisputably prove the existence of experienced sexual abuse and to aid professionals.

Key words: violence, trauma, victim, forensic, methods

P58- PSYCHOLOGICAL AND PERSONALITY ASPECTS AMONG PRISONERS Nikolina Angelova-Barbolova *Regional Hospital of Psychiatry, Department of Forensic Psychiatry, Rousse Bulgaria* nikolinaangelova@abv.bg

The article presents the most contemporary views concerning the prerequisites for aggressive and autoaggressive actions in the institutions for freedom restrictions and the possibilities for prevention. An overview of some studies on the self-inflicted harm in the retention centers is made. Various means, places, factors which increase the risk of aggressive and autoaggressive actions are listed/personality profile, mental illness, family relations, education, age and others/.

Key words: personality disorders, aggression, autoaggression, prisoniers

P59- PARASOMNIA: A REVIEW

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Parasomnias encompass the undesirable physical events or experiences that occur during entry into sleep, within sleep, or during arousals from sleep. Parasomnias are manifestations of central nervous system activation with outflows through skeletal muscle, autonomic nervous system, and emotional-experiential channels. And also parasomnias are unpleasant or undesirable behavioral or experiential phenomena that occur predominately or exclusively during the sleep period. Once believed to unitary phenomena, related to psychiatric disorders, it is now clear that parasomnias are the result of several completely different phenomena and usually are not related to psychiatric conditions. This study is a review for parasomnia. It is a brand new topic for forensic science for both ways. Automatic behaviors (automatisms) resulting in acts that may result in illegal behaviors have been described in many different medical, neurologic, or psychiatric conditions. Violent sleep-related behaviors have been recently reviewed in the context of automatized behavior in general. 114 There are well-documented cases of somnambulistic homicide, filicide, attempted homicide, and suicide, murders and other crimes with sleep drunkenness (confusional arousals), and sleep terrors or sleepwalking with potentially violent or injurious consequences. A wide variety of disorders may result in sleep-related violence. These conveniently fall into two major categories: neurologic (sleep-related) and psychiatric.

Key words: Parasomnia, Sleep Disorder,

P60- CASE STUDY OF PATRICIDE PERPETRATED BY A MINOR

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Patricide - the killing of the father by his biological son - is a rare event, with a complex motivation which usually correlates directly with the psychological structure of those implicated and also with a defective family environment. In this paper the authors present the case of a 15 year old minor, who killed his father with a steel pipe which caused to the victim a blunt trauma. The discussion with the minor revealed that he was subjected to emotional and psychical abuse by the father during his entire life, the abuse being extended to the entire family, especially to the mother. The medico-legal psychiatric expertise of the minor established that he was mentally impaired at the moment when he murdered his father, suffering from acute stress reaction (F43.0 according to ICD 10). During the examination at the Psychiatric Hospital and by medico-legal psychiatry experts the minor was diagnosed also with Post Traumatic Stress Syndrome for which he requires complex drug and psychological therapy. This case underlines the importance of the medico-legal psychiatric expertise in determining the patient's mental state at the moment of committing the murder but also in establishing the long term diagnosis and suitable treatment in order to prevent future episodes of antisocial behavior.

Key words: patricide, minor, murder, expertise, PTSD

P61- PREVALENCE OF RISK FACTORS IN HOMOCIDAL BEHAVIOR IN SCHIZOPHRENIC PATIENTS Ilda Aliko, Anila Kazaferi *Institute of Forensic Medicine Rr. Dibres QSUT "Nene Tereza" Tirana, Albania* ildaaliko@yahoo.com

An important role in homicidal behavior in schizophrenic patients plays comorbid substance abuse, negative compliance with therapy, paranoid and bizarre delusions, command hallucinations, comorbid personality disorders. This study aims at assessing the prevalence of risk factors that affect the homicidal behavior. A sample of 108 schizophrenic patients in prison hospital was analyzed in a cross –selection study. The instruments used are Psychopathy Checklist-Revised (PCL-R) and Positive and Negative Syndrome Scale PANSS. The history of past violence and substance abuse are also significant risk factors of homicide in mentally healthy people. Nearly three - quarters had a history of violence in the past. 27% of schizophrenic forensic patients had comorbid with substances abuse. 64% were not cured with medications during the crime committing period. 73% of patients had positive symptoms (paranoid, bizarre delusions or commanded hallucinations). Personality disorders accounted for 52%. Homicidal behavioral risk factors plays an important role in the increase of the homicide numbers in schizophrenic patients. Mental health service must be careful in management of risk factors to reduce the number of the homicides by patients with schizophrenia.

Key words: homocid, schizophrenia, psychosis

P62- MANUSCRIPTS CHANGED UNDER THE INFLUENCE OF PSYCHO-PHYSICAL FACTORS

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The manuscript, as a basic element for identifying an offender, has been subject of profound scientific studies by specialist forensic experts of the field of scientific manuscript examination worldwide. Besides studies related to offender identification based on the manuscripts in various documents, there has been a wide range of research on the aspect of text writing under the influence of psycho-physical factors, or as otherwise stated "under the effect of a person's unusual psychic psychological conditions", mainly before he puts an end his own life using various forms and methods, such as suicide, self-poisoning etc., and/or also using different tools and items such as firearms, ropes, hand grenades, poison... etc. In the crime scene, or at a distance therefrom we could also locate their manuscripts, who, in one form or another, write about their final will, or the reason that led them to commit suicide. From the forensic aspect, they leave their manuscripts (the material evidence), on the basis of which their identification is made. In scientific examination of manuscripts, the following classic question is taken up for solution:"To determine whether a text, signature or figures are written by this or that person or not?" These are reasons why an expert's conclusion, despite the categorical or probable formulation, by the expert examiner of documents, should be accompanied by the phrase "... compared with the samples made available."

Key words: factors influence, forensics experts, manuscripts, scientific

FORENSIC ANTHROPOLOGY / FORENSIC NURSING

P63- FOURTH MOLARS-HYPERDONTIA: A CASE REPORT IN MIDYAT/AKTAS Avse Acar

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Hyperdontia or Supernumerary teeth are called numeric anomalies of teeth that is rare condition of unknown etiology. Genetic factors probably play important etiological role in the supernumerary teeth. This study was done on human remains found in 4 tombs of Aktas Site (Midyat/Turkey) excavated in 2013. A case report presents occurence in two mandibles which have fourth molars from the first tomb. Burial remains of human skeletons were dated to archaeological periods in AD 3rd and 4th centuries. There has been no information on the sex, age, the cause of death and the demographic data of Aktas population so far. Morphological technique is used for sex assessment in the samples. We used dental wear to assess the age. The age and sex of the first sample was estimated between 20 and 25, and male respectively. The fourth molar of the first sample is post-mortem absent and the alveolary is located in the distal M3. The sample was poorly preserved, that is why it was not possible to assess the age and sex in the second mandible. The fourth molar crown developed, however, its root was rudimentary and its size was smaller than the other molars in the second mandible. The cases described few samples of the supernumerary teeth.

Key words: Hyperdontia, Supernumerary teeth, Fourth molars

P64- FORENSIC IDENTIFICATION CASE SOLVED THROUGH PHOTO SUPERIMPOSITION

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The case shows a successful forensic identification of a body of an unidentified girl. Material and Method: Forensic medical examination of the remains of the deceased with dental status, forensic photography and experimental comparing. The body was in advanced stage of decomposition with partial skeletonization and multiple incised and stab incised wounds, which had been the cause of death. The age of the body was estimated anthropologically to be between 8 - 10 years. The skull (without the mandible) was provided for examination. A photograph of a missing girl at the age of 8 years showing the teeth during a smile was also given. During the examination of the scull and especially of the teeth a lingual inclination of the right lateral incisor was found. The same inclination was identified on the photograph given for superimposition. The comparison between dental characteristics found on the unidentified skull and those on the teeth of the antemortem photograph was carried out by the means of the conventional method of photo superimposition. As a result a full match of dental characteristics was confirmed. It is recommended that this method be applied in the forensic practice as being reliable, demonstrative and relatively easy to perform.

Key words: Forensic medicine, forensic dentistry, body identification, dental status, photo superimposition

P65- EVALUATION OF LESIONS FORMED DURING REMOVAL OF SKELETONIZED REMAINS M. Feyzi Şahin, Özge Ünlütürk *Ministry of Justice, The Council of Forensic Medicine, Istanbul, Turkey* feyzisahin@yahoo.com

Identification of whether lesions identified during examination of skeletonized remains are antemortem, perimortem or postmortem is one of the most important steps and this information provided on the lesion changes the whole investigation process. Antemortem lesions are easily distinguished, while it is more difficult to distinguish perimortem and postmortem lesions. Besides changes caused by environmental factors on bones, misapplied interventions during removal of bones, especially at the scene, causes certain fractures or defects on bone tissue. These lesions that occur during the works or transfer of bones, causes certain difficulties in identification of the cause of death. It is possible to determine whether the lesion occurred prior to/during death or after death, by detailed evaluation of fractures or defect surfaces, during examination. The aim of this study is to contribute to the literature according to criteria specified for distinguishing postmortemperimortem in bone examinations for determining cause of death, and to emphasize the importance of methods to be implemented during removal of bones for clarification of forensic incidents.

Key words: Exhumation, Forensic Anthropology, Cause of Death, Postmortem

P66- THE CRETAN COLLECTION: A MODERN REFERENCE COLLECTION FROM GREECE

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The Cretan osteological Collection consists of 212 human skeletons, mostly individuals that lived in Crete for more than three generations. It is temporarily hosted on the premises of the division of Forensic Pathology of the Ministry of Justice, in Heraklion, Greece. The collection was created by EK in 2003 for the purpose of her doctoral dissertation after authorization from the District Attorney to analyse skeletal remains from 2 Cemeteries in Heraklion, Crete. The sample comprises of individuals who died between 1968 and 1998. 21 people who migrated from Turkey, islands and mainland Greece are included. Demographic information was available for 145 individuals and death certificates were recovered for 77 cases. Sex was inferred from the names on the boxes. Sex distribution is almost equal (49,5% males, 48,6% females). The age range is 19-101 (N=145), mean age is 69±13,8 for males, and 71.7±16,9 for females respectively. Skeletal trauma analysis showed that 42% of the males and 46% of females had at least one fracture. The maximum number of fractures observed was 6 in a male and 10 in a female. A total of 80 skeletons were fully inventoried and the data will be summarized here. The Cretan collection is the second modern reference collection in Greece and it has been thoroughly used as reference in several forensic cases concerning heavily decomposed human remains on the island of Crete. Once the inventory is complete the collection will be available for research upon request.

Key words: Osteological human collection, Forensic Anthropology, Crete, Greece

P67- PRELIMINARY STUDY: AGE ESTIMATION BASED ON THE METAMORPHOSIS OF THE CLAVICLE IN GREEKS

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Age estimation of an individual is of paramount importance in forensic science, either on living or dead people. Among other bones, examination of clavicle, whose medial epiphysis is the last epiphysis of long bones that calcifies, is a useful method. There are several studies on age estimation based on the clavicle, mostly in young adults, morphological and radio imaging ones. In Greece, the clavicle has been studied with regard to gender only. The transformation of the sternal end of the clavicle is studied in a population of Modern Greeks (Cretan collection) using morphological methods. The study population consists of 95 individuals, 43 women and 52 men. In the majority of the cases right and left clavicle was present. The average age is 73 for women and 67 for men. The age ranges between 19 and 101 years. The features studied in the sample were: morphology, shape, relief and porosity of the articular surface; special characteristics of the relief (fossa/pit, gauge and protuberance) margins and lip morphology; presence of groove and ossified nodule; epiphyseal flake, gap between the epiphyseal flake and the bone surface, fusion scar and morphology of the notch for the 1st rib. The data were analysed using linear regression analysis. The variables with the highest correlation with age (p<0.05) were the relief, porosity and the notch for the 1st rib. Regression models have shown promising results. Further analysis must be done with a wider sample in order to provide reliable age estimation equations for the Greek population.

Key words: Forensic anthropology, clavicle, age estimation, Crete, Greece

P68- CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN: AN ARCHITECTURAL APPROACH Gülay Yedekçi Arslan, Christina Kalfoglou

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The cities are ideal places for criminal activities, once they have a crowded heterogeneous population, serious alienation; loosen human social control mechanisms and certainly 'wealth'. Crime has been one of the main problems considered as city life developed from the very beginning of their establishment through history. There is almost no city in the world with no fear against criminality or concern for protection. Crime by its nature is complex and multi-factorial where disciplines like criminology, law, sociology, physiology but also urban planning work together to analyze it, all by their own approach. Crime in the concept of urban planning can be analyzed by its sociodemographic and socio-cultural parameters on the one hand and its physical characteristics on the other. It is stated by Jacobs in 1964 that the increase in human activity in the cities will decrease the criminality because of the availability of human observation. This theory forms the basis for crime prevention understanding even today. Basically we have two main concerns: a) to reduce the crime rates in the cities and b) to reduce the fear of crime of the citizens. Here the concept of physical environment and architecture is introduced. The fear of crime for example has been the reason for the new building complexes that are completely isolated hence well protected. The design is helpful and important in this issue but it is mentioned by several theorists that it may reduce some crime types but enhance some others (Hiller and Rooksby 2005). The certainty is that the design in planning is related to crime.

Key words: Urban design, crime, crime prevention

P69- THE TREATMENT SUSTAINABILITY OF CHILDREN WITH HEALTH PRECAUTION Elif Bağdatlı, Oğuz Özyaral Yeni Yüzyıl University, Faculty of Pharmacy, Istanbul Turkey oguz.ozyaral@yeniyuzyil.edu.tr

Health measures, a child's physical and mental health and the protection of temporary or permanent care for treatment and rehabilitation of drug addicts with treatment of measures are known. This study Health Precautions treatment of Children, a Decision was taken by determining the Sustainability of the treatment of problems with the continuity of the solution to detect and planned with the aim of revealing. Health Precautions treatment of children, a Decision was taken by the Provincial Health Directorates are followed, have been determined. Provincial Directorates of Health, Health Measure in fulfilling the Decision of the court for children", organized by the review report of the social health as a result of the decision of measures based on this decision, the Directorate of Health of the child is determined related health problems is examined by a children's clinic, treatment and, if necessary, for the three-month period of follow-up examination algorithm fulfilled observed. The population of the study of Health in the province of Samsun to the Decision of measures taken all the children are creating the file is reached 115 treatment of the child in terms of continuity of the review. In need of protection, Neglected and abused, living on the streets, driven to crime and violence, the measure about the health of the decision emerged in the treatment of children in the execution of some of the obstacles that were encountered. These obstacles; % to 28.1 economic, % 28.1 of the child to be smuggled in, % 15.6 of access to family, % 15.6 of the child-resistance of, % 12.5 of the family was determined. Health Measures taken in the treatment process, the children devamligi and in order to provide health measure, a decision was taken-to-child economic support, encountered resistance to additional laws are put to some legal sanctions getirilmelisi, schools and kindergartens also be given counselling and psychological support solution, such as recommendations have been

Key words: Health Measures, Children In Need Of Protection, Provincial Health Directorate, Samsun