4th International Congress on
Neurobiology, Psychopharmacology & Treatment Guidance

Focus on patient empowerment and rehabilitation

ICNP2015

May 14th-17th, 2015

Agios Nikolaos Crete, Greece, Dessole Hermes Hotel

INTERNATIONAL SOCIETY of NEUROBIOLOGY & PSYCHOPHARMACOLOGY

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World Psychiatric Association

Under the auspises of:

- School of Medicine Aristotle University of Thessaloniki, Greece
- Psychiatric Association for Eastern Europe and the Balkans
- European Psychiatric Association
- Hellenic Psychiatric Association
- World Association for Social Psychiatry

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ICNP2015

4th International Congress on

Neurobiology, Psychopharmacology & Treatment Guidance

Focus on patient empowerment and rehabilitation

Agios Nikolaos Crete, Greece

Dear colleagues,

It's a great pleasure to welcome all of you to the **ICNP2015**, which is taking place in Agios Nikolaos Crete, Greece, on May 14th-17th, 2015.

After the great success of the 3rd Congress which was held in 2013, this fourth Congress again aims at being valuable for the clinicians who fight daily in the front line for the treatment of real-world patients. In this frame, our goal is to provide a global and comprehensive update of the newest developments in Psychiatry and the allied sciences in a manner, which will be both focused and enriched. The rule is to avoid content-free eloquence and authority and to face hard questions on the base of research findings. Many worldwide experts have been invited to share with us their knowledge and experience once again with the support and guidance of the European Psychiatric Association, the World Psychiatric Association and under the Auspices of the School of Medicine, Aristotle University of Thessaloniki.

During these difficult circumstances for the world economy, advanced education and training is the only way to the future. Teaching clinical usefulness and application of new knowledge and informed treatment with psychopharmacological agents in a truly multidisciplinary approach is the central axis of the meeting and although the congress will embrace high tech research concerning psychopathology, new treatment methods, genetics and molecular biology, it also aims on putting the emphasis on the human factor, both the therapist and the patient.

Apart from the humanistic tradition of Psychiatry and life sciences, the continuous and unconditional investment on the high level training of professionals and education of patients and their families, emerged as a significant challenge during the last few decades. Medical scientists and public health policy makers are increasingly concerned that the scientific discoveries are failing to be translated efficiently into tangible human benefit. Today, in an all the more complex and technologically advanced environment, the human factor emerges again as the most valuable one, the factor that determines the final outcome.

This 4th ICNP specifically focuses on the ultimate aim: that is to empower and eventually free patients and their families from the burden of mental disease and fighting for full remission and functional rehabilitation

As hosts and organizers, we shall spare no effort in making your participation scientifically rewarding and meaningful and your stay in Crete as enjoyable as possible.

Konstantinos N. Fountoulakis
Associate Professor of Psychiatry,
Aristotle University of Thessaloniki, Greece

Chair of the Organizing Committee
4th International Congress on Neurobiology, and Psychopharmacology
ICNP2015

Friends and Colleagues,

I regret that I cannot join you at the *4th International Congress on Neurobiology, Psychopharmacology and Treatment Guidance*on the beautiful island of Crete. With a fine scientific program of quality speakers, I have no doubt that the event will be a meaningful and enjoyable use of your time.

One of the key themes of the Congress: the importance of working collaboratively with patients and empowering them throughout the treatment process; is a topic that underpins much of my own work with the World Psychiatric Association (WPA). Indeed it is my belief that it is vital for all stakeholders in the mental health enterprise - patients, family members, mental health providers, social welfare agencies, and others - to work together to reach an understanding about their common interests. Combining their efforts will help create the convincing arguments needed to persuade government leaders and community members to invest societal resources in mental health care and in the educational and research efforts essential to the promotion of mental health.

A taskforce established by the WPA in the years 2008-2011 highlighted the importance of developing a unified approach to advocacy for mental health at country and international levels. Adequate support for mental health care in any country requires a united voice, but in many countries there are weak partnerships between the many stakeholders concerned about mental health. Patients and their family members are a crucial component of the coalition that is needed to instigate changes in the provision of services to people with mental illnesses. However, support from others for their systematic involvement is uncommon

The WPA has reinforced calls from psychiatrists and advocacy groups for the inclusion of service users and family carers in all decisions directly and indirectly related to the treatment, rehabilitation and recovery of people with mental illnesses. Part of my responsibility within WPA's current action plan is to explore ways we can help to achieve this. It is work that WPA is committed to doing and that we look forward to continuing with your help in this triennium and the next.

I wish you a wonderful Congress!

Helen Herrman
President Elect WPA

FREEDOM - Zenos Frudakis

Zenos Frudakis was born in 1951 in San Francisco by the Greek musician and poet Vasilis Frudakis and Kassiani Alexis. Frudakis was raised in Wheeling, West Virginia, and Gary, Indiana, where he worked in the steel mills. He began sculpting at a very young age, and in 1972 came to Philadelphia to study at the Pennsylvania Academy of the Fine Arts. He studied sculpture with two Prix de Rome winners: His elder brother, sculptor Evangelos Frudakis, and painter James Hanes. At the University of Pennsylvania, he earned bachelor's and master's degrees in Fine Art.
He is a figurative sculptor whose subjects include portraits of living and historical individuals and poetic/philosophical sculpture. He lives and works near Philadelphia. His works include those at Brookgreen Gardens, the Lotos Club of New York City, the Utsukushiga-hara Open Air Museum in Japan, the National Academy of Design, and the U.S. Embassy in Pretoria, South Africa.
Zenos father, born in Greece, went to the U.S. as a boy. The oldest of five children growing up with Greek culture, Zenos admired, respected, and was drawn to Greek sculpture. Greek art influenced his aesthetic vision; additional inspiration came from sculptors Michaelangelo, Bernini, Carpeaux and Rodin. The poetry of Eliot, Frost, Roethke and Graves, is important to Zenos, as is post-modern, deconstructionist philosophy.

His monumental figure FREEDOM was created in 2001 for the GlaxoSmithKline headquarters in Philadelphia. Zenos' statement about his vision of the sculpture suggests that he wanted to create a sculpture almost anyone, regardless of their background, could look at and instantly recognize that it is about the idea of struggling to break free. This sculpture is about the struggle for achievement of freedom through the creative process. This is a universal desire with almost everyone; that need to escape from some situation - be it an internal struggle or an adversarial circumstance, and to be free from it.

Although in FREEDOM there are four figures represented, the work is really one figure moving from left to right. The composition develops from left to right beginning with a kind of mummy/death like captive figure locked into its background. In the second frame, the figure, reminiscent of Michaelangelo's Rebellious Slave, begins to stir and struggle to escape. The figure in the third frame has torn himself from the wall that held him captive and is stepping out, reaching for freedom. In the fourth frame, the figure is entirely free, victorious, arms outstretched, completely away from the wall and from the grave space he left behind. He evokes an escape from his own mortality. Elements of the sculpture trade beside the tools that are cast into the sculpture are calipers both for their use in measuring and their reference to Protagoras' words "Man is the measure of all things."

In the end, this sculpture is a statement about the artist's attempt to free himself from the constraints of mortality through a long lasting creative form.

http://zenosfrudakis.com/sculptures/public/freedom.HTML

Stigma, asylum and Spinalonga

The island of Spinalonga (Greek: Σπιναλόγκα), officially known as Kalydon (Καλυδών), is located in the Gulf of Elounda in north-eastern Crete, in Lasithi, next to the town of Elounda. Originally, Spinalonga was not an island, it was part of the island of Crete. During Venetian occupation, in 1526, the island was carved out of the coast for defense purposes and a fort was built there designed by the engineer GeneseBressani. During Venetian rule, salt was harvested from salt pans around the island.Spinalonga, along with Gramvousa and Souda, remained in Venetian hands even after the rest of Crete fell to the Ottomans in the Cretan War (1645-1669) and until 1715, when they fell to the Ottomans during the last Ottoman-Venetian War.

Spinalonga is widely known because of her use as a leper colony. Because of this it has appeared in novels, television series, and a short film.

The island was used as a leper colony from 1903 to 1957. It is notable for being one of the last active leper colonies in Europe. The last inhabitant, a priest, left the island in 1962. This was to maintain the religious tradition of the Greek Orthodox church, in which a buried person has to be commemorated at following intervals of 40 days; 6 months; 1 year; 3 years; and 5 years, after their death.

There were two entrances to Spinalonga, one being the lepers' entrance, a tunnel known as "Dante's Gate". This was so named because the patients did not know what was going to happen to them once they arrived. However, once on the island they received food, water, medical attention and social security payments. Previously, such amenities had been unavailable to Crete's leprosy patients, as they mostly lived in the area's caves, away from civilization.

Spinalonga featured in the British television series “Who Pays the Ferryman?” and Werner Herzog's experimental short film “Last Words”. It is the (unnamed) setting of Ali Smith's short story, The “Touching of Wood” (in Free Love and Other Stories, 1995). It is also the setting for the 2005 novel “The Island” by Victoria Hislop, the story of a family's ties to the leper colony; the book was adapted for television in the television series “To Nisi” by Mega Channel Greece. The short story “Spinalonga” by John Ware, about a tourist group that visits the island, was included in the 13th Pan Book of Horror.

The long and unusual history of Spinalonga makes it one of the most vivid symbols of stigma, asylum, isolation and pain. It reflects the struggle and suffering of human beings to overcome chronic disease, disability but also social isolation and deprivation and not only survive but also return to life.

The 4th International Congress on Neurobiology and Psychopharmacology will pay a tribute to all humanity and its eternal struggle for life with an event organized on this island on Saturday May 16th, 2015.

Για πλήρεις συνταγογραφικές πληροφορίες συμβουλευθείτε την Π.Χ.Π. των προϊόντων που διατίθεται από την εταιρία.

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Main Topics of the Congress

The main topics of the Congress are the following:

- Animal Models
- Anxiety disorders
- Basic Neuroscience
- Behavioural disorders
- Bioethics
- Biological rhythms
- Biomedical Technology
- Childhood and adolescence disorders
- Clinical Psychiatry
- Clinical Psychopharmacology
- Dementia
- Drug development
- Eating disorders
- Evidence-based psychiatry
- Experimental Psychopharmacology
- Forensic Psychiatry
- Health Economics and Quality of Life
- Information technology and neuroscience
- Learning abilities and disabilities
- Major disaster and mental health
- Memory and cognitive disorders
- Methodology in Psychiatric research
- Molecular Psychiatry
- Mood disorders
- Neural Networks
- Neuroimaging
- Neuropsychology
- Neurophysiology
- Neuropsychobiology
- Neuropsychoendocrinology
- Non pharmacological biological therapies
- Nosology and classification
- Pharmacogenetics
- Psychiatric Genetics
- Psychogeriatrics
- Psychoimmunology
- Psychometrics
- Psychopharmacology
- Psychophysiology
- Psychosocial and other non-biological therapies and interventions
- Schizophrenia and other psychotic disorders
- Sexual behaviour and disorders
- Sleep
- Social Psychiatry
- Stress
- Substance abuse and dependence
- Suicide
- Transcultural Psychiatry
- Treatment guidelines
- Violence

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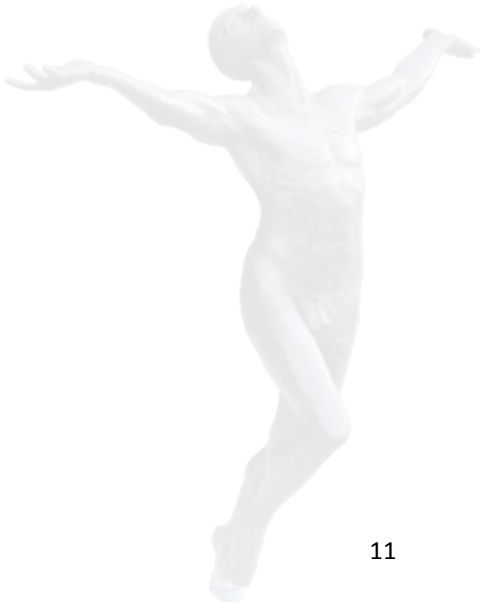

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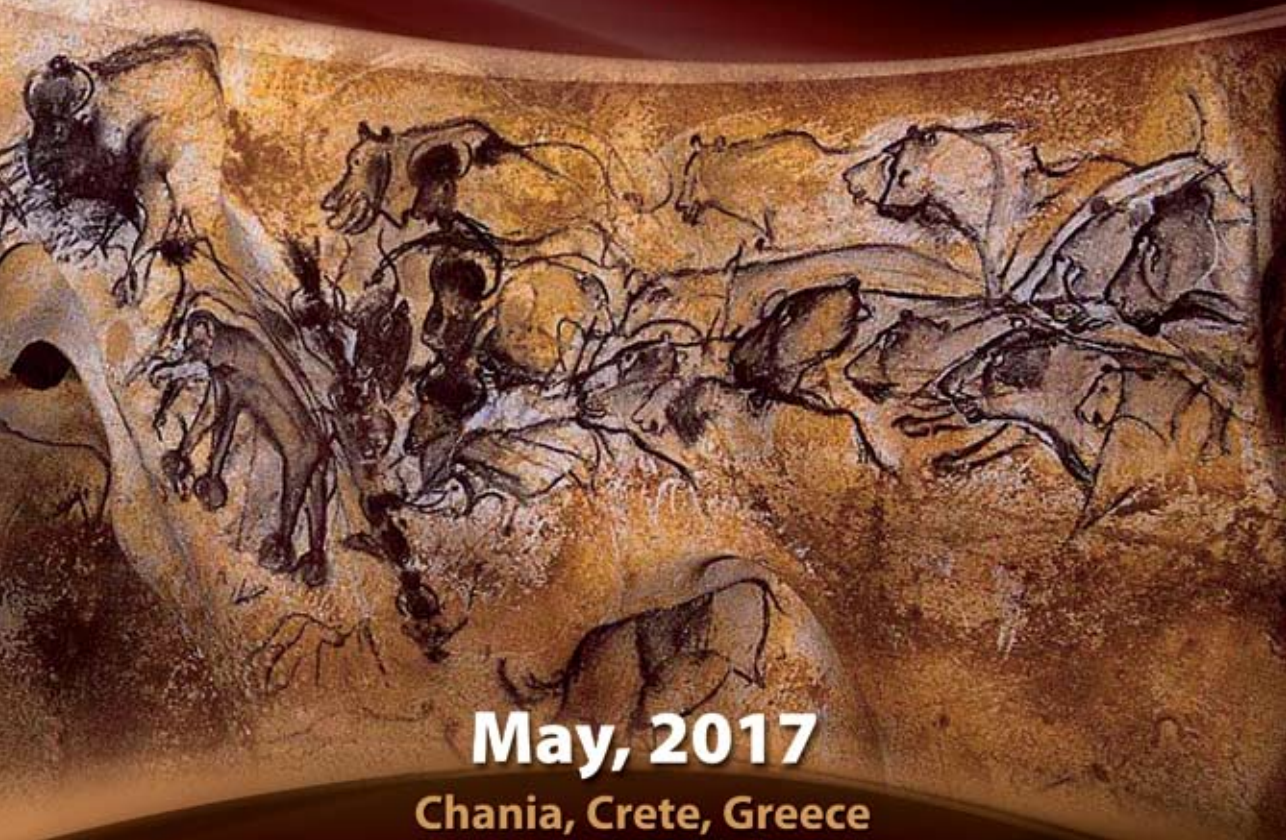

May, 2017

Chania, Crete, Greece

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Scientific Program

Thursday, May 14th 2015 - Hermina Hall

09.30-11.00 **SYMPOSIUM**

IS THERE A ROLE FOR DEPOT CLINICS IN THE MODERN MANAGEMENT OF PSYCHOSIS?

Chairperson: **Evangelia Maria Tsapakis** (Greece)

Promotion of recovery in Schizophrenia: The role of maintenance antipsychotic medication
Evangelia Maria Tsapakis (Greece)

Depot antipsychotics in first- episode Psychosis - Pros, cons and reservations
Styliani Papadopoulou (Greece), **Trisevgeni Dimopoulou** (Greece),
Evangelia Maria Tsapakis (Greece)

Psychopathology, side-effects and quality of life in depot clinic attenders with psychosis: A 12-month follow-up
Trisevgeni Dimopoulou (Greece), **Konstantina Peraki** (Greece),
Styliani Papadopoulou (Greece), **Emmanuel Dolapsakis** (Greece),
Evangelia Maria Tsapakis (Greece)

Monitoring the decision making competence and adherence of patients with Schizophrenia and schizoaffective disorder on LAI treatment
Maria Nystazaki (Greece), **Katerina Pikouli** (Greece), **Agapi Georgou** (Greece), **Dimitrios Ploumpidis** (Greece), **George Alevizopoulos** (Greece)

11.00-11.30 **Coffee Break**

11.30-13.00 **SYMPOSIUM**

SUICIDES AND SUICIDALITY IN CRETE: A MULTI-DIMENSIONAL PHENOMENON

Chairperson: **Alexandros Vgontzas** (Greece)

Medicolegal aproach of suicide in Crete
Aikaterini Kanaki (Greece)

Suicides in Crete: Psychological autopsy, a useful research tool
Anastasia E. Kastanaki (Greece)

Suicide attempts in Heraklion, Crete during the economic crisis: 2008-2014
Maria Basta (Greece)

Suicides in Crete during the economic crisis: Reality vs myth
Alexandros Vgontzas (Greece)

Thursday, May 14th 2015 - Hermina Hall

13.00-14.30 **SYMPOSIUM**
BIPOLAR DISORDER AND OFFENDING
Chairpersons: **Athanasios Douzenis** (Greece), **Christos Tsopelas** (Greece)

Aspects of violent behaviour, offending and punishment in ancient Greek literature
George Tzeferakos (Greece)

Bipolar disorder and criminality
Christos Tsopelas (Greece)

Management of offenders with Bipolar Affective Disorder in the community
Athanasios Douzenis (Greece)

14.30-16.30 **Noon break**

16.30-17.30 **PLENARY LECTURE**
Chairperson: **Charalampos Touloumis** (Greece)

Advances in the management of acute agitation and behavioural problems in the Elderly
Istvan Boksay (USA)

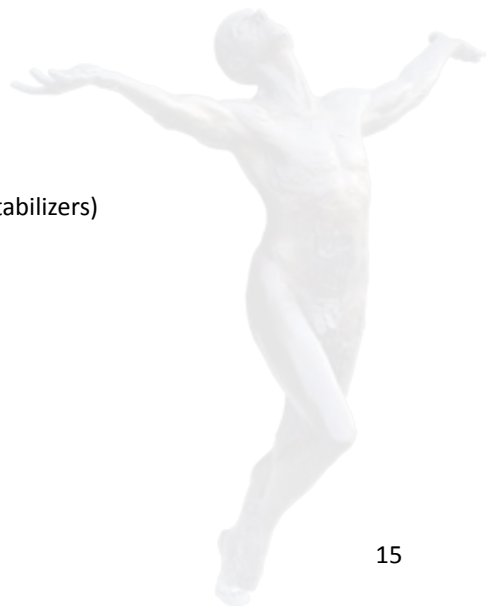
17.30-19.00 **SYMPOSIUM**
ISSUES THAT ARISE IN THE THERAPY OF BD
Chairpersons: **Charalampos Touloumis** (Greece), **Christos Tsopelas** (Greece)

Metabolic aspects in BD
Christos Tsopelas (Greece)

Adverse events of Lithium therapy
Charalampos Touloumis (Greece)

Adverse events of anticonvulsants (mood stabilizers)
Maria Dimitraka (Greece)

19.00-19.30 **Coffee Break**



Thursday, May 14th 2015 - Hermina Hall

19.30-21.00 **SYMPOSIUM**

DISORDERS AND DYSFUNCTIONS OF THE BASIC HUMAN NEEDS: CONCEPTUAL ISSUES AND APPROACHES TO MANAGEMENT

Chairperson: **Dimitrios Dikeos** (Greece)

Sleep disorders
Dimitrios Dikeos (Greece)

Eating disorders
Fragiskos Gonidakis (Greece)

Sexual disorders and dysfunctions: Conceptual issues and approaches to management
Fotini Ferenidou (Greece)

21.00 **Dinner**

Friday, May 15th 2015 - Hermina Hall

09.00-10.30 **SYMPOSIUM**

THE PSYCHIATRIST BETWEEN CLINICAL, REHABILITATION AND WORK MANAGEMENT: A FOCUS ON THESE MAIN MATTERS

Chairperson: **Giuseppe Tavormina** (Italy)

The mixed states: A "new" nosological entity
Sandro Elisei (Italy), **Roberto Quartesan** (Italy), **Norma Verdolini** (Italy)

The GT-MSRS: A new rating scale for mixed states
Giuseppe Tavormina (Italy)

Efficacy of LAI in first episode psychosis: Clinical reports of an opservational study
Alba Cervone (Italy), **Maria Ferrara** (Italy), **Claudio Massaro** (Italy)

Psychiatric caregiver stress: The management of the patients
Francesco Franza (Italy)

10.30-11.30 **LECTURE**

Chairperson: **Xenia Gonda** (Hungary)

Exploration of the individual variability in mice behavioural response to lithium
Nirit Z. Kara (Israel) and **Haim Einat** (Israel)

11.30-12.00 **Coffee Break**

12.00-13.30 **SYMPOSIUM**

COGNITIVE DISORDERS IN BRAIN AGING: FROM THERAPEUTIC TARGETS TO TREATMENT STRATEGIES

Chairpersons: **Constantin Bouras** (Switzerland),
Panteleimon Giannakopoulos (Switzerland)

Normal brain aging: How lesions begin?
Constantin Bouras (Switzerland)

The vascular component of Alzheimer disease
Enikö Kövari (Switzerland)

Amyloid or Tau: Challenges and doubts in AD research
Panteleimon Giannakopoulos (Switzerland)

Can one prevent AD?
Gabriel Gold (Switzerland)

Friday, May 15th 2015 - Hermina Hall

13.30-14.30 **SATELLITE LECTURE**
Chairperson: **Venetsanos Mavreas** (Greece)

The role of cognitive symptoms in the course of depression
Ioannis Michopoulos (Greece)

The lecture is sponsored by Lundbeck

14.30-16.30 **Noon break**

16.30-18.00 **SYMPOSIUM**
LITHIUM 2015: AN UPDATE ON CLINICAL, NEUROBIOLOGICAL, GENOMIC AND CELLULAR ASPECTS
Chairperson: **Thomas G. Schulze** (Germany)

Lithium for prevention of mood episodes in bipolar disorders: Systematic review and meta-analysis
Philipp Ritter (Germany)

Imaging and lithium - Principles and possibilities
David Cousins (UK)

Genomewide association and prospective validation study implicate a long noncoding (lnc) RNA in response to lithium for bipolar disorder
Thomas G. Schulze (Germany)

Effects of lithium on gene expression modulation: Findings from in-vitro studies in patients-derived cell liens
Alessio Squassina (Italy)

Friday, May 15th 2015 - Hermina Hall

18.00-19.30 **SYMPOSIUM**

THE ROLE OF GAMMA-BAND OSCILLATIONS IN UNDERSTANDING THE PATHOPHYSIOLOGY OF SCHIZOPHRENIA

Chairperson: **Christoph Mulert** (Germany)

Alterations of the auditory evoked gamma-band response in schizophrenia: Disturbed gamma-band specific network revealed by means of EEG-informed fMRI
Gregor Leicht (Germany)

Auditory verbal hallucinations related to altered interhemispheric connectivity
Saskia Steinmann (Germany)

Resting-state gamma-band connectivity and symptoms in first-episode Schizophrenia
Christina Andreou (Germany)

Glutamate hypothesis and gamma oscillations in Schizophrenia - New insights from genetic analyses and pharmacological models
Christoph Mulert (Germany)

19.30-20.00 **Coffee Break**

20.00-21.00 **SATELLITE LECTURE**

Chairperson: **Dimitrios Dikeos** (Greece)

Improving outcomes in Schizophrenia: The role of long acting injectable antipsychotics
Charalampos Touloumis (Greece)

The lecture is sponsored by Lilly ΦΑΡΜΑΣΕΡΒ

21.00 **Dinner**

Saturday, May 16th 2015 - Hermina Hall

08.00-09.30 **SYMPOSIUM**
PRIMARY CARE OF NEUROCOGNITIVE DISORDERS
Chairpersons: **Hans Förstl** (Germany), **Alexander Kurz** (Germany)

Non- pharmacological treatments of neurocognitive disorders
Alexander Kurz (Germany)

Pharmacological therapies of cognitive deficits
Robert Perneczky (UK)

Pharmacological therapies of behavioural and psychological symptoms of neurocognitive disorders
Panagiotis Alexopoulos (Germany)

New conceptualisation of neurocognitive disorders: Implications for primary care
Hans Förstl (Germany)

09.30-10.00 **LECTURE**
Chairperson: **Athanasios Douzenis** (Greece)

Is depression in men underestimated and undertreated?
Anne Maria Moeller-Leimkühler (Germany)

10.00-11.30 **SYMPOSIUM**
UNCHARTED ISSUES IN THE MANAGEMENT OF BIPOLAR DISORDER
Chairpersons: **Giuseppe Tavormina** (Italy), **Haim Einat** (Israel)

Pros and cons of network analysis for bipolar treatments
Ayşegül Yildiz (Turkey)

When bad is good and good is bad: Evolutional and cultural aspects of affective illness from symptoms to treatment
Xenia Gonda (Hungary)

Bipolar mixed states and suicidality
Dina Popovic (Spain)

11.30-12.00 **LECTURE**
Chairperson: **Venetsanos Mavreas** (Greece)

Treatment guidelines for schizophrenia: An update
Petros Fotiadis (Greece)

Saturday, May 16th 2015 - Hermina Hall

12.00-16.30 **CEREMONY ON STIGMA AND MENTAL ILLNESS**
Location: Island of Spinalonga
Coordinator: **Konstantinos N. Fountoulakis** (Greece)
Speakers: **Alexandros Vgontzas** (Greece), **Charalambos Papageorgiou** (Greece), **Venetsanos Mavreas** (Greece)

17.00-17.30 **LECTURE**
Chairpersons: **Hans-Jürgen Moeller** (Germany), **Siegfried Kasper** (Austria)

The CINP treatment guidelines for bipolar disorder in adults
Konstantinos N. Fountoulakis (Greece)

17.30-18.30 **LECTURE**
Chairperson: **Siegfried Kasper** (Austria)

Neurobiological background, assessment and psychopharmacological treatment of negative symptoms
Hans-Jürgen Moeller (Germany)

18.30-19.00 **Coffee Break**

19.00-19.30 **LECTURE**
Chairperson: **Charalambos Papageorgiou** (Greece)

Psychopharmacology in ancient Greece
Basileios Alevizos (Greece)

19.30-20.00 **LECTURE**
Chairperson: **Charalambos Papageorgiou** (Greece)

Attenuated Psychosis Syndrome: Some questions to be addressed
Vasileios Kontaxakis (Greece)

20.00-21.00 **LECTURE**
Chairperson: **Hans-Jürgen Moeller** (Germany)

Where do psychiatry and mental health (brain health) stand today and what to expect in the future
Siegfried Kasper (Austria)

21.00-21.30 **Awards Ceremony**
Chairperson: **Hagop S. Akiskal** (USA)

21.30 **Dinner**

Sunday, May 17th 2015 - Hermina Hall

09.00-10.30 **SYMPOSIUM**

NEUROCOGNITIVE DISORDER IN UNIPOLAR MAJOR DEPRESSION

Chairperson: **Konstantinos N. Fountoulakis** (Greece)

General neurocognitive functioning, intelligence quotient (IQ), psychomotor and mental speed and attention in unipolar depression
Stella Miziou (Greece)

Memory, learning and verbal and visuospatial impairment
Eirini Tsitsipa (Greece)

Executive function impairment and insight concerning the neurocognitive deficit
Stefania Moysidou (Greece)

Clinical correlates and the long term development and course of the neurocognitive deficit
Vangelis Karavelas (Greece)

10.30-12.00 **SYMPOSIUM**

EVIDENCE BASED TREATMENT OF BIPOLAR DISORDER WITH THE CLINICAL PICTURE AS GUIDE

Chairperson: **Konstantinos N. Fountoulakis** (Greece)

Historical perspective of the evolution of the diagnosis and treatment of bipolar disorder
Filippos Kouniakis (Greece)

Important clinical features as targets for treatment intervention: What to look for
Dimos Dimellis (Greece)

How to best treat bipolar disorder by taking into consideration the clinical picture
Vangelis Karavelas (Greece)

Sunday, May 17th 2015 - Hermina Hall

12.00-13.30 SYMPOSIUM

DISCUSSING THE INTEGRATION ON MENTAL HEALTH TREATMENT AND BEHAVIOURAL HEALTH CARE INTO PRIMARY CARE: THEORETICAL INSIGHTS AND EXPERIENCES GAINED IN GREECE

Chairperson: **Christos Lionis** (Greece)

Integration of community mental health services into mainstream primary care: The Achilles' Heel of the Greek psychiatric reform
Pavlos Theodorakis (Greece)

Sectorization as the main vehicle towards primary care and mental health integration
Sotirios Koupidis (Greece)

Patient centered medical home: Is that model feasible and suitable to the Greek setting?
Christos Lionis (Greece)

13.30-14.30 **Closing Ceremony**

IN MEMORIAM

Juan Lopez-Ibor
(1940-2015)

από το 1949

μαζί στην υγεία στην εξέλιξη στην καινοτομία

Η GAP από το 1949 μέχρι σήμερα παραμένει αταλάντευτα προσηλωμένη σε ένα βασικό κώδικα αρχών που προτάσσει πάνω από όλα την ΠΟΙΟΤΗΤΑ, την ΑΣΦΑΛΕΙΑ, την ΑΠΟΤΕΛΕΣΜΑΤΙΚΟΤΗΤΑ και την ΚΑΙΝΟΤΟΜΙΑ των προϊόντων της με βασικό στόχο την παροχή υπηρεσιών υγείας υψηλών προδιαγραφών.

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  - Αντικαταθλιπτικά: **Espoza** escitalopram, **Solben** paroxetine, **Melocin** venlafaxine
  - Αντι-Alzheimer: **Zopitel** donepezil, **Lasium** rivastigmine
- Καρδιαγγειακά
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Kostas N. Fountoulakis

Bipolar Disorder

An Evidence-Based Guide to Manic Depression

Springer

General Information

Congress Venue
Dessole Hermes Hotel, Agios Nikolaos Crete, Greece.
(Akti Koundourou 17, 72 100 Agios Nikolaos, Crete, Greece, Tel.: +30 2841028257, www.dessolehotels.com)

Access to Congress Venue
Agios Nikolaos can be reached by arriving at Heraklion Airport Nikos Kazantzakis and then bus transfers will be provided for group of 30 persons and over (65 klm east from Hrakleion) or by public bus transportation (http://www.ktelherlas.gr/?lang=en). Please visit the official website to see the city map for further information.

Official Language
English will be the official language of the Congress.
All printed material and poster presentations will be in English.

CME Accreditation
The congress has been accredited with **18 World Psychiatric Association Educational credits** for the main Congress Program.

Certificate of Attendance
Certificates of attendance can be received from the registration desk on Sunday, May 17th 2015. Please note that a barcode system will be used and in order to obtain CME credits you must complete 60% participation of the scientific program.

E-Posters
All E-posters will be presented electronically, and they will be available also on-line. No hardcopies will be hanged. The E-posters will be available to delegates throughout the Congress in the exhibition area.

Poster Awards
The International Society on Neurobiology and Psychopharmacology announces 5 awards for the 5 best posters which will be presented during the 2015 Congress. The winners will receive an honorary diploma.
All submitted posters are considered candidates for the awards, unless otherwise stated by the author(s).
Chairperson of the Posters Award Jury: **Konstantinos N. Fountoulakis** (Greece)

Abstract Book
The scientific program will be available online (pdf format). The abstract book will be published as a hard copy and will be available online. The full posters will be available online (pdf format).

Exhibition
Within the Congress area there will be an exhibition of medical equipment and pharmaceutical products.

Presentations
Available audiovisual equipment for all presentations will be through power point presentation. For power point presentations, your presence to the "technical reception desk" is required one hour prior to the time of your presentation in order to check the compatibility of your cd or usb stick. Use of personal computers will not be permitted.

Registration Fees

TYPE OF REGISTRATION	GROUP A countries	GROUP B countries	GROUP C countries	GROUP D countries
Specialists	200€	150€	100€	Free
Residents	150€	75€	50€	Free
Other mental health professionals	50€	Free	Free	Free
Students*	Free	Free	Free	Free

* It applies only to the undergraduate students and not to the postgraduate students.
Note: For countrie's classification visit the official web site (www.psychiatry.gr).
For free registrations the congress bag will be provided according to availability.
All the scientific proceedings including book of abstracts will be available for free online in pdf format.

On-site Registration
Participants who wish to register on-site are advised to arrive early. On-site registration will be processed on a first-come, first-served basis. Priority will be given to pre-registered delegates. Depending on the number of onsite registered delegates, availability of congress bags may be limited.

Congress Badge
All participants are requested to wear their name badge at all time during all Congress Events.

Taxis
Taxis are available in front of the airport as well as the hotel entrance.

Insurance
We can not accept responsibility for any personal loss, accidents or damages to participants and/or accompanying persons. Participants are strongly advised to obtain personal insurance to cover any evenduality that may occur during the Congress.

Climate

Agios Nikolaos in May is splendid since the weather is not too hot yet or too cold. The average high temperature during May is 25°C or 77°F. As for the lowest point, the city has an average temperature of 15°C or 59°F, but it gets cooler during the evening.

For further information regarding the Congress visit the Congress's web site:
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PROCCEEDINGS

09.30-11.00 **SYMPOSIUM**
IS THERE A ROLE FOR DEPOT CLINICS IN THE MODERN MANAGEMENT OF PSYCHOSIS?
Chairperson: **Evangelia Maria Tsapakis** (Greece)

Promotion of recovery in Schizophrenia: The role of maintenance antipsychotic medication

Evangelia Maria Tsapakis
Aghios Charalambos Mental Health Clinic, Heraklion, Crete, Greece

Background: The critical issue of poor adherence to oral antipsychotic medication led to the development of long-acting injectable antipsychotics (LAIs) or depot injections, as early as in 1966. In recent years, second generation LAIs have become available and seem to become popular amongst clinicians and patients despite their cost. The aim of this review was to understand whether and to what extent LAIs promote recovery in severe mental illness.

Methods: A systematic search was carried out in PubMed from 1966 to 2014 using the keywords "schizophrenia" AND "depot", "schizophrenia" AND "long acting injections", "schizophrenia" AND "depot clinic". Furthermore, the National Institute for Clinical Excellence (NICE 2009/2014) clinical guidelines focusing on the role of LAIs in the treatment of schizophrenia, as well as the guidelines of the American Psychiatric Association (APA, 2004), the Patient Outcome Research Team (PORT), the British Association for Psychopharmacology (BAP), and the guidelines of the World Federation of Societies of Biological Psychiatry (WFSBP) for Biological Treatment of Schizophrenia were reviewed.

Results: The search for "schizophrenia" AND "depot" yielded 828 papers, the search for "schizophrenia" AND "long acting injections" 332 papers and the last search yielded 50 papers, all in the English language. Most research in the field is observational with a paucity of randomized controlled trials and evidence-based systematic reviews. With regards to pharmacology, LAIs used as maintenance antipsychotic medication remain to this day the mainstay for relapse prevention in the treatment of patients with schizophrenia and other psychotic disorders. All clinical prescribing guidelines taken into account here, suggest their use as part of the optimal therapeutic approach to schizophrenia.

Conclusion: With the availability of second generation LAIs, depot clinics seem to have been given the "kiss of life", and appear to be essential in integrated rehabilitation programmes. Furthermore, there is good evidence to support the use of depot antipsychotics for relapse prevention in schizophrenia, but no clear difference in efficacy between oral and depot formulations can be stated.

Depot antipsychotics in first- episode Psychosis - Pros, Cons and Reservations

Styliani Papadopoulou, Trisevgeni Dimopoulou, Evangelia Maria Tsapakis
Aghios Charalambos Mental Health Clinic, Heraklion, Crete, Greece

Background: Antipsychotic medications are important in the management of schizophrenia and other psychotic disorders. Not only they contribute to the optimal treatment of psychotic symptoms and functional deficits, but also help in preventing relapse. Long-acting injectable (LAI or Depot) antipsychotics possibly present a useful option for relapse prevention and an overall better clinical outcomes. The indications for depot antipsychotics have been extended from use in chronic, stabilized patients to use in acutely psychotic patients, as the risk for extrapyramidal side-effects has decreased with the introduction of second-generation atypical antipsychotics in the long acting injection form.

Methods: A review of the literature focusing in the use of LAIs in first episode psychosis (FEP) was undertaken using PubMed.

Results: Several studies investigating the use of LAIs in first-episode psychosis (FEP) patients were found, raising the possibility of prescribing LAIs as a treatment option. The first years of psychosis are thought to be the most critical period for long-term prognosis. At this stage, the antipsychotic treatment response of FEP patients is better than that of chronically-ill patients who have suffered multiple episodes. Additionally, it seems that most clinical and psychosocial deterioration in psychosis occurs within the first 5 to 10 years from the onset of illness. Hence, successful management of early episodes, is important for better long-term outcomes. Furthermore, medication discontinuation is by far the strongest predictor of relapse in FEP patients, whereas using LAIs that enhance adherence in FEP may have a beneficial impact on treatment outcomes. In clinical practice, however, psychiatrists tend to use depot antipsychotics conservatively, and the majority of them do not prescribe LAIs after FEP episodes. Lack of information and guidelines seems to generate negative attitudes towards LAIs both amongst clinicians and patients, while patients may fear the restriction of autonomy related with repeated injections as well as the possibility of a painful procedure. It is well established that including patients in the decision-making process about medical treatment could reduce the negative image and stigmatization attached to depot medications.

Conclusions: As there is still limited research using second-generation LAIs in FEP, better -designed, randomized, controlled clinical trials are needed. Additionally, studies about the adverse effects of LAIs in long-term use such as tardive dyskinesia and metabolic side-effects are required prior to recommending LAIs for FEP patients.

Psychopathology, side-effects and quality of life in depot clinic attenders with psychosis: A 12-month follow-up

Trisevgeni Dimopoulou, Konstantina Peraki, Styliani Papadopoulou, Emmanuel Dolapsakis, Evangelia Maria Tsapakis
Aghios Charalambos Mental Health Clinic, Heraklion, Crete, Greece

Background: Long-acting depot antipsychotic medication is a useful therapeutic option especially for patients with psychosis who lack insight or adhere poorly to oral medication. Routine and systematic assessment aims to evaluate change in psychopathology and medication side-effects, whereas quality of life is thought to reflect efficient illness management. The aim of this 12-month observational study was twofold: first, to clinically evaluate the effectiveness of long-acting injectable antipsychotics in terms of psychopathology and extrapyramidal symptom change, and second, to examine change in patients' quality of life (QoL). Here, the preliminary 6-month results are presented whereas the full 12-month results will be presented at the meeting.

Methods: From a total sample of 41 patients with a primary psychiatric diagnosis of F20-F29 and F30-F39 (as assessed by MINI), 28 were recruited during the first six months from the outpatient clinic of «Aghios Charalambos» Mental Health Clinic in Heraklion, Crete. Information on socio-demographics, diagnosis, age of onset of illness, duration of illness, treatment prescribed and route of administration was included in data collection. Psychopathology change was assessed by the Brief Psychiatric Rating Scale (BPRS), antipsychotic side-effect change by the Liverpool University Neuroleptic Side-Effect Scale (LUNSERS) and the Glasgow Antipsychotic Side-Effect Scale (GASS), and QoL by the the Greek version of the World Health Organization Quality of Life (WHOQOL-100) questionnaire.

Results: The sample (mean age 47.43 years) consisted of 20 male and 8 female patients of whom 42.9% were receiving depot haloperidol and 42.9% olanzapine long-acting injection. Twenty (20) patients were on antipsychotic polytherapy and had a mean length of previous hospitalizations of 21.54 months. Compared to baseline, significant improvement over a period of 6 months was observed for QoL [Wilks'Lambda=.20, $F(2, 25)=48.95$, $p<.0005$, partial eta squared=.80], but psychopathology as measured by BPRS did not show any significant change. Multiple linear regression analysis was performed to develop a model (age, side effects and symptoms) for predicting quality of life of patients medicated on LAIs. The four predictor model was able to account for 62% (38% adjusted) of the variance of QoL [$F(472, 4)= 3.40$, $p=.026$]; however, only age was able to make a statistically significant unique contribution to the prediction of QoL ($b=.423$, $p=.029$). Nevertheless, symptoms and side effects explained an additional 27.2 % of the variance of quality of life after the effect of age had been removed and that was a statistically significant contribution.

Conclusion: Preliminary results at 6-months show improvement in the QoL of patients on long-acting antipsychotic injections (LAIs) but an overall stability in psychopathology. Thus, further support is provided for the role of LAIs in the treatment armamentarium for psychosis.

Monitoring the decision making competence and adherence of patients with Schizophrenia and schizoaffective disorder on LAI treatment

Maria Nystazaki[1], Katerina Pikouli[2], Agapi Georgou[1], Dimitrios Ploumpidis[2], George Alevizopoulos[1]
[1]Agioi Anargyroi Hospital Department of Psychiatry, University of Athens, Greece
[2]Vyronas-Kaisariani Community Mental Health Centre, University of Athens, Greece

Background: Medication non-adherence and treatment discontinuation are common occurrences in schizophrenia. A very helpful approach to improve adherence in schizophrenia is the use of Long-Acting Injectable antipsychotics (LAI). Nevertheless, it may be argued that LAIs are against choice because they take away the patients' ability to control their medication. Patients' informed consent prior to treatment initiation is an essential component of contemporary clinical practice, but sometimes, patients lack decision-making capacity. Assessment of such capacity is significant in every day clinical practice. Even more important is such assessment in psychiatric patients. The aims of this naturalistic study were to assess patients', on LAI Antipsychotics, decision making capacity, to monitor patients' adherence to their prescribed LAI and to compare adherence to LAIs with compliance to oral medication.

Methods: The study was carried out at 2 Psychiatric Establishments in Greece. In particular, at the Depot Clinic of Agioi Anargyroi Hospital Department of Psychiatry and at the Depot Clinic of Vyronas-Kaisariani Community Mental Health Centre. Inclusion criteria included participants' age being at least 18 years, having a diagnosis of schizophrenia or schizoaffective disorder as established by the Structured Clinical Interview for DSM-IV, and currently prescribed and taking LAI antipsychotics (regardless of other concomitant medication). Patients were followed up for 26 months at the above mentioned Depot Clinics. Decision-making capacity was assessed with the MacCAT-T competence assessment tool. Patients were considered compliant if they attended at their scheduled appointment for their injection at the two Depot Clinics mentioned above. Antipsychotic side-effects were assessed with the Glasgow Antipsychotic Side-Effect Scale (GASS). Patient compliance with oral pharmacological treatment was assessed by the use of the Drug Attitude Inventory (DAI).

Results: Patient's sample consisted of 80 participants (68.8% men and 31.3% women) with a mean age of 42.6 years (SD= 14.5 years). Patients showed high ratings in understanding, reasoning and appreciation indicating good decision making capacity. Clear deficiencies were found for only 1 subject. Regarding adherence almost 100% of the patients sample indicated high compliance rates. Most patients were categorized as having moderate side effects. The compliance rate of patients to their prescribed LAI medication reached 94% versus 65% when on oral medication.

Conclusion: Outpatients on LAI formulations are capable of making treatment decisions. The use of long-acting injectable antipsychotics, which improves compliance rates and patient follow-up, should facilitate the management of patients with schizophrenia. Thus, further research is required to elucidate which special population may benefit most from LAI therapy.

11.30-13.00 **SYMPOSIUM**
SUICIDES AND SUICIDALITY IN CRETE: A MULTI-DIMENSIONAL PHENOMENON
Chairperson: **Alexandros Vgontzas** (Greece)

Medicolegal aproach of suicide in Crete

Aikaterini Kanaki
Forensic Pathologist, Department of Forensic Sciences, University Hospital of Heraklion, Crete

The Island of Crete has a permanent population of about 630.000 people, whish increase during tourist season to approximately 3 million, and is mainly served by the University Department of Forensic Sciences. We present data on suicide cases from autopsy records, during the years 1999-2014 and we inform about the variation extent of parameters like sex, age, time and method of suicide, the influence of alcohol and drugs in the fatalities. These data encompasses the first full scale study in Crete.

Results indicated that about 75% of the victims were males; spring is the period of the year with the most relevant numbers, about 16% of the cases were under the influence of alcohol and 8.5% under the influence of illegal drugs (depending the year). There were only a few cases under the age of 20, and the suicide rates among elderly were found to be low. Suicide methods were mostly violent. Hanging was the most frequent method (about 36%, depending the year), followed by fatal poisoning (about 29%, depending the year). Special forensic forms like "murder followed by suicide", and "using of multiple methods in order to commit suicide" are discussed.

Suicides in Crete: Psychological Autopsy, a useful research tool

Anastasia E. Kastanaki
Clinical Psychologist, General Hospital of Chania, Crete, Greece

Introduction: In the past decades an increasing number of researchers have employed the psychological autopsy method for studying completed suicide, in order to shed light on reasons for suicide, to examine the recent stresses in the life of the suicidal individuals, to evaluate the victims' behavior and psychological state before the suicidal act, and to assess the severity of suicidal intention in the group.

Material & Method: Data on suicide was collected from the Department of Forensic Sciences of the Faculty of Medicine of the University of Crete and the Department of Justice for the region. The sample of the psychological autopsy study consisted of all 374 subjects whose deaths received a suicide verdict and occurred between January 1999 and December 2007. Information was collected by conducting semi-structured interviews with the next-of-kin of the suicide victims, and from a variety of other sources.

Results & Discussion: The main findings were (i) psychiatric morbidity and previous self-harm

were less than generally reported; (ii) differences between genders regarding the reported reasons for suicide were observed; (iii) approximately 41.2% of the suicide victims had contact with mental health services; (iv) there was evidence of a profound suicidal intent and intensive planning of the suicidal act; (v) common elements in the vast majority of the suicide victims were isolation of the individual committing suicide, timing of attempt so rescue was not likely, taking some precautions against discovery, not acting to get help, planning of the act, and no communication of intent; (vi) a suicide note was present in 15.2% of the cases. These results, though, may be ascribed to the reluctance of the key informants to provide accurate information.

Suicide attempts in Heraklion, Crete during the economic crisis: 2008-2014

Maria Basta, Zacharias Stefanakis, Alexandros Vgontzas
Department of Psychiatry, University Hospital of Heraklion, Crete, Greece

Introduction: Recently, suicides in Greece, have drawn national and international interest due to the current economic crisis. According to published reports, suicide attempts and completed suicides in Greece have been increasing since 2010.

Objectives: To explore whether suicide attempt rates in the region of Heraklion, have been influenced by the economic crisis.

Methods: We included admission records of suicide attempts in the Internal Medicine Department of the University Hospital of Heraklion, Crete (UHH), for the years 2008 to 2014 through the electronic database of the hospital. We examined the yearly and monthly rates of suicide attempts in the total group, as well as, stratified by gender. Data were analyzed by regression models.

Results: Our analysis, by fitting a linear regression model, showed that during the period examined the number of yearly suicide attempts showed a significant decline for the total number of patients admitted for suicide attempts (β=-6,57, p=0.006), and for women (β=-6,54, p=0,002), whereas for men there was no significant difference overall. Furthermore, we found a seasonal pattern in suicide attempts for women but not for men. Specifically, attempts peaked in May-June and October. When fitting a quadratic regression model to our data, the estimated peak was found to be in May (p=0.013).

Conclusions: The total yearly rate of suicide attempts has shown a steady decline between 2008-2014 suggesting an opposite association with the economic crisis in Eastern Crete, Greece contrary to previous findings and popular beliefs. It appears that this effect is significant for women but not for men, most likely related to the culturally-based differential roles of the two genders. An interesting finding was the seasonal pattern with suicide attempts showing a significant peak in May for women, which is similar to the seasonal pattern of completed suicides.
It appears that the association between suicidality and economic crisis is complex and warrants further investigation.

Suicides in Crete during the economic crisis: Reality vs myth

Alexandros Vgontzas[1], Aikaterini Kanaki[2], Emmanuel Michalodimitrakis[2], Maria Basta[1], Eirini Koutentaki[1]
[1]Psychiatry, [2]Forensic Medicine, University Hospital of Heraklion - Crete, Heraklion, Greece

Introduction: Recently, suicides in Greece, have drawn national and international interest due to the current economic crisis. According to published reports, suicides in Greece have increased up to 40%. Specifically, lay press has highlighted Crete as an area with the sharpest increase of suicides in Greece.

Aim: To investigate the suicide rates in Crete between 1999-2014 and their association with the economic crisis.

Methods: Data on suicides were selected from the Department of Forensic Medicine files of the University Hospital of Heraklion/Crete, as well as from the Forensic Medicine Files of Crete.

Results: Our analysis showed that during the period examined (1) Crete, although has the highest suicide rate in Greece, no significant increase was observed between 1999-2014, (2)suicides are four times more frequent in men compared to women, (3) in women there is a significant decrease of suicides, ,whereas in men 40-65 yrs old suicides appear to be increased (4) finally, there was a regional shift for suicides with a significant decrease in Western Crete and a significant increase in Eastern Crete.

Conclusions: Crete has the highest suicide rates in Greece, which however, has not increased during the last 15 yrs. These findings do not support the popular belief of increased suicides due to the current economic crisis. Furthermore, it appears that crisis affects the two genders in a differential way, which may be related to the culturally expected roles of the two genders. Finally, the relative increase of suicides in Eastern Crete may be explained by other factors, i.e. the lack of community psychiatric services in the area.

13.00-14.30 **SYMPOSIUM**
BIPOLAR DISORDER AND OFFENDING
Chairpersons: **Athanasios Douzenis** (Greece), **Christos Tsopelas** (Greece)

Aspects of violent behaviour, offending and punishment in Ancient Greek literature

George Tzeferakos
Psychiatrist, Scientific Associate of the Forensic Psychiatric Unit, 2nd Department of Psychiatry, "Attikon" University Hospital of Athens, Greece

In ancient Greece, as in all archaic civilizations, the approach to the different psychic phenomena was through a cosmogonic - theocratic perception. Through this "sacred" perception of the different phenomena, either natural/psychic or social/political, the rules of the social structure and human coexistence were forged. The primitive legal systems of the ancient world had also a

divine origin and made little distinction between crime, punishment and a person's legal responsibility. Gradually, with the help of philosophers, theologians, doctors and legal scholars, the concept of criminal responsibility took shape in the different sociopolitical and religious contexts.

Bipolar disorder and criminality

Christos Tsopelas
Consultant Psychiatrist in Adult Psychiatry, Psychiatric Hospital of Attica, Athens, Greece

In public opinion schizophrenia is the mental disorder often connected with violent crime and Bipolar disorder do not appear to be linked to criminal behavior. However, patients with bipolar disorder are more likely to be violent than patients with schizophrenia and bipolar I disorder presents six times more often in prisons than in the general population. As Yoon 2012 reported in a study about the characteristics of homicide by the polarity of mood episode in patients with bipolar I disorder, general rate of total offense higher in the manic phase than in the depressive phase (86.8% vs. 13.2%). But the rate of homicide was higher in the depressive phase than in the manic phase and the victims of homicide were more likely to be family members (96.2% vs. 63.9%, p = 0.001). Furthermore, Daff, 2014 in an linkage study compare patterns of officially recorded criminal offending between 1,076 people with bipolar disorder drawn from a state-wide psychiatric case register with a community comparison group and found patients with bipolar disorder were significantly more likely than community members to be charged with, convicted of, and be found guilty of, violent, non-violent and intermediate level criminal offences. Co-occurring substance use differentially impacts on the likelihood of criminal offending for males and females. Risk of offending in people with bipolar disorder is an important issue and management strategies should be in place enhancing protection and safety primarily for the patients.

Jeong-Hoon Yoon, Jeong-Hyun Kim,Sang Sub Choi, Mi Kyung Lyu, Jee-Hyun Kwon, Yun-Ik Jang, Gun-Tae Park **Homicide and bipolar I disorder: A 22-year study** Forensic Science International, April 10, 2012 Volume 217, Issues 1-3, Pages 113-118
Daff E, Thomas SD. **Bipolar disorder and criminal offending: a data linkage study**. Soc Psychiatry Psychiatr Epidemiol. 2014 Dec;49(12):1985-91

Management of offenders with Bipolar Affective Disorder in the community

Athanasios Douzenis
Associate Professor of Psychiatry and Forensic Psychiatry, Director of the Second University Psychiatry Department, Attikon Hospital, Greece

Although individuals with bipolar disorder are not overrepresented in the mentally ill offenders population, their management in the community poses special challenges. Aim of this review is to present critically findings about the better practices applied by forensic community psychiatry teams regarding this population. In the US prisons the main psychiatric diagnoses range from: 13.1 percent to 18.6 percent for major depression, Schizophrenia or another psychotic

disorder from 2.3 percent to 3.9 percent and Bipolar disorder, 2.1 percent to 4.3 percent. Mentally ill offenders discharged from prison or a forensic facility face many difficulties that can accumulate in a relapse.

Two interventions have been shown to be effective: A. Discharge planning with support for applying for social support and B. Integrated dual disorder treatment programs. These appear to be effective interventions for seriously mentally ill offenders transitioning back to the community.

Forensic assertive community treatment is an emerging model for preventing arrest and incarceration of adults with severe mental illness who have substantial histories of involvement with the criminal justice system.

16.30-17.30 **PLENARY LECTURE**
Chairperson: **Charalampos Touloumis** (Greece)

Advances in the management of acute agitation and behavioural problems in the Elderly

Istvan Boksay
Clinical Professor of Psychiatry, School of Medicine, New York University (NYU), USA

Recent clinical data supports newer treatment approaches to managing acute agitation and compare them with conventional approaches in terms of efficacy, safety and tolerability.

The newer treatments are; 1. In the short turn, benzodiazepines appear at least as effective as antipsychotics; 2. Antipsychotics may have longer duration of action; 3. Antipsychotics address underlying psychosis and mania; 4. All first line atypical antipsychotics appear comparable in efficacy; 5. Mode and ease of administration should guide choice of Expert Consensus Panel choice of oral atypical for agitated, hostile, and aggressive patient: risperidone (48%), Olanzapine (21%), quetiapine (4%).

Also choosing Medication for Treatment of Agitation in Emergency are based on: 1. Availability in IM, oral liquid, or oral rapidly dissolved formulation; 2. Speed of onset; 3. History of medication response; 4. Produces clinically useful sedation; 5. Limited chance of causing intolerable dangerous adverse reactions or side effects; 6. Patient preference.

17.30-19.00 **SYMPOSIUM**
ISSUES THAT ARISE IN THE THERAPY OF BD
Chairpersons: **Charalampos Touloumis** (Greece), **Christos Tsopelas** (Greece)

Adverse events of Lithium therapy

Charalampos Touloumis
NHS Director, Psychiatric Hospital of Attiki, Athens Greece

Lithium is an important option in the evidence based rational treatment of bipolar disorder. It has been shown to be effective for acute mania (especially euphoric mania, not first line option for mixed episodes or rapid cycling, as well as in patients with comorbid neurological illness) and bipolar depression (with well known anti suicidal properties) and as a prophylactic treatment for bipolar depression (the best studied drug for this indication, it decreases the frequency of mood episodes, especially manic, and "time ill" in patients with bipolar type I or II disorder). Evidence also suggests that lithium may have a role in the treatment of refractory unipolar depression (as an add on therapy, especially for patients at risk for suicide). Other (not approved) uses of lithium includes organic brain syndrome with secondary affective symptoms, chronic aggression / antisocial behavior / impulsivity across a broad range of diagnoses, schizophrenia, pathological gambling, anorexia nervosa, etc.

Lithium has a narrow therapeutic index in humans and its currently recommended therapeutic serum concentration range is **0,8-1,2 mEq/Lit**, and adverse events / toxicity become increasingly more evident at doses that result in higher serum levels. A review of the literature reveals that **35-93%** of patients complain about adverse events.

The most common side effects reported are :
- Excessive thirst
- Polyuria
- Memory problems
- Tremor
- Weight gain
- Drowsiness / tiredness
- Diarrhea
- Hypothyroidism

Metabolic aspects in BD

Christos Tsopelas
Consultant Psychiatrist in Adult Psychiatry, Psychiatric Hospital of Attica, Athens, Greece

There is contemporary research regarding the co-occurrence of bipolar disorder and metabolic syndrome and the impact that it has on daily functionality, relapse occurrence and treatment management of patients with bipolar disorder. We performed searches of the relevant data-

bases and search engines up to March 2015 for English-language articles published containing the keywords: bipolar, bipolar$ AND metabolic, weight, obesity, diabetes, dyslipidemia, hypertension in the title or the abstract. Abstracts and titles were evaluated for relevance.

Metabolic risk factors are highly prevalent in patients with bipolar disorder. There are numerous factors accounting for the link between bipolar disorder and metabolic syndrome and several manifestations of the metabolic syndrome in the course of the disorder. A comprehensive assessment of metabolic risk factors and specifically regular monitoring of body mass index, waist circumference, lipid profile, and plasma glucose are important for patients with bipolar disorder. We should include in our daily practice, management strategies for the bipolar patient with metabolic risk factors, such as use of http://europepmc.org/abstract/med/24502861/?whatizit_url=http://europepmc.org/search/?page=1&query=%22bipolar%20disorder%22 medications with better metabolic profiles, lifestyle interventions, and specific medications for dyslipidemia, hypertension, and/or hyperglycemia in an effort to deal with adverse cardiovascular events and the development of diabetes mellitus.

Adverse events of anticonvulsants (Mood stabilizers)

Maria Dimitraka
Psychiatrist in Adult General Psychiatry, Psychotherapist, Greece

Mood stabilizers are widely used in the psychiatric practice and have contributed a lot in the treatment of bipolar disorder. Their benefits, though, sometimes come at a price. Both acute and long term use of these agents often results in significant acute and long term adverse events. Unwanted adverse events may limit the use of these agents and may, sometimes, result in serious morbidity. Their impact on quality of life often leads to treatment discontinuation or non adherence and thus to treatment failure. The adverse effect profiles of the anticonvulsants differ greatly and are one of the determining factors in drug selection. The most common adverse effects are dose dependent and reversible. Cognitive impairment is of particular concern and idiosyncratic effects, such as skin rashes or chronic effects, such as weight gain, can complicate clinical management. Most conventional anticonvulsants have a poor record when it comes to drug interactions, largely because of their tendency to interfere with hepatic drug metabolism. The increased use of polypharmacy in psychiatry poses even greater challenges and requires careful attention. Also important are the special issues in the treatment of women. Nearly all conventional anticonvulsants increase the risk of congenital malformations when taken during pregnancy, with valproate posing a potentially greater risk, whereas the potential teratogenicity of the newer agents is largely unknown. Mood stabilizers are a well documented and relatively safe treatment for bipolar disorder. Awareness, screening, early identification and management of the adverse events of these agents is the only way to reduce the risks and continue an effective therapy.

19.30-21.00 **SYMPOSIUM**
DISORDERS AND DYSFUNCTIONS OF THE BASIC HUMAN NEEDS: CONCEPTUAL ISSUES AND APPROACHES TO MANAGEMENT
Chairperson: **Dimitrios Dikeos** (Greece)

Eating disorders

Fragiskos Gonidakis
Lecturer of Psychiatry in Athens University, Medical School, Athens, Greece

Eating Disorders present a difficult and complex therapeutic dilemma. The behaviors related to the patients eating attitudes cause considerable damage to the body while in many occasions at the same time the patient is now willing to receive treatment. Furthermore Eating Disorders are highly comorbid with mood and anxiety disorders as well as substance abuse and more specific alcohol abuse.

For Anorexia Nervosa almost all psychiatric medication has been tested with no definite positive results. Fluoxetine trials showed that the medicine was not superior to placebo in alleviating anorectic symptomatology. Zinc supplementation was shown in one trial to assist weight restoration but no further tests were conducted. The administration of antipsychotics and especially olanzapine is a wide spread practice although there is no direct evidence yet that atypical antipsychotics are beneficial to patients suffering from Anorexia Nervosa.

For Bulimia Nervosa there is a plethora of studies indicating that fluoxetine in higher dose (60 mg) than those used for the treatment of depression is effective for the treatment of the disorder. The anti-epileptic topiramate and ondansetron a drug used to counteract extensive vomiting has shown promising results. Finally the opioid antagonist naltrexone has been test with ambiguous results.

Binge Eating Disorder is a rather newly described disorder. Results so far indicate that SSRI's and not specifically fluoxetine as well as topiramate might be beneficial for the treatment of this disorder.

Sexual disorders and dysfunctions: Conceptual issues and approaches to management

Fotini Ferenidou
Psychiatrist in Training, Eginiteion University Hospital of Athens, Greece

"Sexual health is the integration of the somatic, emotional, intellectual, and social aspects of sexual being, in ways that are positively enriching and that enhance personality, communication and love". Since that meaning, provided by WHO in 1974, there has been an increasing focus on sexual health and its problems.

Sexual medicine has been defined as "the branch of medicine concerned with human sexuality and its disorders. Sexual medicine attempts to improve sexual health through the prevention, diagnosis, treatment, and rehabilitation of conditions or diseases that involve: a) sexual function, b) sexual and/or partnership experience and behavior, c) gender identity, and d) sexual trauma and its consequences".

In the last century the focus was on destigmatizing and demystifying sexuality with surveys and laboratory research. In the present century the focus is more on fully understanding normative sexual function, as well as the physical and psychological factors that contribute to changes in sexual interest and response in different contextual and interpersonal circumstances; the sexual concomitants of acute or chronic illness; the possibilities and development of new medications to enhance and/or improve sexual function, and the long-term sexual side effects of existing medications.

The main principles for clinical evaluation and management of sexual dysfunctions are a) a patient-centered approach, b) differentiating sexual concerns and difficulties from dysfunctions and disorders, c) the determination of the cause (organic, psychogenic or mixed), d) evidence-based diagnostic and treatment planning, and e) the use of unified management approach. Sexual, medical and psychosocial history is mandatory in every case, while treatment outcomes can be considered as having three major components: a) relief of symptoms and/or restoration of sexual function, b) reduction of bother/distress and c) improvement of patient/partner sexual well-being.

09.00-10.30 **SYMPOSIUM**
THE PSYCHIATRIST BETWEEN CLINICAL, REHABILITATION AND WORK MANAGEMENT: A FOCUS ON THESE MAIN MATTERS
Chairperson: **Giuseppe Tavormina** (Italy)

The mixed states: A "new" nosografy entity

Sandro Elisei, Roberto Quartesan, Norma Verdolini
Division of Psychiatry, Clinical Psychology and Rehabilitation, University of Perugia, Santa Maria della Misericordia Hospital, Perugia, Italy
School of Specialization in Psychiatry - University of Perugia, Italy

Objective: Mixed states represent a controversial topic in the current psychiatry. The definitions and the diagnostic criteria have changed over the past years. The new DSM-5 classification will have a substantial impact in several fields: epidemiology, diagnosis, treatment, research, education, and regulations.

Methods: We reviewed the latest literature by using the key words "mixed states" and "agitated depression" on the PubMed.

Results: Although there is a great expectation about the validity of the new DSM-5 mixed states diagnosis, little is known about its application on large population study but the formulation of less restrictive and more specific criteria for the diagnosis of mixed states represent a starting point for future researches, mainly in consideration of the fact that previous classifications consider the MS a superposition of manic and depressive symptoms, underestimating the clinical complexity and the wider phenomenologic variability of these conditions.

Conclusions: Clinical trials need to address treatment effects according to the presence or absence of mixed features in consideration of the fact that replacing in the bipolar spectrum patients that traditionally are considered to be affected by unipolar depression, represent a topical research hypothesis and has a practical remarkable importance in the appropriate therapeutic choice.

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The GT-MSRS: A new rating scale for mixed states

Giuseppe Tavormina
President of the Psychiatric Studies Centre, Italy

The mixed states are the most serious clinical state in the bipolar spectrum, having the major risk of sucidality among all sub-types of the spectrum.

The consequences of the lack of recognition and treatment of mood disorder mixed states can lead to a higher risk of suicide, reduction in the expectation and/or the quality of life (personal, family and work), increased loss of working days, increased use of health care resources, including those for concurrent diseases: if unrecognised, the mood may become chronic and the clinical picture can worsen year by year.

The clinician needs to have all the modalities to enable him to make a correct diagnosis wherever possible and a correct pharmacological treatment: the aim of this study is to help diagnosis and treatment of the patients having bipolar disorder mixed state, giving to psychiatrists and physicians a new efficacy rating scale focusing on this illness.

The "G.T. MSRS" has been created to improve the clinical activity of psychiatrists.

Key words - bipolar spectrum disorders - mixed states - mixed state rating scale.

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Efficacy of LAI in first episode psychosis: Clinical reports of an opservational study

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Introduction: Long-Acting Injectable (LAI) formulations of antipsychotics have traditionally been used for those patients with psychosis with the most severe symptoms, poorest compliance, most hospitalizations, and poorest outcomes, namely at the latter stages of their illness; moreover it seems that psychiatrists tend to prescribe LAI at the latter stages of the disease. The use of antip-

sychotics, especially second generation antipsychotic, represents the milestone treatment of First Episode of Psychosis (FEP); it although prodromal symptoms of psychosis have long been recognized, the clinical management of psychotic disorders conventionally begins at the first episode of frank psychosis, as it is well known now that duration of untreated psychosis is one of the main factor that negatively affects prognosis, with a longer Duration of Untreated Psychosis (DUP) being highly correlate to reduced response to treatment and poor clinical and social outcomes, and, until recently, the period immediately preceding the first episode received relatively little attention because the DUP is one of the factor related to worsening of prognosis.

Objective: To evaluate the use of second-generation long-acting injectable (LAI) antipsychotics in the treatment of FEP in a community mental health service and to discuss the potential role of LAIs in improving FEP outcomes.

Material and Methods: We retrospectively collected clinical and sociodemographic data regarding patients presenting with symptoms of FEP attending the Community Mental Health Service in Foggia from 1st June 2014 to 31st January 2015. We selected patients whose initial treatment was a LAI and we administrated the following scales BPRS, HONOS, GAF, ESRS at baseline, and after 3 and 6 months since enrolment.

Results: 6 people were included in the study, of which 5 were treated with LAI. We observed an overall improvement in terms of reduced psychotic symptoms, improved quality of life and absence of extrapyramidal side effects.

Conclusion: Since it is now clear that there is a high response rate to initial antipsychotic treatment in FEP, with considerable loss of response to a second antipsychotic and beyond, that LAIs has shown strong superiority compared to oral antipsychotics in preventing hospitalizations, and that DUP could worsen prognosis, it is a wonder that there has not been more of a movement to utilize LAIs in first episode instead of last episode of psychosis. Considering that early intervention in FEP services should be accessible to all people with a first episode or first presentation of psychosis, irrespective of the person's age or the duration of untreated psychosis, LAIs could have an important role to improve recovery. In our experiences LAIs could play an important role in the treatment of Bipolar Disorder too.

Psychiatric caregiver stress: The management of the patients

Francesco Franza
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The management of patients with mental illness involves multiple burdens, possibly leading to burnout and/or to compassion fatigue (also known as secondary traumatic stress). Sometimes the relationship of care of psychiatrist and nursing staff determines an emotional and psychological burden that can cause the appearance of a psychological distress in these caregivers.
In addition, caregiving strain has been associated with compromised health and mental health among caregivers of patients with major affective and other chronic mental disorders. Moreover, the capacity to manage affects is rooted in early interactions with caregivers, which in adulthood are internalized as different attachment styles.

We studied this emotional burden on the psychiatric staff of inpatients with psychiatric disorders (and particularly with Bipolar Disorders). Caregivers were interviewed by research assistants on measures of stress, coping, health and mental health at baseline, and were reassessed 6 and 12 months later.

Data were collected with the following rating scales: Compassion Fatigue scale of Figley; Caregiver Burden Inventory and Relationships Questionnaire (Rq, for assessing attachment styles). The final results indicate that some attachment styles in caregiveres are manly associated with development of anxious and depressive symptoms in each single manic or depressive episode.

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10.30-11.30 **LECTURE**
Chairperson: **Xenia Gonda** (Hungary)

Exploration of the individual variability in mice behavioural response to lithium

Nirit Z. Kara[1,2] and Haim Einat[1,2,3]
[1]Tel Aviv-Yaffo Academic College, [2]Ben-Gurion University of the Negev and the [3]University of Minnesota

Lithium is still the cornerstone for treatment of bipolar disorder. However, a large fraction of patients are partial or non-responders to lithium and rates of response of patients to lithium monotherapy (at least 50% reduction in symptoms) are approximately 50%. The individual variability in the response to lithium is repeatedly suggested to be influenced by genetic factors and the pharmacogenetics of response to lithium has become a growing field of research. However, the progress in exploring the genetic factors involved in response to lithium in patients has been slow.

Testing the effects of lithium in animal models also results in significant individual differences in behavioral and biochemical responses but the tradition is to look mostly for group effects and overcome variability issues by increasing the number of animals per group. Alternatively, it is possible to utilize the variable response of animals to explore the underlying biology of the differential response of patients.

Our recent findings show that there is a large variability in the response of mice to lithium even in models where group effects are well established. Furthermore, there is a clear relationship

between the power of the response of mice in different tests modeling bipolar depression or bipolar mania but we found no such relationship between tests representing mania and tests representing depression. Presently, we are working to explore biochemical, molecular and genetic factors that are involved in the variability of responses in the different behavioral tests.

It is therefore strongly suggested that the individual variability in the response of animals to lithium treatment (and possibly to other drugs) can be used to increase our knowledge on the biological basis of the different responses of patients to drugs and to assist in the development of personalized medicine in psychiatry.

12.00-13.30 **SYMPOSIUM**
COGNITIVE DISORDERS IN BRAIN AGING: FROM THERAPEUTIC TARGETS TO TREATMENT STRATEGIES
Chairpersons: **Constantin Bouras** (Switzerland),
Panteleimon Giannakopoulos (Switzerland)

Normal brain aging: How lesions begin?

Constantin Bouras
Professor, Division of Neuropsychiatry, Department of Mental Health and Psychiatry, University Hospitals and University of Geneva, Switzerland

Both normal brain aging and Alzheimer's disease (AD) are characterized by the formation of neurofibrillary tangles (NFT) and senile plaques (SP). The quantity of hippocampal NFTs is well correlated with age-associated memory impairment, whereas substantial NFT formation in neocortical association areas is the neuropathological hallmark of AD. The distribution and severity of NFT formation shows a strong correlation with the clinical signs. Probably the neuropathological changes associated with normal brain aging and AD affect selective cortical circuits. Moreover, they support the hypothesis that AD symptomatology may be due to the degeneration of a defined set of long projections, eventually progressing to a syndrome of cortical disconnection.

Different types of vascular lesions are also common in the aged brain. To study these lesions and their cognitive effect a vascular score was developed for both microvascular (histological) and small macrovascular lesions (lacunes). The results showed that only some micro- or small vascular lesions as cortical microinfarcts, demyelination and thalamic and basal ganglia lacunes have a cognitive impact. Other lesions as focal cortical and subcortical white matter gliosis or lacunes in the white matter do not seem to influence the cognitive status. Depending on the age of the subjects we observed an important difference: before 85 years the main determinant of vascular cognitive function is represented by thalamic and basal ganglia lacunes and by cortical microinfarcts after the age of 85 years.

The vascular component of Alzheimer disease

Enikö Kövari
Unit of Biomarkers, Division of General Psychiatry, Department of Mental Health and Psychiatry, University School of Medicine, Geneva, Switzerland

In the last years mixed brain pathologies are increasingly recognised in elderly subjects. Mainly the association of cases Alzheimer's disease (AD) with vascular lesions or Lewy body pathology are reported, but publications with argyrophilic grains disease or TDP-43 inclusions are not uncommon. Our earlier studies have shown, that several microvascular pathologies, as cortical microinfacts (CMI) and basal ganglia and thalamic lacunas play an important role in the severity of dementia in AD cases.

Cerebral amyloid angiopathy (CAA) as etiological factor of small vascular lesions as CMI and cerebral microbleeds (CMB) is largely discussed.

To investigate the role of CAA in the microvascular pathology of the brain we performed two separate studies on non-selected autopsy series. The relationship CAA vs. CMI and CAA vs. CMB was examined using immunohistological methods on autopsy brains.

There was no correlation between CAA and CMB, both affecting different layers in lobar localisation and also an opposite frequency were observed regarding of their "geographical" distribution.

In contrast, our results have shown that in cases with CAA cortical microinfarcts are more frequent.

In conclusion, our studies don't support an exclusive importance CAA in vascular brain lesions. However they could play a role in ischaemic lesions, but are not important etiological factors in small brain haemorrhage.

Amyloid or Tau: Challenges and doubts in AD research

Panteleimon Giannakopoulos
Professor of Psychiatry, University of Geneva, Switzerland

The pertinence of the amyloid cascade hypothesis as a unique and causal explanation of cognitive deterioration is challenged in the light of recent therapeutic failures of clinical trials based on amyloid vaccination and increasing role of tau protein in clinical expression. The detection of very early and possibly preclinical stages of the disease emerges as a necessary condition for the efficacy of future amyloid or tau-oriented curative strategies. In this respect, the possibility of finding individual vulnerability markers-in the group of cognitively intact subjects-represents a major challenge of the clinical research in this field. Preclinical Alzheimer disease (AD) is a recent concept designing cases with progressive installation of pathological processes in the absence of overt clinical signs of dementia. These cognitively intact elders who usually display increased amyloid burden in positron emission tomography (PET) scans and decreased concentration of Aß42 in cerebrospinal fluid remain cognitively stable for variable time periods but ultimately display significantly increased risk for AD. Pointing to the difficulty to identify cases at

high risk of AD among this heterogeneous group, a 5 years follow-up of healthy elders showed that more than 60% have a stable memory trajectory, 36% display subtle memory decline and only 4% progress to pre-MCI. Both markers of Aß accumulation (decreased levels of CSF Aß42, positive PET amyloid imaging) and neurodegeneration (increased CSF t-tau and p-tau, increased hippocampal atrophy or cortical thinning) have been shown to be associated with increased rates of cognitive decline in preclinical AD. The most challenging issue remains our ability to predict at an individual level the cognitive fate of at risk elderly controls based on a multimodal analysis of biological signature and detailed neuropsychological testing over time.

Can one prevent AD?

Gabriel Gold
Professor, University of Geneva, Switzerland

Dementia prevalence increases exponentially after the age of 65 years. This, coupled with population aging has led to a marked increase in the number of people affected by cognitive disorders. As a result, dementia and cognitive impairment represent a major public health concern in the XXIst century.

Fortunately, risk factors have been identified and preventive strategies have been developed. Several recent studies have reported decreases in dementia prevalence and/or incidence over the past decades strongly suggesting that risk factor control may be an effective intervention. A recent neuropathological study has demonstrated a significant decrease in brain amyloid deposits over the past thirty years in older individuals. In fact, people over 85 who died in 2006 had less amyloid deposition compared to people who were 10 years younger but died in 1972. Other analyses confirmed a strong cohort effect.

New biomarkers and neuroimaging techniques have improved our ability to diagnose AD early, before major neuronal loss occurs. Clinical trials can now focus on very early cases and it is hoped that these will prove successful in preventing evolution to more advanced stages.
The above results and strategies provide some support for cautious optimism and reinforce the need for further research in the early treatment and prevention of Alzheimer's disease and other dementias.

13.30-14.30 **SATELLITE LECTURE**
Chairperson: **Venetsanos Mavreas** (Greece)

The lecture is sponsored by Lundbeck

The role of cognitive symptoms in the course of depression

Ioannis Michopoulos (Greece)
Assistant Professor of Psychiatry, School of Medicine, University of Athens, Greece

Background: Cognitive dysfunction is a common aspect in several mental disorders. There is a great amount of research dealing with cognitive deficits in schizophrenia, bipolar disorder and

other psychiatric disorders. However, in the last years growing evidence has shown that cognitive dysfunction is present in major depression disorder (MDD), too.

Materials and methods: Review of the most recent literature in cognitive dysfunction in MDD is done. Special focus on how cognitive dysfunction affects the therapeutic outcome in MDD is made.

Results: Most of the studies conclude that cognitive deficits in MDD do exist. The most pronounced deficits are observed in executive function and memory. Executive function deficits involve both planning and attentional set shifting. Working memory deficits are also present. Finally, psychomotor speed and attention are also affected. The cognitive deficits in executive function and memory have been tried to be associated with hypercortisolaimia toxicity but this has not been proved yet. The cognitive deficits in MDD seem to be trait markers, but they do not appear in all patients.

Conclusions: Cognitive deficits in MDD affect the patients' psychosocial functionality. Self-confidence and ability to work are reduced in substantial degree. Cognitive deficits participate in obstructing remission. The need for developing therapeutic agents and strategies aiming particularly to reduce cognitive dysfunction in MDD is described.

16.30-18.00 **SYMPOSIUM**
LITHIUM 2015: AN UPDATE ON CLINICAL, NEUROBIOLOGICAL, GENOMIC, AND CELLULAR ASPECTS
Chairperson: **Thomas G. Schulze** (Germany)

Lithium for prevention of mood episodes in bipolar disorders: Systematic review and meta-analysis

Emanuel Severus, Matthew J. Taylor, Cathrin Sauer, Andrea Pfennig, Philipp Ritter, Michael Bauer, John R. Geddes

Background: In a previous meta-analysis of randomized controlled trials comparing lithium with placebo as a long-term treatment in bipolar disorders, we observed a clear preventative effect for manic episodes; however, the effect was equivocal for depressive episodes. Since then, the evidence base has grown further. In this update, we furthermore present the data on efficacy of lithium in comparison to alternative drug treatments. In addition, we analyze the data comparing lithium with placebo and other treatments regarding drop-outs due to reasons other than a mood episode and completion of study (no mood episode and no drop-out to reasons other than a mood episode).

Methods: Randomized controlled trials (RCTs) were sought comparing lithium with placebo and lithium with an alternative treatment in bipolar disorders where the stated intent of treatment was prevention of mood episodes. To this purpose, the Cochrane Central Register of Controlled Trials (CENTRAL) was searched. Reference lists of relevant papers and major textbooks of mood

disorders were examined. Authors, other experts in the field, and pharmaceutical companies were contacted for knowledge of suitable trials, published or unpublished.

Results: For the comparison of lithium with placebo, seven trials (1,580 participants) were included. Lithium was more effective than placebo in preventing overall mood episodes (random effects RR 0.66, 95% CI 0.53 to 0.82), manic episodes (random effects RR 0.52, 95% CI 0.38 to 0.71), and, dependent on the type of analyses applied, depressive episodes (random effects RR 0.78, 95% CI 0.59 to 1.03; fixed effect RR 0.73, 95% CI 0.60 to 0.88). Lithium was inferior to placebo in leading to drop-outs for reasons other than a mood episode (random effects RR 1.33, 95% CI 1.07 to 1.65) but superior to placebo on study completion (random effects RR 1.69, 95% CI 1.12 to 2.55).

For the comparison of lithium with anticonvulsants, seven trials were included (n = 1,305). In prevention of manic episodes, lithium showed superiority compared to anticonvulsants (random effects RR 0.66, 95% CI 0.44 to 1.00). However, there was no significant difference regarding prevention of overall mood episodes, depressive episodes, dropping-out to reasons other than a mood episode, or study completion.

Conclusions: The evidence base for lithium in the long-term treatment of bipolar disorders has strengthened. With no other drug available having such ample and consistent evidence for its efficacy lithium remains the most valuable treatment option in this indication.

Imaging and lithium: Principles and possibilities

David Cousins
Clinical Fellow and Honorary Consultant Psychiatrist, Newcastle University, UK

Nuclear magnetic resonance is an established technique that has provided numerous insights in the field of neuroscience. The NMR phenomenon can yield structural images of exquisite detail, allow the estimation of brain function and permit the chemical composition of human tissues to be examined *in vivo*. It would therefore appear to be an invaluable tool of use in advancing our understanding of the neurobiology of lithium, perhaps even permitting the prediction of response.

Human and animal studies investigating the effect of lithium on the brain have produced a number of intriguing findings - increased grey matter; alterations in candidate neurometabolites; perturbations in white matter integrity - often interpreted within a neuroprotective framework. Studies have also investigated the potential for magnetic resonance techniques to be used in predicting response to lithium, but useful biomarkers have yet to be advanced.

In understanding the biophysical relationship between brain, lithium and the NMR phenomenon, new insights and methodologies can be advanced. Dr Cousins will examine the state of the art in the field and raise for discussion future avenues of research.

Genomewide association and prospective validation study implicate a long noncoding (lnc) RNA in response to lithium for bipolar disorder

Thomas G. Schulze
Professor and Director of the Institute of Psychiatric Phenomics and Genomics, Ludwig-Maximilans-University of Munich, Germany
Department of Psychiatry, The Johns Hopkins University, Baltimore, USA

Thomas G. Schulze for the Consortium on Lithium Genetics (www.ConLiGen.org)

Lithium is a first-line treatment in the therapy of bipolar disorder. Previous studies suggested that lithium response in patients with bipolar disorder is a heritable trait, but no genetic markers have been reproducibly identified to date. Here we report the results of a genome-wide association study of lithium response in 2,563 patients collected by 22 participating sites from the International Consortium on Lithium Genetics (ConLiGen). Data were combined by imputation to over 6 million common SNPs and analyzed under a categorical and a quantitative measure of lithium response. A single locus of four linked SNPs (rs79663003, rs78015114, rs74795342, and rs75222709; minimum p=3.31E-09) met corrected genome-wide significance criteria for association with the quantitative phenotype. In an independent prospective validation study in 73 patients treated with lithium monotherapy for a period of up to two years, carriers of the response-associated alleles showed a significantly longer time to relapse than carriers of the alternate alleles (p=0.03; OR=3.8). The associated region contains a long, non-coding RNA (lncRNA), LncRNAs are increasingly appreciated as important players in gene regulation, in particular in the CNS. Further replications, ideally using prospective designs, are warranted to establish these findings as genetic markers for lithium response. As there are no biomarkers of lithium response so far, so any robust genetic markers would constitute a real step forward.

Effects of lithium on gene expression modulation: Findings from in-vitro studies in patients-derived cell liens

Alessio Squassina
Lecturer, University of Cagliari, Italy
Adjunct Assistant Professor of Psychiatry, Dalhousie University, Halifax, Canada

Lithium (Li) is known to influence the expression of hundreds of genes. Transcription factors and microRNAs have been suggested to be key modulators of these effects. Despite our knowledge on targets of Li has significantly increased in the last decade, there is still not clear understanding of the correlation between its molecular and therapeutic effects.

In this symposium we will present data from microarray, qRT-PCR, genome wide miRNA expression and in vitro assays carried out in lymphoblasts (LCLs) derived from bipolar (BD) patients characterized for either Li response or suicidal behavior. Our data showed that Insulin Like Growth Factor 1 (IGF1) was overexpressed in LCLs from BD subjects responding (R) to Li compared to non-responders (NR). Moreover, Li treatment induced significant growth inhibition in LCLs from BD patients compared to controls and the addition of exogenous IGF1 to serum-

free medium affected this growth inhibition differentially in R compared to NR. Our studies on LCLs from BD patients with different suicidal behavior showed that miR-4286 and miR-186-5p were differentially expressed in BD suicide victims compared to non-suicidal BD patients. The expression of both miRNAs was significantly influenced by Li treatment in human derived neural precursors. MiR-4286 was also dysregulated in postmortem brains from BD suicide victims compared to controls. Findings from these studies suggest new potential molecular players involved in Li response or suicidal behavior in BD patients and in modulating Li effects on gene expression.

18.00-19.30 **SYMPOSIUM**
THE ROLE OF GAMMA-BAND OSCILLATIONS IN UNDERSTANDING THE PATHOPHYSIOLOGY OF SCHIZOPHRENIA
Chairperson: **Christoph Mulert** (Germany)

Alterations of the auditory evoked gamma-band response in schizophrenia: Disturbed gamma-band specific network revealed by means of EEG-informed fMRI

Gregor Leicht
Department of Psychiatry and Psychotherapy, University Medical Center Hamburg-Eppendorf, Germany

Objectives: There is growing evidence of abnormalities of high-frequency oscillations in the gamma range of the electroencephalography in schizophrenia. For instance, the auditory evoked gamma-band response (aeGBR) is known to be reduced in schizophrenia patients. Our studies aimed to investigate alterations of the aeGBR across the different stages of the disease by means of EEG. Moreover, we aimed to elucidate alterations of an aeGBR-specific network mediated by gamma oscillations in the high-risk state of schizophrenia (HRS) using functional magnetic resonance imaging (fMRI) informed by electroencephalography (EEG).

Methods: We used EEG recorded during a cognitively demanding auditory reaction task in order to investigate the aeGBR in chronic and first-episode schizophrenic patients and in first-degree relatives of schizophrenia patients. EEG and fMRI were simultaneously recorded from individuals in the high-risk state of schizophrenia (HRS) during performance of the same task. Single trial coupling of the aeGBR with the corresponding blood oxygen level depending (BOLD) response (EEG-informed fMRI) was performed in order to characterise alterations of a gamma-band specific network.

Results: The aeGBR is reduced across all stages of the disease. The EEG-informed fMRI analysis revealed a significantly lower activity of a network mediated by gamma oscillations in HRS subjects compared to HC. This network involved the bilateral auditory cortices, the thalamus and frontal brain regions including the anterior cingulate cortex (ACC) as well as the bilateral dorsolateral prefrontal cortex (DLPFC).

Conclusions: For the first time we report a reduced activation of an aeGBR-specific network in schizophrenia brought forward by EEG-informed fMRI. The results of our studies confirm the applicability of aeGBR disturbances as a stable endophenotype of schizophrenia.

Auditory verbal hallucinations related to altered interhemispheric connectivity

Saskia Steinmann
University Medical Center Hamburg-Eppendorf, Department of Psychiatry and Psychotherapy, Psychiatry Neuroimaging Branch, Hamburg, Germany

Importance: Although the pathophysiology of auditory verbal hallucinations (AVHs) is not yet fully understood, abnormalities in the neuronal circuitry of language-relevant brain areas are thought to play a major role. To date, not much is known about the neural mechanisms underlying functional connectivity between brain areas involved in language processing and AVH, although gamma-band oscillations (GBO) are a strong candidate given their specific role for perception processes in general and the growing literature on alterations of GBO in schizophrenia (SZ). In the current study, we directly addressed the question whether interhemispheric connectivity between bilateral auditory areas in the gamma-band range is associated with AVH.

Methods: 20 SZ patients (7 with and 13 without AVH) without psychiatric comorbidities and 22 age- and sex-matched healthy controls (HC) were investigated with 64-channel EEG while performing a dichotic listening task requiring functional connectivity between bilateral speech processing areas. In this paradigm, two different consonant-vowel syllables were presented simultaneously, one to the left and another to the right ear. A typical finding across studies in healthy right-handed individuals is the so-called Right Ear Advantage (REA), which is usually reduced in SZ patients and especially in those who suffer from AVHs. Using lagged phase synchronization analysis and eLORETA source estimation we examined the functional connectivity between right and left primary and secondary auditory cortices in the gamma-band.

Results: Behaviorally, there was a significantly reduced REA in AVH, while the REA magnitude in non-AVH was found to be intermediate between AVH and controls, replicating prior findings. The major finding was significantly increased interhemispheric gamma-band phase synchrony between right and left primary auditory cortices in AVH compared to both and non-AVH.

Conclusion and relevance: These findings provide further support for the hypothesis that both altered GBO play an important role in the pathophysiology of SZ and that altered connectivity between bilateral language areas is a key feature of AVHs.

Resting-state gamma-band connectivity and symptoms in first-episode Schizophrenia

Christina Andreou
Department of Psychiatry and Psychotherapy, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

Background: Schizophrenia has long been suggested to represent a disorder of dysconnectivity. Gamma-band oscillations are highly relevant in this context, due both to their proposed involvement in neuronal synchronization and to their association with neurotransmitter systems relevant for schizophrenia. The present study aimed to investigate resting-state gamma-band connectivity in patients with schizophrenia.

Methods: 64-channel resting-state EEG (eyes closed) was recorded in 22 patients with first-episode schizophrenia and 22 healthy controls matched for age and gender. Connectivity (orthogonalized power envelope correlation) was assessed across 80 cortical regions at 40 Hz.

Results: Network-based analyses indicated increased connectivity in patients within a strongly lateralized network consisting mainly of left inferior frontal/orbitofrontal, lateral and medial temporal, and inferior parietal areas. Within this network, gamma-band connectivity was higher in patients with low levels of positive and disorganization symptoms.

Conclusions: The present study provides a link between resting-state gamma-band connectivity and core symptoms of schizophrenia. The observed findings are different than those reported by task-related studies, suggesting that resting-state studies might reveal new aspects in the pathophysiology of schizophrenia.

Glutamate hypothesis and gamma oscillations in Schizophrenia - New insights from genetic analyses and pharmacological models

Christoph Mulert
Professor of Psychiatry and Head of the Psychiatry Neuroimaging Branch,
Department of Psychiatry and Psychotherapy, Hamburg University, Germany

The glutamate hypothesis of schizophrenia attracted increasing interest during the last few years because of current translational strategies for new drug development for schizophrenia targeting the NMDA receptor. At the same time, basic research revealed direct evidence for the close relationship between glutamatergic neurotransmission at the NMDA receptor and the emergence of gamma oscillations. In addition, disturbed gamma oscillations in schizophrenia were described in relationship to key symptoms of the disease such as cognitive disturbances or auditory hallucinations. In this talk we will present new data addressing the relationship between the genetic background of the glutamatergic system, schizophrenia risk genes and gamma oscillations. Moreover, we will present data concerning alterations of gamma oscillations in the ketamine model of schizophrenia.

20.00-21.00 **SATELLITE LECTURE**
Chairperson: **Dimitrios Dikeos** (Greece)

The lecture is sponsored by Lilly ΦΑΡΜΑΣΕΡΒ

Improving outcomes in Schizophrenia: The role of long acting injectable antipsychotics

Charalampos Touloumis
NHS Director, Psychiatric Hospital of Attiki, Athens Greece

Schizophrenia, the presumed serious mental disorder (a disease with lifelong prevalence around 1%, the age of onset of about 20years old, almost the same incidence in both sexes, increased

prevalence in urban areas with high population density mostly degraded, increased mortality by 1.5 -2.5 timeshigher than in the general population and with shortened life expectancy by at least 20%), continues still today (50 years after the introduction of antipsychotic substances) to plague sufferers, be a significant burden for families, to puzzle experts and entail significant social load (not only because of the increased treatment cost).The most important causes that create this difficult situation arises from the nature of the disorder (heterogeneous, recurrent, chronic, characterized by poor insight, clear decline in functionality and sometimes dangerous), the non-ideal approach oftherapists (more than 50% of patients worldwide are not adequately treating) the ineffectiveness of specific interventions (antipsychotics, even the younger ones, are unlikely to be substantially in areas disorder symptoms that cause the greatest degree of disability, such as negative symptoms and the decline of cognitive functions) and deadlocks that exist in research approach.

From the research effort so far has shown that the most important factors preventing relapse in schizophrenia is the systematic taking antipsychotic treatment (forintervalsrather longandimpossiblebe clearly definedby themanifestations).The clinical reality, regarding the compliance to antipsychotic treatment is not at all promising, since at least 50% of patients are poorly compliant with the therapist's instructions. The reasons for poor compliance are numerous but substantial among them is the low insight that characterizes the disease.

The Long Acting antipsychotics aim to improve at least some forms of defective compliance (such as covert) and clearly provide simpler dosing regimens for patients.The advantages of using Long Acting antipsychotics will be extensively analyzed.

08.00-09.30 **SYMPOSIUM**
PRIMARY CARE OF NEUROCOGNITIVE DISORDERS
Chairpersons: **Hans Förstl** (Germany), **Alexander Kurz** (Germany)

Non- pharmacological treatments of neurocognitive disorders

Alexander Kurz
Head of the Centre for Cognitive Disorders at the Department of Psychiatry and Psychotherapy of Technische Universität München, Germany

Non-pharmacological treatments for people with neurocognitive disorders represent a heterogeneous group of interventions that address affected individuals, informal carers, or both. The aims of these interventions are to enhance or preserve abilities (cognitive training and stimulation, physical activity), to compensate disability and maintain independence (cognitive rehabilitation, occupational therapy), to improve psychological well-being and reduce behavioural problems (reminiscence therapy, behavioural therapy, validation, multi-sensory stimulation, music therapy, aroma therapy) and to support carers (counseling, support groups). In recent years the methodological quality of studies evaluating these interventions has improved. Evidence of efficacy has been provided for most strategies, particularly for cognitive stimulation, occupational therapy, reminiscence therapy, physical activity and carer support. The management of neurocognitive disorders should take advantage of non-pharmacological interventions at all clinical stages.

Pharmacological therapies of cognitive deficits

Robert Perneczky
Co-head of the Neuroepidemiology and Ageing (NEA) Research Unit, Neuroepidemiology and Ageing Research Unit of the Imperial College of Science, Technology and Medicine, London, UK

The pharmacological treatment of the cognitive symptoms of Alzheimer's disease and other dementias covers interventions which have in fact only symptomatic effects; the pathophysiology itself remains unaffected. The current pharamacological treatment mainly includes cholinesterase inhibitors and memantine. None of the promising new substances with causal therapeutic potential have proved to yield significant clinical benefits for patients with dementia. This presentation will give a concise update on the current state-of-the art of dementia pharmacological treatment and will also discuss the rationale behind on-going and planned efforts to design effective and efficient pharmacological options targeting dementia biology and cognitive symptoms.

Pharmacological therapies of behavioural and psychological symptoms of neurocognitive disorders

Panagiotis Alexopoulos
Head of the Neurobiological Laboratory, Department of Psychiatry and Psychotherapy, Technische Universität München, Germany

The prevalence of neurocognitive disorders is increasing rapidly and it is becoming a scourge of our times. Behavioral and psychological symptoms are a common aspect of the spectrum of the disorders' symptoms and are associated with poor prognosis. Their treatment constitutes a challenge because of its importance for the quality of life of the patients and their caregivers, and it warrants appropriate action. Non-pharmacological interventions should be the first step in the management of these symptoms, but when their effect is insufficient, a wide variety of pharmacological agents can contribute to the amelioration of behavioral and psychological symptoms. The objective of this talk is to present data concerning the efficacy of various different classes of pharmacological agents in the management of the neuropsychiatric symptoms of neurocognitive disorders. A systematic review of articles, concerning studies which examined the effectiveness of drug therapies in the treatment of behavioral and psychological symptoms was conducted, using MEDLINE and PubMed. Antidepressants seem to be effective only in the treatment of depression and not for other neuropsychiatric symptoms. Cholinesterase inhibitors generally appear to have small, though statistically significant efficacy. The efficacy of typical neuroleptics is limited and adverse effects are common. The results of studies on the efficiency of atypical antipsychotics showed a modest, statistically significant efficacy with minimal adverse effects at lower dosages. Atypical antipsychotics are associated with an increased risk of death. Newer retrospective cohort studies however suggest that conventional antipsychotics are at least as likely as atypical agents to increase the risk of mortality. The results of the studies of memantine and carbamazepine are conflicting, and valproate is not effective in the treatment of neuropsychiatric symptoms

New conceptualisation of neurocognitive disorders: Implications for primary care

Hans Förstl
Professor and Director, Department of Psychiatry and Psychotherapy of TUM-MED, Germany

"Dementia" had long been considered an acceptable clinical diagnosis until the public and the experts became increasingly disenchanted with (1) the confusion between Alzheimer's and dementia; (2) the overlap between Alzheimer's and other underlying pathologies; (3) merely symptomatic pharmacological treatment approaches available for Alzheimer's dementia; (4) the negligible clinical efficacy of causally-oriented treatment strategies in patients with manifest cognitive impairment; and (5) a widening hiatus between clinical routine and scientific advances.

Conventional diagnostic systems usually represent a practical simplification of theory and reality, which is useful for the benefit of communication and treatment; a diagnosis Alzheimer's dementia for example encourages the use of so-called antidementia drugs. New insights into the nature of disease, new methods to identify pathological changes, and newly available inter-

ventions in specific disease processes call for new concepts. The burden of disease and prevalence of dementia in ageing societies have propelled scientific research and recently acquired knowledge needs to be integrated into new approaches and algorithms. This contribution will address some of the recent conceptual issues, which need to be translated into practice (early diagnosis of neurodegenerative disease; trial design; dealing with symptom-free patients; …)

09.30-10.00 **LECTURE**
Chairperson: **Athanasios Douzenis** (Greece)

Is depression in men underestimated and undertreated?

Anne Maria Moeller-Leimkühler
Department of Psychiatry, Ludwig-Maximilians University, Munich, Germany

Depression remains to be one of the most underdiagnosed and undertreated mental disorders, despite of increasing subscriptions of antidepressants, evidence-based guidelines for diagnosing depression and public awareness campaigns. Underdetection of depression is more pronounced in males than in females, especially in males who suffer from male depression showing more externalizing symptoms than typical depression symptoms. However, empirical evidence in this respect is rare to date.

The reasons for underdiagnoses and undertreatment of depression in men are complex. They go far beyond adherence to antidepressants or psychotherapy, rather including societal attitudes towards men, masculinity and depression, men´s self-diagnosis, dysfunctional strategies of self-care and delayed help-seeking, as well as gender bias in diagnosing depression. Untreated depression may have adverse consequences such as worse course of illness, reduced social integration, comorbidity related to alcoholism, cardiovascular disease, stroke, diabetes and suicide. Conclusions are drawn for further research, clinical practice and public health strategies.

10.00-11.30 **SYMPOSIUM**
UNCHARTED ISSUES IN THE MANAGEMENT OF BIPOLAR DISORDER
Chairpersons: **Giuseppe Tavormina** (Italy), **Haim Einat** (Israel)

Pros and Cons of Network analysis for bipolar treatments

Ayşegül Yildiz
Professor of Psychiatry, Department of Psychiatry, Dokuz Eylül University, Izmir, Turkey and Harvard Medical School International Consortium for Bipolar Disorder Research, Boston, USA

Needs for the development of decision-analytic cost-effectiveness (CE) models and dearth of head-to-head trials prompted use of evidence synthesis techniques called multiple treatments meta-analysis (MTM), which borrow strength from direct comparisons for making indirect comparisons. MTM in the context of Bayesian approach offers a great opportunity for ranking of available treatments to select to most CE option and enables simultaneous incorporation of various clinical measures affecting treatment decisions. However, validity of the tech-

nique depends critically on similarity of the trials regarding all characteristics other than the comparison(s) being made. Recent applications of the MTM for anti-manic treatment trials with differing network structure yielded different results on comparative efficacy assessment of anti-manic treatments. Considerate evaluation of the technical and clinical aspects of the matter call for improvement of trial level source evidence, careful and considerate construction of the network as well as in corporation of all available clinical information for other aspects of anti-manic drugs affecting clinical wellness such as effects on cognition, quality of life, functionality, acute and late neurologic side effects, suicidality, metabolic, endocrinologic, and depressogenic effects in the MTM model for a most useful application of the technique for acute bipolar mania. Network analysis for bipolar maintenance treatments is recently released. This new perspective of analytic evidence synthesis is promising yet there is still much room for acquiring most accurate and informative results via this technique.

Key words: antimanic; bipolar; mania; multiple treatments meta-analysis

When bad is good and good is bad: Evolutional and cultural aspects of affective illness from symptoms to treatment

Xenia Gonda
Assistant Professor, Department of Clinical and Theoretical Mental Health, Semmelweis University, Budapest, Hungary

Novel genetic and GWAS approaches to depression increasingly shed light on the genetic background of affective illness, and also on the association of genes and polymorphisms implicated in the background of affective illness with otherwise normal personality traits carrying an adaptive aspect. Also, although depression is a highly prevalent mental illness with increasing burden for the patient, their family and society as well, we still do not have complete understanding either of the phenomenology or the etiopathological background of depression, and cross-country, cross-ethnic and cross-cultural differences in the prevalence and symptomatic manifestation as well as response to treatment of depression further obscure this picture. Features of affective symptomatology related to culture or ethnicity are also increasingly important to understand as migration increases worldwide. Apart from this, delineating further elements complicating the manifestation and clinical picture as well as the background of depression would be crucial in understanding, preventing, diagnosing and treating this illness. Understanding ethnic and cultural differences both in the background and clinical manifestations of depression would not only give us better understanding of this illness, but would also clear up several issues currently obscuring depression research, from cultural biases of instruments assessing the depressive phenotype to ethnic differences in frequency of relevant genetic polymorphisms. We review the possible evolutional advantages of affective illness and traits related to affective symptomatology such as affective temperaments, as well as the most consistently replicated findings concerning the most important cross-national and cross-ethnic differences in the rates and characteristics of depression including differences in the social, psychological as well as physiological manifestations and differences related to genetic and neurobiological background and treatment.

Xenia Gonda is recipient of the Janos Bolyai Research Fellowship of the Hungarian Academy of Sciences.

Bipolar mixed states and suicidality

Dina Popovic
Bipolar Disorders Program of Hospital Clinic, University of Barcelona, Spain

The impact of mental disorders on mortality from suicide is substantial, but insufficiently recognized as a public health problem. While suicidal behaviour is unquestionably determined by a complex combination of risk factors and environmental circumstances, available data concerning suicide risk presents a confusing array of unreplicated findings with potentially confounding factors. After critically reviewing the most important risk factors, the results of the BRIDGE-II-MIX study will be presented. BRIDGE-II-MIX study aimed to provide a reliable estimate of the frequency of mixed states in a large international sample of patients diagnosed with major depressive episode according to several sets of criteria, then to compare the clinical validity of the several proposed criteria by examining specific features, such as suicidality. The characteristics of patients diagnosed with MDE who present history of suicide attempt(s) with patients without previous suicide attempts within this large international sample will be presented. Finally, the role of antidepressants in the induction of mixed states and suicidality will be discussed.

11.30-12.00 **LECTURE**
Chairperson: **Venetsanos Mavreas** (Greece)

Treatment guidelines for schizophrenia: An update

Petros Fotiadis
Director of Military Community Mental Health Center, at rank of Lieutenant Colonel, 424 General Military Hospital, Thessaloniki, Greece

The interventions which will be examined in these recommendations pertain to all pharmacological interventions that are available to clinicians for schizophrenia in adults. It also made limited reference to other available biological interventions.Although the editorial team of the present recommendations considers that these interventions are necessary for holistic (based on the biopsychosocial model) treatment of psychotic patients,these instructions will not cover in detail the appropriate psychosocial interventions, as well as special psychoeducational topics. The ideal therapy usually involves a combination of available treatments, while the personalized care plays an important role according to the patient's preference and the local availability of services. Data based on searchinmedline/Pubmed database, scientific societies and websites of other organizations (Cochrane library), other national guidelines and recommendations, scientific societies and organizations as well as meta-analyses of randomized studies relating to the intervention under consideration. Individual studies also identified and used when a) was more recent than the published instructions and their results have brought some change in documentation, b) in cases of specialized topics, such as persistent cases or specific subgroups of patients, which may not be covered by the previous directives. The search of the data was restricted in the last 10 years (2004-2014) and in English (regardless of country of origin).
These guidelines covers the biological treatment of acute schizophrenia, the management of treatment-resistant schizophrenia, the long-term treatment as well as the management of relevant side effects.

12.00-16.30 **CEREMONY ON STIGMA AND MENTAL ILLNESS**
Location: Island of Spinalonga
Coordinator: **Konstantinos N. Fountoulakis** (Greece)
Speakers: **Alexandros Vgontzas** (Greece), **Charalambos Papageorgiou** (Greece), **Venetsanos Mavreas** (Greece)

17.00-17.30 **LECTURE**
Chairpersons: **Hans-Jürgen Moeller** (Germany), **Siegfried Kasper** (Austria)

The Collegium International Neuro-Psychopharmacologicum (CINP) treatment guidelines for bipolar disorder in adults

Konstantinos N. Fountoulakis
Associate Professor of Psychiatry of the Aristotle University of Thessaloniki, AHEPA University Hospital, Thessaloniki, Greece

The CINP assembled a workgroup to develop guidelines and a precise algorithm for Bipolar disorder (BD). The works are still in progress and the actual guideline is expected to be published within 2015. These guidelines will be based on hard data and were intented to be as evidence based as possible. A new system of grading the evidence was developed. Monotherapy was given priority over combination therapy. The first approach led to a draft detailed guidance for each phase of BD in a five-step way, by taking into consideration the specific clinical features if possible. The second includes a very precise algorithm. When released, the CINP guidelines will be the most recent fully updated and fully evidence based guidelines on the treatment of BD. Many issues need further study, data are rare and insufficient and many questions remain unanswered. The most important and still unmet need is to be able to merge all the guidelines which concern different phases of the illness into a single one, and in this way consider BD as a single unified disorder, which is the real world fact. However todate the research data do not permit such a unified approach.

17.30-18.30 **LECTURE**
Chairperson: **Siegfried Kasper** (Austria)

Neurobiological background, assessment and psychopharmacological treatment of negative symptoms

Hans-Jürgen Moeller
Emeritus Professor of Psychiatry, Ludwig-Maximilians University, Munich, Germany

Negative symptoms have a high prevalence and important functional consequences in schizophrenia, especially during longterm outcome. The persistent primary negative symptoms, also called deficit syndrome, which are not secondary to positive symptoms, parkinsonian side effects of antipsychotics or other factors are seen as core symptoms of schizophrenic psychoses.

For a more reliable assessment several clinical rating scales are recommended. Beside the widely used traditional scales like the SANS or the Negative Subscale of the PANSS recently developped scales are now available, which seem to have some advantages in terms of validity, probably not in terms of reliability. Especially the Clinical Assessment Interview for Negative Symptoms (CAINS) attracted interest as an innovative approach in this field.

Structural and functional neuroimaging studies addressed the issue of neurobiological background of negative symptoms from several perspectives: considering them as unitary construct or focusing on primary and/or persistent negative symptoms. Although interesting findings were presented, there ist too much inconsistency to develop a clear concept of brain alterations related to negative symptoms.The same is true for alterations of different neurotransmitters systems, like dopamine, serotonin, glutamate etc.

Sofar the psychopharmacological treatment of negative symptoms is not as successful as the treatment of positive symptoms. Antipsychotics reduce negative symptoms oft he acute episode in association with the reduction of positive symptoms. However, the persistent/primary negative symptoms are difficult to treat. Only some of the second generation antipsychotics like clozapin or amisulpride seem to have some proven efficacy in this respect. Therefore add-on treatment strategies with antidepressants or glutamatergic compounds are widely used, although the evidence is not fully satisfying.

19.00-19.30 **LECTURE**
Chairperson: **Charalambos Papageorgiou** (Greece)

Psychopharmacology in ancient Greece

Basileios Alevizos
Associate Professor of Psychiatry, Athens University, Greece

Even as man always turned to the plant kingdom to combat sickness and pain, the psychopharmacology arose in ancient Greece when drugs were studied by the Helen of Troy and drug reports were sung by Homer. It happened in Sparta when Menelaos and his guests, Peisistratos and Telemachos, were in tears remembering the lost Odysseus. He was still missing ten years after the war. This atmosphere was disastrous for the enjoyment of dinner parties. Helen puts in the wine they were drinking a drug against “sorrow and anger”(nepenthes t’ acholon te), a gift from Polydamna, according to Homer. This was tremendous success. The drug brought instant relief and ataraxia.

Drugs were used for sorcery. Circe with drugs and a swing of her wand to potentiate the drugs, transformed Odysseus’ crew into swine and back again with a wand and an ointment to remove the bristles. Gods decided to spare Odysseus and sent Hermes to give him an antidote, a herb, Moly, with black root and white, like milk flower.

In an Aegean island inhabited by peace-loving people Odysseus’ crew invited for dinner with lotus, a sweet fruit. Whoever ate of it would forget to go home and preferred to stay forever

after among their hosts, as lotus eaters. Odysseus decided to tie them to the oars and made them row as fast as they could.

Pythia sat on her golden tripod in the Delphian oracle, a political influential organization, tried to facilitate the prediction by inhaling fumes emanating from the ground below the tripod or by taking a drug. It was an important advance in psychopharmacology - the first use of a drug to intensify perception for prediction.

Hippocrates used mandrake, carefully dosed to avoid excitation in depression with suicidal tendency and hellebore. He recognized the unity of the organism, the oneness of body and mind and the brain as the most important organ, surfaced the biological psychiatry under the plain tree on the island Cos. Mental disease is a disease of the brain that can be treated by diet, bathing, exercise and with drugs.

19.30-20.00 **Lecture**
Chairperson: **Charalambos Papageorgiou** (Greece)

Attenuated Psychosis Syndrome: Some questions to be addressed

Vasileios Kontaxakis
Professor of Clinical and Social Psychiatry in the Athens University, 2nd Psychiatric Department, «Attikon» General Hospital, Athens, Greece

The onset of psychosis usually is young people causes considerable difficulties and problems to patients and their families. In our days, it is well known that both psycho-social and/or pharmacological interventions in early phase of the disease could result to a better outcome and better quality to patient's life. During the last decade several projects are being implemented, focusing on the pre-onset identification and early treatment of schizophrenia and other psychoses. Recently (2013), a new diagnostic category for further study, entitled "Attenuated Psychosis Syndrome" was included in the Diagnostic and Statistical Manual for Mental Disorders of the American Psychiatric Association (DSM-5). However, during the last years there was a vivid debate as to whether this condition should be included or not in DSM-5. In this presentation, I will try to answer, among others, the following questions: a. The title of the condition is correct and appropriate? b. Is it possible to prevent or to delay the onset of psychosis by treatment interventions in the prodromal state? c. Which treatment intervention is more effective without side effects? d. How long should be the duration of treatment?

20.00-21.00 **LECTURE**
Chairperson: **Hans-Jürgen Moeller** (Germany)

Where do psychiatry and mental health (brain health) stand today and what to expect in the future

Siegfried Kasper
Professor of Psychiatry and Chairman of the Department of Psychiatry and Psychotherapy, Medical University of Vienna, Austria

The wording of mental disorders has caused a stigma to our patients and it has recently been discussed to term them as "brain health". This wording could be viewed as disregarding that our patients live in the psychosocial environment, as it focuses on the notion that mental disorders are brain disorders. However, this is also evident for other medical disorders and no specific feature of the so-called "psychiatric diseases". Mental disorders result from complex genetic risk factors and developmental and environmental factors. Current treatments help too few patients to get better and most importantly current treatments need to include research findings in daily clinical practice. Along this line it is noteworthy that the renowned journal *The Lancet* recently introduced a new journal termed *The Lancet Psychiatry* and the *Archives of General Psychiatry* had been renamed as *JAMA Psychiatry* as an issue of the American Medical Association. With this in mind it has to be acknowledged that there is a revolution in neuroscience. For instance, for the first time science indicates that brain disorders such as depression and dementia begin early in life, which opens the door to early prevention, an issue which has already been discussed for other diseases like diabetes. Additionally, neuroscientists are working with psychiatrists and family doctors to personalize/stratify treatments and therefore develop predictive properties under different treatment regimes. Interestingly, for the first time nations/institutions are launching brain projects including psychiatric disorders like the brain health movement in Canada, brain medicine in Asia or the recently established neuroscience cluster in Vienna, Austria, which includes neurosurgery, neurology as well as psychiatry and psychotherapy (http://cluster.meduniwien.ac.at/mnc). Owing to fascinating new methodologies based on brain imaging techniques as well molecular biology results together with clinical variables we are very likely to be successful in keeping the so-called psychiatric illnesses within medical science (brain health) for the better understanding and treatment of our patients.

Sunday, May 17th 2015 - Hermina Hall

09.00-10.30 **SYMPOSIUM**
NEUROCOGNITIVE DISORDER IN UNIPOLAR MAJOR DEPRESSION
Chairperson: **Konstantinos N. Fountoulakis** (Greece)

General neurocognitive functioning, intelligence quotient (IQ), psychomotor and mental speed and attention in unipolar depression

Stella Miziou
Psychologist, Thessaloniki, Greece

Patients with Major Depressive Disorder have specific neuropsychological deficits. The research data available for the intelligence quotient is quite limited and do not allow us to draw conclusions. MDD depressed patients manifested an important slowing of sensorimotor and overall neurocognitive processes. Global functional impairment is significantly associated with poor performance on a cognitive measure of processing speed. The neuropsychological deficits in attention are associated with alertness, speed of information processing and the selective attention.

The neurocognitive function is impaired in major depression, but it remains uncertain whether and to what extent improved neurocognitive function occurs when remission of depressive symptoms.

Memory, learning and verbal and visuospatial impairment

Eirini Tsitsipa
Cognitive - Behavioral Psychotherapist, Thessaloniki, Greece

There is considerable interest in the identification of neurocognitive impairment inpatients with depression. Depression-related disturbances of cognitive function havebeen demonstrated in a range of domains, including learning and memory, verbal skills and visuospatial skills. Depression may negatively impact different types of memory, including explicit, implicit, short term, long term, and working memory. During the acute episode, paired associate learning, spatial recognition memory, rapid visual processing and visuospatial planning were impaired. In remission, is observed the improvement of visual learning ability, and spatial recognition memory. Age and gender plays a significant role in neurocognitive deterioration. The number of depressive episodes, the severity and the longer duration of the illness as well as the acute phase and psychiatric comorbidity, negatively impact the neurocognitive performance in patients with depression.

Executive function impairment and insight concerning the neurocognitive deficit

Stefania Moysidou
Psychologist at Hellenic Police, Division of Aliens and Border Protection, Department of illegal Migration and Psychological Consultant with Sports Academies, Greece

Depression is a common mental disorder, which has been connected with neurocognitive dysfunction in a number of domains, including theory of mind. Bibliography suggests the presence of clear evidence for dysfunction in executive functions (working memory, verbal fluency, cognitive flexibility, cognitive inhibition, concept formation, problem-solving, planning), the degree of which increases with severity of clinical picture. However, there are conflicting findings mainly due to methodological problems. Moreover, in patients with depression there is a disturbed ability to identify and discriminate basic emotions. According to data it appears to be associated both with a generalized bias with a predominance of negative, as much as with an absence of positive. The issue of awareness of neurocognitive deficit is poorly studied.

Clinical correlates and the long term development and course of the neurocognitive deficit

Vangelis Karavelas
Research Associate, 3rd Department of Psychiatry, Aristotle University of Thessaloniki, Greece

It is well known that besides the characteristic mood disorder, the clinical picture of Unipolar Depression includes a set of finding that support a neurocognitive deficit. Research data suggest that specific clinical features of the disorder might contribute to a greater deficit. Late-onset of Depression, previous history of MDD, the number of episodes and severity of the disorder may affect in a negative way neurocognitive functions. Furthermore, the presence of psychotic features relates to a worse overall neurocognitive performance. Memory, psychomotor speed, verbal fluency and attention are some of the neurocognitive parts that are influenced. Treatment with antidepressants improves this deficit in general. Each pharmacological agent seems to have different result in each area of the impairment. Duloxetine and escitalopram seem to improve more areas of the deficit. SNRI's in general seem to have better results than SSRI's in various types of memory.

10.30-12.00 **SYMPOSIUM**
EVIDENCE BASED TREATMENT OF BIPOLAR DISORDER WITH THE CLINICAL PICTURE AS GUIDE
Chairperson: **Konstantinos N. Fountoulakis** (Greece)

Historical perspective of the evolution of the diagnosis and treatment of bipolar disorder

Filippos Kouniakis
Psychiatrist, Thessaloniki, Greece

The last five decades have brought essential changes and developments in psychiatry. One indirect but fundamental development was the rediscovery and rebirth of old diagnostic, nosological, and phenomenological concepts. For example, new pharmacological experiences led to the rediscovery of therelevance of the unipolar-bipolar dichotomy.

There has been growing literature about the concept of mood disorders and especially bipolar disorder. It was already a "mystery" in the ancient years where we find some references to depression and bipolarity, e.g. 3000 BC in ancient Egypt in Eber's papyrus where they were described as heart disease. Later on, it was through the work and theories of the Greek physicians of the classical period, especially of the school of Hippocrates and, later, of the school of Aretaeus ofCappadocia when they thought that the origin of mental diseases lay in the disturbed interaction of body fluids with the brain.

In general, during the times of ancient Greece and the Roman Empire, religion, science and philosophy were interplexed in the way mental illness was conceived. After the fall of the Greco-Roman world, science and particularly medicine retreated in front of religious-metaphysical approaches and priests and the church took over health and particularly mental health in Europe. Thus, during the 10th and 11th century AD Arab scholars dominated medicine. Avicenna (980-1037) further developed the theory of the temperaments.

A number of European scientists and doctors made several efforts to conceptualize the bipolarity, until finally, Emil Kraepelin (1856-1926; fig. 1.8) in his 6th but in more details in the 8th edition of his textbook of psychiatry in 1899, established manic-depressive illness as a distinct nosological entity and separated it from schizophrenia, on the basis of heredity, longitudinal follow-up and a supposed favourable outcome (Kraepelin 1921).

Important clinical features as targets for treatment intervention: What to look for

Dimos Dimellis
Consultant, 424 General Military Hospital, Thessaloniki, Greece

Bipolar Disorder (BD) is a severe and relapsing mental illness associated with the deregulation of mood, thought and activity, which is often misdiagnosed and undertreated. The most common misdiagnosis is that of Major Depressive Disorder. This misdiagnosis affects negatively the quality of life as well as the clinical course of patients suffering from this mental illness. Furthermore the frequent comorbidity of BD with anxiety, substance use and medical disorders might trouble, even more the correct diagnosis and the choice of treatment, while, at the same time these conditions could worsen mainly the affective symptoms (e.g. mood swings). On the other hand, the presence, for example, of hypomanic symptoms in patients suffering from depression is a clinically important variable which should not be ignored as it must influence treatment planning. In order to facilitate the diagnostic procedure we review diagnostic tools, self- report measures that accelerate screening for BD, and symptom severity scales. Other assessment domains, including measures designed to facilitate self-monitoring of symptoms, are also being reviewed. Finally, we are going to highlight particular gaps in the field, including the lack of research on the reliable diagnosis of bipolar II and milder forms of disorder like these included in the Bipolar Spectrum, the lack of empirical data on the best ways to integrate data from multiple domains, and the shortage of measures targeting a broader set of illness- related constructs relevant to bipolar disorder.

How to best treat bipolar disorder by taking into consideration the clinical picture

Vangelis Karavelas
Research Associate, 3rd Department of Psychiatry, Aristotle University of Thessaloniki, Greece

Treatment of Bipolar Disorder is a challenge for all Psychiatrists. The non-linear form of the disorder and its specific characteristics makes it even harder for the physician to make the proper psychopharmalogical decision. Issues such as index episode, predominant polarity, seasonality, current episode and the presence or not of rapid cycling seem to play an important role in making that decision. Treatment guidelines have been published from several International and National institutions with high acceptance and validity. Evidence based data have been emerging lately that come into contradiction with our every day clinical practice. The purpose of this presentation is to try and combine all this data and formulate a guide having in mind each patients unique clinical picture and personal history.

12.00-13.30 **SYMPOSIUM**
DISCUSSING THE INTEGRATION ON MENTAL HEALTH TREATMENT AND BEHAVIOURAL HEALTH CARE INTO PRIMARY CARE: THEORETICAL INSIGHTS AND EXPERIENCES GAINED IN GREECE
Chairperson: **Christos Lionis** (Greece)

Integration of community mental health services into mainstream primary care: The Achilles' Heel of the Greek psychiatric reform

Pavlos Theodorakis
CEO & Chairman of the Attica Mental Health Hospitals Trust, Athens, Greece

This paper recalls the principles and design of the reform, reviews accomplishments and details of the unfinished agenda for completion of Greece's Mental Health Reform, focusing on the separate and fragmented development of the community mental health services, in parallel rather than integrated into the mainstream primary care system.

The mental health reform was oriented by law 2716 on national mental health services passed in 1999, and followed the outcry following the Leros documentary about the way psychiatric patients were treated in Greece.

The psychiatric reform was mainly designed on three reform axes namely: de-institutionalisation of chronic psychiatric hospital patients; creation of acute psychiatric care wards in general hospitals; and the organisation of community mental health services aligned with sectorisation.

The law envisages the organisation of community mental health through 3 types of structures: community mental health centres (public structures for prevention, outreach, ambulatory treatment and follow-up, etc); day hospitalisation centres (public – and some NGO – structures as a temporary solution for transition from hospitalisation between hospitalisation and ambulatory care, or in order to avoid hospitalisation where ambulatory care is not sufficient); and mobile units in rural environments and home care in urban environments, provided by public and some NGO structures.

This part of the reform has been conducted in parallel – as opposed to integrated – with other efforts to restructure health care in Greece: the lack of integration and coordination has led to avoidable costs and problems with continuity and comprehensiveness of care. Distortions have been observed due to the modalities of implementation and modalities of funding.

The design of the reform remains largely appropriate. The unfinished agenda can now confidently and speedily be addressed since the PHC-EOPYY law of February 2014 offers far better perspectives for integration. The creation of Community Health Centres – structurally the weak point in the strategy up to now – can now be done within the reformed PEDY units. This will respond to the policy objective of reducing stigmatisation and have the added advantage of absorbing some of the staff capacity working in these units.

The new programming period of the European Structural Funds is a unique opportunity to complete the mental health reform. Exploiting synergies with the ongoing Primary Care Reform makes it possible to complete closure of the asylums, while introducing innovative and systemic actions and pilots to integrate mental health and primary health care, and strengthen and adjust services to new emerging needs.

Sectorization as the main vehicle towards primary care and mental health integration

Sotirios Koupidis
Occupational Medicine Specialist, Athens, Greece

Law 2716/1999 is the main law for the Mental Health Reform that is establishing Mental Health (MH) community services. The basic concept is to abolish Psychiatric Hospitals and create community MH services inside a specific geographical area for their specific population. MH sectors (To.PS.Y) are geographical and population modules-areas. To define every specific ToPSY, it was taken into account the transport, epidemiological, social and other conditions, aiming to provide appropriate MH care services close to where the citizens live or staying or working. In this way, there is a guarantee for equitable and universal access to services in a way that public interest is served. Greece was devided in 62 To.PS.Y.

Law 4238/2014 implemented Primary Health Care (PHC) reform by establishing the National Primary Health Network (P.E.D.Y.). The general aim of the reform intervention undertaken is the creation of a global and integrated system of primary health care, based on the quality, effectiveness, efficiency and social justice.

Main instrument of this reform is the area of responsibility of each Health Center that is called Primary Health Care Sector (To.P.F.Y.). Within the To.P.F.Y., all structures that provide primary care services, family doctors and medical practitioners consist the local network for P.H.C. services. The number of To.P.F.Y.., is determined by Ministerial decision that must be released.
Introduction of To.P.F.Y., is trying to ensure geographically comprehensive provision of care that will cover the health needs of each individual, where the responsibilities can be assigned to specific health networks and professionals.

This is a great challenge to integrate the reforms mentioned above and create a comprehensive and sustainable local health network that will coordinate the provision of preventive services and promotion of physical and mental health of all the citizens. At the same time attempting to efficient utilization of all available resources (human, financial and material) of the health system in PHC and MH may ensure reasonable and indispensable citizens' access to secondary health care (ambulatory - outpatient or inpatient). The experience and the methodology are "more than ever" known and we need to use them for the PHC and MH care integration in a local sectorized level. In that case health reforms will succeed in improving the efficiency and the equity of the health services covering the population health needs

Patient centered medical home: Is that model feasible and suitable to the Greek setting?

Christos Lionis
Professor of General Practice and Primary Health Care, School of Medicine, University of Crete
Head of the Clinic of Social and Family Medicine, School of Medicine, University of Crete, Greece

Patient centered care has received prompt attention in both the US and Europe, with efforts dedicated to describe effective models that aim to reduce health care cost and improve quality of care. In the US, 'patient centered medical home' is an old concept that originally was presented in 1967 to describe services based on four pillars: accessibility, continuity, comprehensiveness and coordination, while two components on patient safety and quality of care have been added. In Europe, the Dutch Institute NIVEL described in a similar approach with the four dimensions of high quality primary care. In both models, the term integrated care has been recently embedded in the initial recommendations on the integration of mental health services into the patient centered models.

Although the ongoing debate in the literature, integrated care in primary care has received minimal attention, while integrated primary care in Greece is completely lacking even in a period of economic crisis. Therefore, this presentation aims to explore to what extent patient centered and integrated care is suitable and feasible in the Greek context. A focus on the integration of mental health into patient centered models would be used as an example.

E-POSTERS

P01 The genome-wide associated schizophrenia risk variant rs10520163 affects Prepulse Inhibition and executive functions: Preliminary findings from the PreMES cohort

Leda Karagiannopoulou[1], Chrysoula Zouraraki[1], Despoina Vassou[2], Penny Karamaouna[1], Dimitris Katezopoulos[2], Panos Roussos[3,4], Panos Bitsios[4], Stella Giakoumaki[1]

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Background: Several schizophrenia associated genetic variants have been found in genome-wide association studies, but their contribution in the pathophysiology of the illness often remains unclear. Recently the SNP rs1052016, located in the CLCN3 gene, was suggested as a candidate for schizophrenia-related processes. In this study we examined for the first time the effects of rs10520163 on endophenotypic measures of schizophrenia [Prepulse-Inhibition (PPI), executive functions], in first-degree unaffected relatives of schizophrenia-spectrum patients and in a community sample.

Materials and methods: 56 unaffected relatives and 38 community participants were tested. PPI was assessed with 75- and 85-dB prepulses (30, 60, 120ms lead-intervals). Executive functions were assessed with the Wisconsin Card Sorting test (WCST) for set-shifting and a Spatial Working Memory (SWM)/strategy-formation task. Genotyping was done with Luminex® xMAP™ technology. PPI was analysed with repeated measures ANOVA [grouping factors: status (relatives, community) and genotype (C/C homozygotes, risk T-allele carriers)]; cognitive data were analysed with univariate ANOVAs (same grouping factors).

Results: T-allele carriers (genotype main effect) had lower PPI ($p=0.01$) and worse performance in the WCST (fewer categories completed, more total errors, more unrelated matches, $Ps<0.05$). In SWM, the relatives made more between and total errors (status main effect, $Ps<0.05$); only the C/C homozygote relatives had worse strategy score (status x genotype interaction, $p=0.01$).
Conclusions: Compared to C/C homozygotes, risk T-allele carriers showed decreased PPI and set-shifting but not SWM/strategy. These results suggest that the rs1052016 polymorphism is selectively associated with endophenotypes in the schizophrenia-spectrum. Larger scale studies are required to extend the findings.

P02 Differential effects of polymorphisms associated with schizophrenia on cognition and quality of life: Findings from the schizophrenia high-rik PreMES cohort

Chrysoula Zouraraki[1], Penny Karamaouna[1], Despoina Vassou[2], Leda Karagiannopoulou[1], Dimitris Katetzopoulos[2], Panos Roussos[3,4], Panos Bitsios[4], Stella Giakoumaki[1]

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Background: Schizophrenia is characterised by cognitive impairment and impoverished quality of life (QL). Recently, genome-wide association findings suggested the SNPs rs1339227 and rs4766428 (located in RIMS1and ATP2A2 genes, implicated in calcium signalling) and the rs8042374 (located in the CHRNA3 gene implicated in cholinergic neurotransmission) to be of particular interest for schizophrenia aetiology/treatment. In the present study we examined the effects of these SNPs on cognition and QL in first-degree unaffected relatives of schizophrenia-spectrum patients.

Materials and methods: 56 unaffected relatives were tested with a Spatial Working Memory/ strategy formation task, Iowa Gambling task (IGT) assessing emotional decision-making, Behavioural Assessment of the Dysexecutive Syndrome Key-Search task assessing problem solving and the Quality of Life Enjoyment/Satisfaction Questionnaire. Genotyping was performed with Luminex® xMAP™ technology. Data were analysed with separate univariate ANOVAs.

Results: The risk G-allele carriers (n=29) of rs1339227 and the risk T-allele carriers (n=36) of rs4766428 had poorer strategy and reduced QL (Ps<0.05) compared with the non-risk A/A (n=27) and C/C homozygotes (n=20), respectively; the risk T-allele carriers also had lower Key-search score (P<0.05). The risk G-allele carriers (n=29) of rs8042374 had impaired performance only in the IGT (Ps<0.05) compared with the non-risk A/A (n=27) homozygotes.

Conclusions: These preliminary findings further support the involvement of the RIMS1, ATP2A2 and CHRNA genes in schizophrenia-related processes, in accordance with the existing literature. They also suggest differential effects of the three SNPs on cognition and QL. A study with a larger sample is in progress, to further elucidate the effects of these SNPs in schizophrenia.

P03 Plasma levels of soluble amyloid precursor protein β in mild cognitive impairment

Lena-Sophie Gleixner[1], Tamara Eisele[1], Nathalie Thierjung[1], Panagiotis Alexopoulos[2]

[1]Department of Psychiatry and Psychotherapy, Klinikum rechts der Isar, Technische Universität München, Munich, Germany
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Background: There is an urgent need for novel, less invasive, 'upstream' biomarkers of Alzheimer's disease (AD). Soluble amyloid precursor protein β (sAPPβ) is a protein which is crucially involved in the initial phase of the amyloid cascade, being a central aspect of the AD pathogenesis. It has been recently shown that AD dementia is associated with low plasma sAPPβ levels. The aim of the present study was to investigate the plasma sAPPβ concentrations in patients with mild cognitive impairment, a clinical entity which often represents a pre-dementia stage of AD.

Materials and methods: sAPPβ was determined in plasma of 40 patients with MCI (21 with 18F-Fluorodeoxyglucose positron emission tomography (FDG PET) findings typical for AD), 43 patients with AD dementia, as well as in 15 elderly, cognitively healthy individuals without preclinical AD as indicated by normal cerebrospinal fluid biomarker profiles. The statistical analyses were based on Kolmogorov-Smirnov-Test, analysis of variance, Bonferroni post-hoc analysis, Kruskal Wallis test, Mann Whitney test and Chi-square test as appropriate.

Results: Age, education, sex- and Apolipoprotein ε4 distribution did not differ across the diagnostic groups. As expected, MMSE scores were lower in patients compared to controls. Moreover, plasma sAPPβ levels were significantly lower in patients with MCI in comparison to that of healthy controls, whilst they did not differ from that of patients with AD dementia. It is noteworthy that the differences with regards to sAPPβ levels remained statistically significant even when only the MCI patients with FDG PET findings typical for AD were taken into account.

Conclusions: Our results yield further evidence for the potential utility of sAPPβ in plasma as a novel, less invasive biomarker candidate of AD.

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P04 Antidepressants medication use among individuals diagnosed with 12-month disorders in São Paulo Metropolitan Area, Brazil

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Background: Studies in several countries have found low prevalence rates of use of antidepressants medication among those with 12-month disorders. The purpose of this study was to estimate the prevalence of antidepressants medication use among individuals with 12-month DSM-IV disorders in the São Paulo Metropolitan Area, Brazil.

Materials and methods: A representative cross-sectional household sample of 2,942 adults were face-to-face interviewed. The World Mental Health (WHO) Composite International Diagnostic Interview (CIDI) was used to assess psychopathology, disorder severity, and use of psychotropic medication. Respondents were asked about use of psychotropic medication during the previous 12-month. Multiple logistic regression analysis was used to evaluate associations of use of antidepressants medication with sociodemographic correlates and presence of psychopathology.

Results: The prevalence rates antidepressants medication use was 9.1% among those with 12-month disorders, being 17.9% among those with mood, 9.0% in those with anxiety, 6.8% among those with impulse control and 5.1%, among those with substance use. The exclusive use of antidepressants was 3.9%. Multiple logistic regression showed association between use of antidepressants and female gender (OR=2.8; CI95%=1.5-5.3; p=0.0021), mood disorder (OR=3.0; CI 95%=1.7-5.6; p=0,0003), serious/moderate disorders (OR=2.0; CI 95%=1.1-3.6; p=0,0243) and among those who reported psychiatric services use (OR=58.9; CI 95%=25.9-133.7; p<0,0001).

Conclusions: These findings suggest low rates of use antidepressants medication among individuals diagnosed with any mental disorders.

P05 Assessing the relation among burnout and aggression In nursing staff

Evangelos Fradelos[1], Ioanna Papathanasiou[2], Christos Kleisiaris[3], Dimitra Mitsi[4], Christos Iliadis[5], Sofia Zyga[6]

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Background: Burnout is usually defined as a state of physical, emotional and mental exhaustion; that results from long-term involvement in work situations that are emotionally demanding. Aggression is also an emotional state elicited by stressful situations, leading the person to evaluate the situation as more threatening than it really is. The present study aims to assess burnout and to examine possible correlation of burnout and aggressive behavior of the nursing personnel.

Materials and methods: A cohort of 124 nurses was recruited from hospitals located within the broader area of Attica. The psychometric tools that used in the study were the Greek version of the Maslach Burnout Inventory (MBI) and the Buss and Perry Aggression Questionnaire. Statistical analysis performed with the Statistical package for Social Sciences, SPSS 21. Descriptive statistics such as frequencies, means, percentages and standard deviations are been utilized. Inferential statistics such as Pearson r correlation and regression analysis have been used to determined correlations between relevant variables. Level of significance accepted is $p < 0.05$

Results: The 92% of the sample was women, 50% married and 40% single. Regarding the educational status the 70% has a higher education degree. The mean of age was 38.20 ± 9.60 years and the mean of working years was 16.40±9.00. The reported burnout levels for each factor were for Emotional Exhaustion 20.33±11.34, for Depersonalization 10.11±5.05 and for Personal Accomplishment 35.73 ±7.67. Significant positive correlation are existing between the scale of "Depersonalization" and "Physical Aggression" ($R = +0.291$, $p=0.002$), furthermore "Physical Aggression" appears to be negatively correlated with work experience ($R = -0.215$, $p=0.041$). The "Personal Accomplishment" subscale of the MBI, exhibits, as expected, quite the opposite behavior. It is negatively correlated with the "Anger" ($R = -0.229$, $p=0.017$), and furthermore the subscale "Anger" of the aggression questionnaire is also negatively correlated with work experience ($R = -0.209$, $p=0.045$).

Conclusions: Burnout levels in nurses appear to be moderate. Although the sample of nurses in the study is rather small (n=124), it seems that there is a correlation between burnout and aggressive behavior

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P06 The perceptions for mental illness in Greek antiquity

Evangelos Fradelos[1], Ioanna Papathanasiou[2], Olga Velentza[3], Lambrini Kourkouta[4]

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Background: Mental disorders seem to accompany mankind since the begging of time, drilled skulls that were found in excavations from all over the world leading us to the conclusion that surgeries were performed in antiquity in order to relief troubled minds from evil spirits.

Materials and methods: For the research methodology, there were pursued several strategies, including traditional searches of the PubMed/ Medline databases. Additionally, archival research was performed at several locations including folklore and Health Sciences Library of university of Athens.

Results: Stories of weird and provoking behavior, unexplained sadness and manic state of mind can easily found in Indian philology, ancient Egypt and in Greek antiquity as well. The Origins of the care for the mentally ill in Greek antiquity goes back there were reality and ancient myths are combined as they are depicted in ancient Greek literature. Gods and goddesses represent the metaphors that ancient Greeks used to make sense of the world around them and of life in general. The awe that mental illness could cause to people in antiquity was led to the assumption of the divine intervention to the onset of them. Mental illness as viewed by ancient Greeks is known through Stories and myths mixed with reality as they were passed to us through the work of Historians as Herodotus and epic poets as Homer and Hesiod. Hippocrates described many mental conditions and gave them names that some are used until today like mania, hysteria, melancholia and paranoia. Most of the mental disorders were a result of a disturbance of the equilibrium of the four bile's.

Conclusions: As in every civilization that has written history so in Greece mental illness and his treatment have a special chapter on it. Perceptions about their origin and healing techniques changed and had been evaluated and had been reformed in the course of evolution of the science to many times. The initial metaphysical vision of the phenomenon, gave it place to the empirical -logical interpretations.

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P07 The self-destructive behavior in mental disease

Olga Velentza

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Background: A percentage of 90-95% of people who commit suicide or attempt suicide have a mental disorder. In approximately 80% suffer from depression. According to WHO (World Health Organization), the risk of suicide during the life of people with emotional disorders mainly depression is 6-15%, the rate of alcoholism is 7-15%, and for schizophrenia is 4-10%.

Materials and methods: An extensive review of the recent literature in electronic databases «Heal Link», «Google Scholar», and «Pub Med», which refered to the self-destructive behavior in mental illness.

Results: The most effective way to address the suicide problem is prevention. Primary care is vital link between the health system and the community. Workers in primary care are able to offer a continuum of care and seek help and support from family and friends of the patient.
The cost of suicide and suicidal behavior in general is enormous. Besides the loss of life, there are important psychological implications for the family and friends, and financial implications for society.

Conclusions: Suicide is the self-induced death of a human in order to exit a problem or a condition that causes much pain. It is not a random act, but rather an option of a man who feels hopeless, helpless and unable to manage his problems.

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P08 Effect of the timing of acetylcholinesterase inhibitor ingestion on sleep

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Background: Many patients with Alzheimer's disease experience sleep disturbances, and donepezil is usually prescribed for night-time administration. However, increased acetylcholine is associated with cortical arousal. We evaluated whether subjective sleep quality differed according to the timing of medication administration.

Materials and methods: Ninety-two patients with mild to moderate Alzheimer's disease who had taken donepezil at night (n=54) or galantamine in the morning (n=38) were recruited for this study. Scores on the sleep visual analogue scale (VAS) for sleep quality and daytime drowsiness were obtained.

Results: The mean sleep-quality and daytime-drowsiness VAS scores of the donepezil and galantamine groups differed significantly at baseline (44.0±26.4 vs. 55.2±27.3, respectively; $P < 0.001$ and 48.8±28.8 vs. 38.8±25.3, respectively; $P < 0.001$). The patients taking donepezil were then randomly assigned to take donepezil in the morning (n=24) or at night (n=30). Eight weeks later, VAS scores also differed among the three groups ($P < 0.001$ for both sleep quality and daytime drowsiness). The VAS scores of patients taking galantamine and donepezil in the morning were different from those taking donepezil at night at week 8. Significant changes in VAS scores emerged only in the group taking donepezil in the morning (4.6±26.5,$P = 0.046$ for sleep quality; - 7.1±26.1, $P < 0.001$ for daytime drowsiness).

Conclusions: These results suggest that taking acetylchlinesterase inhibitors in the morning can improve the sleep states of patients with Alzheimer's disease.

P09 Mixed-state bipolar I and II depression: Time to remission and clinical characteristics

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Background: We compared the time to achieve remission and the clinical characteristics of patients with bipolar depressive mixed state and those with bipolar depressive non-mixed state.

Materials and methods: The subjects were inpatients diagnosed between 2006 and 2012 with bipolar I or II disorder, depression; "pure depressive state (PD)", "sub-threshold mixed state (SMX)", and "depressive mixed state (DMX)": three or more manic symptoms in a depressive episode. The subjects' charts were retrospectively reviewed to ascertain the time to achieve remission from the index episode and to identify other factors, such as demographic and clinical characteristics, specific manic symptoms, and pharmacological treatment, that may have contributed to remission.

Results: The time to achieve remission was significantly longer in the DMX and SMX than in the PD. Adjustment for covariates using a Cox proportional hazards model did not change these results. Clinically, subjects with a DMX were more likely to have manic symptoms in the index episode, especially inflated self-esteem and psychomotor agitation than those in the PD.

Conclusions: These findings showed that sub-syndromal manic symptoms in bipolar depression had different clinical characteristics and a more severe illness course, including a longer time to achieve remission, than did a pure depressive state.

P10 A course of the illness and clinical characteristics of mixed states in bipolar mania

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Background: The aim of this study was to elucidate the course of the illness and clinical characteristics of mixed states in bipolar mania.

Materials and methods: The subjects were inpatients diagnosed with bipolar I disorder, manic, between 2003 and 2010 and were classified into three groups: "pure mania (PM)", "probable mixed mania (PMM)", and "definite mixed mania (DMM)". The charts of subjects were retrospectively reviewed for demographic and clinical characteristics prior to the index episode, clinical data regarding the index episode, and course of the illness over a 12-month follow-up period.

Results: The inter-episode remission rate was lower in the DMM than in the PMM. There were no significant differences in clinical data regarding the index episode. Suicidality was higher in the DMM compared with the PMM and PM. Subjects with DMM were more likely to be young at admission, to be female, to have familial affective loading, and to have a history of suicidality compared with the PM in the regression model.

Conclusions: The results of the present study suggest that mixed states in bipolar mania had different clinical characteristics and a more severe illness course, including a lower inter-episode remission rate, than did a non-mixed mania.

P11 Can atypical antipsychotic augmentation reduce subsequent treatment failure more effectively among depressed patients with a higher degree of treatment resistance?: A meta-analysis of randomized controlled trials

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Background: Atypical antipsychotic augmentation was demonstrated to be efficacious in treatment resistant depression (TRD) in previous meta-analyses. We investigate whether there are differences in the effect size of atypical antipsychotic augmentation in major depressive disorder according to the degree of treatment resistance.

Materials and methods: A comprehensive search of four databases identified eleven randomized controlled trials. The eleven trials, which included 3,341 participants, were pooled using a random-effects meta-analysis.

Results: Atypical antipsychotic augmentation of antidepressant therapy showed superior efficacy compared to antidepressant monotherapy in TRD in terms of both response and remission rates (response, risk ratio (RR) = 1.38 (95% CI= 1.25 to 1.53); remission, RR = 1.62 (95% CI= 1.42 to 1.85)). In addition, regarding response rates in the TRD trials, atypical antipsychotic augmentation exhibited significantly different effect sizes according to the degree of treatment resistance (TRD 1: RR= 1.24; TRD 2: RR=1.37; TRD 2-4: RR=1.58). In non-TRD trials, atypical antipsychotic augmentation failed to show superior efficacy over antidepressant monotherapy in terms of remission rates (RR = 0.89 (95% CI= 0.69 to 1.14)).

Conclusions: Atypical antipsychotic augmentation of antidepressant therapy exhibits greater effect size in patients with a higher degree of treatment resistance. This finding strengthens the rationale for considering atypical antipsychotic augmentation among depressed patients with multiple previous treatment failures in clinical practice. The efficacy of atypical antipsychotic augmentation for non-TRD seems to be different from that for TRD, and, thus, further studies of non-TRD populations are needed.

P12 The validity of the mood disorder questionnaire for screening bipolar disorder: A meta-analysis

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Background: Mood Disorder Questionnaire (MDQ) is one of the most common screening instruments for bipolar disorder. There have been many validation studies that evaluated the validity of MDQ in various countries and therapeutic settings. This meta-analysis was conducted to assess screening performance of MDQ for detecting bipolar disorder among patients with mood disorders in clinical settings.

Materials and methods: Literature search was performed using Medline, EMBASE, and the Cochrane Library on September 2014.The validation studies that evaluated screening attributes of MDQ in the population with mood disorders were included for this meta-analysis. We found a total of 21 validation studies meeting our selection criteria. Two reviewers extracted the data independently from each study. Quality assessment was performed with QUADAS 2. Screening accuracy of MDQ in relation to standard diagnostic references (DSM-IV) was evaluated. We used a bivariate random effects model to calculate summary sensitivity, summary specificity, and pooled diagnostic odds ratios (DOR) using STATA. Hierarchical summary receiver operating characteristics (hsROC) was also calculated.

Results: With DSM-IV diagnostic criteria as reference standard, the pooled data of 21 validation studies, using authors' own optimal cutoff value, showed that summary sensitivity of MDQ was 0.76 and specificity was 0.78 (pooled DOR= 10.85). To evaluate screening accuracy of MDQ at the standard cutoff or modified cutoff value of 7, we pooled the data from 19 studies that suggested sensitivity and specificity at the standard cutoff or modified cutoff value of 7. This analysis showed that summary sensitivity was 0.63 with very wide 95% prediction region and specificity was 0.85 (pooled DOR=0.94). Data from 7 studies that initially excluded patients with previously diagnosed bipolar disorder showed that summary sensitivity was 0.72 with narrow 95% prediction region and specificity was 0.74 with relatively wider 95% prediction region (pooled DOR=7.62). Data from the 14 studies that included both bipolar and unipolar depression patients as screened population revealed similar screening accuracy with those found when a total of 21 validation studies were pooled, with summary sensitivity of 0.77 and summary specificity of 0.79 (pooled DOR= 12.46). To investigate whether current mood symptoms (especially current depression symptoms) have an influence on screening accuracy of MDQ, we pooled 7 studies that only included patients suffering from current depressive episode. The data from these 7 studies showed that summary sensitivity was 0.76 with wide 95% prediction region and summary specificity was 0.79 (pooled DOR=11.78). We evaluated screening accuracy of MDQ

according to the continents where each study was conducted. In all Europe studies (n=10), the optimal cutoff values were at least 7 points. However, in Asia studies (n=10), the optimal cutoff values in six studies were less than 7 ('Asia less than 7 studies') and that in the remaining 4 studies were 7 ('Asia 7 studies'). The 95% confidence regions of Europe studies, 'Asia less than 7 studies' and 'Asia 7 studies' overlapped each other, thus, there were no significant differences in screening accuracy of MDQ according to the continents. However, 95% confidence region and 95% prediction region of Europe studies were much narrower than those of 'Asia less than 7 studies' or 'Asia 7 studies', suggesting that screening accuracy of MDQ is more reliable when applying to European populations than to Asian populations.

Conclusions: MDQ appears to be a sensitive screening instrument for detection of bipolar disorder among patients with mood disorders with summary sensitivity of 0.76 and specificity of 0.78 when using authors' optimal cutoff points in each study. With the use of standard cutoff or modified cutoff value of 7, 95% prediction region was very wide, suggesting that screening accuracy (especially sensitivity) of MDQ when using standard cutoff or modified cutoff value of 7 is not reliable. Among patients who were diagnosed with depression without previous bipolar disorder diagnosis, MDQ showed the most reliable sensitivity at the level of 0.72, suggesting its reliability and effectiveness for screening bipolar disorder among these clinical populations. Current depression symptoms of screened population do not appear to improve screening accuracy of MDQ. Finally, for Asian populations, to use MDQ with the standard cutoff or modified cutoff value of 7 uniformly, is not recommended. The adequate cutoff value should be investigated according to each ethnic group or population characteristics.

P13 Factors affected with bipolar diathesis in pregnant females

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Background: This cross-sectional study was aimed to investigate the factors associated with bipolar disorder in pregnant female, including sociodemographic parameters, social support, social conflict, suicidal idea and sleep.

Materials and methods: A total of 84 pregnant female were recruited. They filled out self-completing questionnaires on sociodemographic factors, obstetric history, depressive symptoms and bipolarity. Depressive symptoms were assessed using the Korean version of the Edinburgh Postnatal Depression Scale (EPDS). Bipolarity was assessed using the Korean version of the Mood Disorder Questionnaire (K-MDQ).

Results: Nineteen participants (22.6%) had positive K-MDQ scores, suggesting the present of bipolarity. Positive EPDS group had twenty subjects (25%) who had depressive symptoms. The diathesis of bipolar disorder was associated with marital dissatisfaction, social conflict, depression and sleep. The multiple logistic regression analysis revealed that the only poor sleep was a risk of bipolarity.

Conclusions: Pregnant female with bipolarity were more depressed and sleep problems than those without bipolarity. The results showed that the most important factor of influencing bipolarity was sleep.

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P14 Depression in the elderly- the relation with index of coexistent disease and the cognitive status

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Background: Number of the elderly will reach the number of two billion until 2050. Depressiveness is one of the most prevalent mental health problems in this population.

Materials and methods: The purpose of the study was to assess differences Index of Disease Severity (IDS), Index of Physical Impairment (IPI), The Index of Coexistent Disease (ICED) and MMSE score between the elderly with and without depressiveness. This cross -sectional study included 249 subjects (169 women and 80 men). All subjects were 65 and older, with the average age 80.93±6.63. All of the subjects were divided in two groups (with or without depressiveness). Depressiveness was assessed with the score on Geriatric Depression Scale- 15 (GDS- 15). The index of comorbidity was determined by ICED. ICED index consists of two subscales: IDS and IPI. A lower score indicates the lower index of comorbidity. Cognitive functions of patients were examined by MMSE scale.

Results: Average GDS score was high (6.79 ± 3.76), and 57.7% of the subjects had the symptoms of depressiveness. There was not statistically significant difference in GDS scores when concerning gender (p=0.760). Among the examined grups, was statistically significant difference in IDS (p=0.048), IPI (p<0.001)and ICED (p=0.001). These three indices were statistically significantly higher in group of patients suffering from depressiveness. MMSE score was statistically significantly higher in group of patients without depressiveness.

Conclusions: A high index of depressiveness in the total sample of people older then 65 along with worse indicators associate diseases and cognitive status in the group of the elderly suffering from depressiveness, suggested the significantly violated life quality in this population.

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P15 Axis I and II co-morbidity and psychopharmacologic treatment in adult and adolescent clients referred for treatment of double diagnosis (substance use and mental health disorders) to a specialized unit

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Background: (1) to assess co morbid DSM-IV-TR Axis I and II disorders in individuals referred for treatment of double diagnosis (comorbidity of substance use with mental disorders) and (2) to present the relevant psychopharmacologic interventions, in a newly established community-based unit specializing in the treatment of double diagnosis, during its first year of service.

Materials and methods: 141 clients (mean age 29 years, range 13 -54) were assessed with unstructured DSM IV-TR based clinical interviews and standardized clinical questionnaires (SCL 90-R, SOCRATES 8, AUDIT, CAGE-AID, FTDI, BDI) to assess mental disorders, psychosocial variables and detailed aspects of drug use.

Results: All 141 clients were dependent on at least one substance. 114 (81 %) fulfilled criteria for at least one co morbid present Axis I disorder, other than substance use disorders and 20 (14%) fulfilled criteria for an Axis II (personality) disorder. High prevalence of present mood disorders (n=29, 21%), psychotic disorders (not due to substance use, n=26, 18%) and anxiety disorders (n=9, 6%) were found.
20% (n=23) of the clients with an Axis I or II diagnosis were prescribed neuroleptic medication, 17% (n=19) were treated with antidepressive agents, 17% (n=19) with a combination of both and 14% (n=16) with a mood stabilizer.

Conclusions: Present data validates previous findings of high psychiatric co-morbidity in individuals with substance use disorders [1] [2]. The announcement is the initial phase of an ongoing study, with focus on relapse prevention that aims to assess the reported high effectiveness [3] of a treatment program that implements the integrated model of management of double diagnosis.

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P16 The relevance of some memory deficits in a valproic acid-induced rat model of autism

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Background: Autism is a complex disorder characterized by repetitive behavior and impaired social communication. Still, apart from these main manifestations, a significant number of cases display impaired emotional learning and memory functions.

Materials and methods: We tried to better understand the memory functions in an environmentally induced rat animal model of autism, based on the administration of valproic acid (VPA) during gestation (500 mg/kg or saline on day 12.5 of gestation) and examined the resultant progeny on specific memory tests, such as the Y maze task and the 8-arms radial maze.

Results: Our data indicated that animals perinatally exposed to VPA are showing, besides specific social interaction deficiencies, significant behavioral alterations in Y maze task, as expressed in decreased spontaneous alternations percentage, suggesting affected immediate working memory and in the radial arm maze, as expressed to an increased number of both reference and working memory errors.

Conclusions: In conclusion, we showed significant memory deficits in a VPA-induced rat model of autism, demonstrating also the relevance of the memory processes in autism, apart from the social deficiencies.

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P17 Memory deficits in a ketamine-induced rat model of schizophrenia

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Background: Significant cognitive impairment is common in schizophrenia, affecting up to 75% of patients. In this way, it seems that a wide range of cognitive functions are affected, and particularly memory. Moreover, it seems that the cognitive impairment often pre-dates the illness onset.
Also, it is now generally accepted that a subchronic administration of 30 mg/kg ketamine induces reliable changes in behaviour of rat and parameters of dopaminergic, glutamatergic, and serotonergic neurotransmissions, which could resemble to schizophrenia manifestations.

Materials and methods: In this way, in the present experiment, we want it to test if there are any memory deficits in a ketamine-induced rat model of schizophrenia, as tested in the Y maze and radial arm maze tasks. To test this, rats were injected with 30 mg/kg ip ketamine or saline daily for seven consecutive days, while the behavioral experiments were performed 2 weeks after ketamine treatment.

Results: Our data suggested significant memory deficits in this ketamine-induced rat model of schizophrenia in rat, as demonstrated by an increased number of reference memory errors in 8-radial arm maze. Also, the time necessary to finish this test was increased in the ketamine group, as compared to saline. Moreover, the spontaneous alternation percentage was significantly decreased, suggesting deficiencies in the immediate working memory.

Conclusions: Our results presented here suggest that subchronic treatment with subanaesthetic doses of ketamine are inducing significant memory deficits, as tested in the Y maze and radial arm maze tasks.

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P18 Current aspects regarding the relevance of the body mass index in Alzheimer's disease

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Background: The occurrence of obesity, commonly estimated using body mass index (BMI), and the most common late-onset dementia, Alzheimer disease (AD), are increasing globally.

Materials and methods: Thus, in the present report we will describe the fundamental importance of this topic in public health, given the global epidemic of high adiposity and its consequences.

Results: In this way, both low and high BMI has been associated with cognitive impairment and dementia risk, including AD. Moreover, studies investigating the association between midlife BMI and risk for dementia demonstrated in generally an increased risk among overweight and obese adults. Also, a high BMI in middle-age or a decrease in BMI at late-age has been considered a predictor for the development of AD. Still, very few aspects are known about the BMI changes close to or after AD onset.

Conclusions: Thus, the possibility that high adiposity increases Alzheimer's disease risk is alarming given global trends of overweight and obesity in the general population. However, prevention and manipulation of adiposity may also provide away to prevent Alzheimer disease. In this way, further research evaluating BMI and dementia is required.

P19 Two weeks treadmill exercising is reducing anxiety, depression and memory deficits associated with a MPTP-induced rat model of Parkinson's disease

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Background: It is well known that in Parkinson's disease (PD), individuals have greater reduction in physical activity levels. Also, inactivity is considered an important factor in accelerating the degenerative process of PD. In addition, PD is known for its cognitive impairments, as well as for depression and anxiety disorders, which may be important causes of morbidity (40% prevalence in PD).
Also, one of the most used animal models of PD is generated by the administration of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP).

Materials and methods: We want it to see if induced physical exercising in an MPTP-induced rat model of PD (20 mg/kg i.p.), will result in any changes in memory (as tested in Y maze), anxiety (as tested in elevated-plus-maze) and depression-like behaviour (forced-swim-test), as compared to a non-exercised control group of rats which also received MPTP.
The exercising was performed on an adapted treadmill, for 2 weeks (3 series of 5 minutes/day).

Results: In the group of exercised MPTP group we could observe an increased time spent by the rats in the open arms of the elevated-plus-maze, together with a significant decrease of stretching behaviour and increased head dipping, as compared to non-exercised MPTP group, factors with are suggesting an anxiolytic-like manifestation. In addition, spontaneous alternation in Y maze (index for immediate memory), and swim time (anti-depressive index) in forced swim test were increased in the exercised rats with an MPTP-induced model of PD.

Conclusions: Physical exercising seems to reduce anxiety, depression and memory deficits associated with a MPTP-induced rat model of PD.

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P20 Memory and increased oxidative stress in a scopolamine-induced rat model of Alzheimer's disease

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Background: Scopolamine is a well known muscarinic cholinergic competitive antagonist involved in human and animal memory processes, particularly in the processes of learning acquisition and short-term memory and it has been one of the most used drugs to induce animal models of Alzheimer disease (AD). Also, there is an increased awareness regarding the relevance of the oxidative stress in the progression of AD.

Materials and methods: In this context, we were interested in studying the effects that scopolamine induction of a rat model of AD has on oxidative stress, as expressed by the Total Antioxidant Status (TAS) from the temporal lobe, the most sensitive brain area to the effects of the oxidative stress status.

Results: The cognitive deficits of scopolamine were confirmed in the Y maze task, as expressed through a significant decrease of the spontaneous alternation. Also, our data indicated that the administration of scopolamine has a significant prooxidant effect, which is manifested by a decrease in the TAS of the temporal lobe, as compared to the controls. Moreover, a significant Pearson correlation was observed between the levels of the behavioural tasks and the values of the TAs in the temporal lobe.

Conclusions: In this study we have demonstrated the presence of increased oxidative stress in a rat model of Alzheimer's disease obtained through the administration of scopolamine. Moreover, there is a significant correlation between the behavioral markers in the Y maze and the levels of TAS, as a result of scopolamine administration.

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P21 One single administration of MPTP is enough to produce memory deficits in a rat model of Parkinson's disease

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Background: Besides the well known locomotory aspects, the various neuropsychological investigations of patients with Parkinson's disease (PD) have shown specific cognitive impairments, ranging from minor disturbances in memory to intellectual function or even dementia.
Also, one of the most used animal models of PD in rats in referring to the administration of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP).

Materials and methods: In this way, while most of the administration patterns are including several different intraperitoneally (i.p.) injections of MPTP (e.g. 4 injections X•20mg/kg, 2 h apart; 1-2 daily injections of MPTP, 20-30mg/kg, 5 days), here we were interested, for the first time in our best of knowledge, to see if just one acute administration of a single injection of MPTP 20mg/kg i.p. will result in any cognitive deficits in rats, as studies in the Y maze task. The behavioral testing was performed one week after the MPTP administration, while the control group received saline.

Results: In this way, the administration of single i.p. MPTP dose resulted in a significant decrease of the spontaneous alternation percentage in the Y maze task (77.5± 6.2% in controls vs. 52.2± 4.1% in MPTP group), suggesting deficits in the immediate working memory. Moreover, these results were not generated by some locomotor deficiencies, considering that there was no significant difference in the number of arm entries between the two groups of rats.

Conclusions: One single i.p. administration of MPTP 20 mg/kg is enough to produce memory deficits in a rat model of PD, as studies in the Y maze task.

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P22 First reported nociceptive manifestations in an MPTP-induced rat model of Parkinson's disease

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Background: Generally, Parkinson's disease (PD) is less widely appreciated as a disease causing pain syndromes, although pain is found in 40-80 % of PD patients, as described by the very few reports in this area of research. Moreover, in some PD patients, pain is so severe and intractable that it overshadows the motor symptoms of the disorder. Still, pain in PD frequently goes underacknowledged and undertreated. Also, the studies regarding pain perception in the existing animal models of PD are very few.

Materials and methods: We experimentally induced the PD model in rats by injecting subcutaneously one dose of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP), 20mg/kg, while the control group received saline. The behavioral testing for pain included the hot-plate task and was performed 7 days after MPTP injection.

Results: In this way, our rat model resulted from the acute treatment with a low dose of MPTP, exhibited an increased sensitivity to pain perception, as demonstrated by the significant decrease in the values of the latency time in hot-plate for rats treated with MPTP, as compared to the controls. The latency time is expressed in seconds and is referring to the reaction time to two different types of behavior: licking the paw and jumping (11.33 s ± 2.1 in controls vs. 6.8 s ± 4.1 in MPTP group).

Conclusions: Our data is suggesting, for the first time in our best of knowledge, an increased sensitivity to pain in a MPTP-induced rat model of PD. In this way, further studies in this area of research seem warranted.

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P23 "Great expectations" negotiation: A factor that reduce patients' attendance in a supporting psychotherapy group?

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Background: Supporting psychotherapy group is usually part of rehabilitation interventions for chronic mental patients care. This study aims to highlight the factors having affected the patients' attendance in such a supportive group, that took place in the "Cutting- Sewing" vocational training program of Byron- Kaissariani Community Mental Health Centre, from 2003 to 2007.

Materials and methods: 18 women, with mean age of 38.56 (SD= 6.92) years, attended the group. Most of them were high school graduates, unmarried, with low socioeconomic status, suffering from a schizophrenic spectrum disorder and having 15.22 (SD = 8.44) years mean of illness duration. In total, 83 group sessions took place, and an average of four issues was discussed per session. 22 (26.5%) of sessions were by the absence of a co-therapist, 11 (13.3%) after a participant's entrance/ withdrawal and 11 (13.3%) after a session's cancellation. All data were gathered from Center's medical records and group sessions' reports.

Results: Participants' demographic and psychiatric characteristics weren't associated with their attendance proportion in supportive group. Similarly, sessions' attendance proportion didn't seem to be significantly related to the absence of a co-therapist, to a member's entrance/ withdrawal and to a session's cancellation. In contrast, the sessions' attendance proportion was negatively correlated to the number of issues discussed per session, and to the negotiation of members' "great expectations" (having a family, further education, finding a job) specific issue.

Conclusions: In group psychotherapy practice with chronic mental patients, factors such as number and content of discussed issues should be considered as predictors that could affect the participants' attendance.

P24 Studying the correlations that might exist between physical exercise and cognitive status

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Background: As we will show in the present mini-review, lately there is an increased awareness regarding the connections that might exist between physical exercise and the cognitive status.

Materials and methods: In this way, lately it has become clear that physical activity can influence various aspects of the brain superior functions, in both human and non-human animal studies. These positive effects of exercise performing can be extremely varied and could include effects at the molecular or cellular level systems, as well as at the behavioural levels.

Results: Thus, various reports stated positive effects in this area of research, with exercising promoting from general adaptation and growth, preserving brain function, or enabling the brain to respond to future challenges to specific and mechanical aspects such as increasing central perfusion, increased blood volume into hippocampus or other indirect improved memory-related processes.

Conclusions: However, there are still many unknowns and controversies in this area of research, with one possible solution to solve this aspect being a mutual agreement on a reduced battery of cognitive tests to use, in order to increase the reproducibility of results for future research regarding the influence of exercising of superior functions.

P25 Future perspectives on Alzheimer's disease computational modeling

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Background: Alzheimer's disease (AD), which is the most important age - associated neurodegenerative disorders, has been proven to be of a multifactorial and polygenic disease. No single gene mutations alone or environmental factors can be associated to AD development, except for the close and complex interactions in human genome and metabolome.

Materials and methods: This is the reason why AD exhibits many phenotypic features correlated to common and specific neuropsychiatric symptoms. Such complex diseases can only be understood by correlating a large amount of data and knowledge which can be possible only in a high performance algorithmic system available nowadays through computational modeling.

Results: There are many computational models to correlate different features of AD and to highlight new features of AD. This review aims to bring together some of the most representative computational AD modeling studies and to propose new ways of using computational algorithms in AD research.

Conclusions: Computational science can offer great opportunities in further research in order to understand neuronal networking of brain, information that can correlate behavior to biochemical pathways and genetics.

P26 Biological, psychological and social implications of oxytocin administration in the affective disorders

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Background: In some psychiatric disorders, such as autism or the affective disorders oxytocin can be used as some neuropsychiatric symptoms regulator.

Materials and methods: Given the increasing incidence of affective disorders and the significant resistance to treatment, it is imperative the finding of new treatments and advance the study of new molecules. The present mini-review updates the current knowledge about the relevance of oxytocin mostly in the affective disorders.

Results: As demonstrated in the present report, most of the recent studies on oxytocin showed that it is deeply involved in the ethiopathology of depression. Of course, this could be extremely relevant for the potentially benefic effects of oxytocin in affective disorders, such as psychic and somatic depressions, sexuality, insomnia or social behavior and could also represent a very important step to the extension of antidepressant therapy in wide clinical trials.

Conclusions: In this way, further studies regarding biochemical, molecular, genetic or immunological aspects of oxytocin effects seems warranted, as well as the further understanding of this drug's actions and its relevance in the etiopathological mechanisms involved in the affective disorders

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P27 The importance for the quality of life evaluation in patients with terminal pancreatic cancer

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Background: Lately, the Quality of Life (QOL) has increasingly become a widely used parameter in Oncology Clinical Research, and for over a decade, it is considered a very important tool used to establish valid and accurate research instruments for the patients with cancer.

Materials and methods: In this way, in the present report we will describe some aspects regarding the quality of life after pancreatic-duodenectomy, an aspect which increasingly relevant especially since lately the mortality by pancreatic-duodenectomy is significantly decreasing, and interests are directing towards the postoperative morbiditynd also terminal stages.

Results: It seems that that these survivors of pancreatic-duodenectomy should be monitored appropriately in regards to their quality of life.
Also, the relevance of these studies in the context of the death denial and the maintaining for the quality of life in the pre-terminal stages are presented and discussed extensively.

Conclusions: Terminal status denial in these patients is not a static or pathological concept, but rather a dynamic and natural condition, the majority of patients solving their problems and eventually accepting their disease terminal aspect/sense. However, it is clear that a perfected and effective relief of the physical, psychosocial and spiritual symptoms and fear attenuation is necessary in these terminal stages.

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P28 Basic criteria for efficient selection of an Alzheimer disease animal research model

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Background: Due to Alzheimer's disease (AD) great aggressiveness, many worldwide health associations begun to globalize research efforts in order to find a suitable treatment and to clarify once and for all its controversial etiology.

Materials and methods: One of the best research method used in human metabolism mechanisms is animal modeling.

Results: There are several steps and criterion which must be considered in choosing a research animal model. An ideal animal model has not been developed yet, but by a rigorous selection of the existent models or even by developing new models suitable to research conditions there can be made important progress.

Conclusions: Many Alzheimer's disease animal models have been proven to be appropriate for mechanisms of action or etiology elucidation and therapeutic compounds testing. Still, further research in this area of study seems warranted.

P29 Pain manifestations in schizophrenia - clinical aspects and animal models

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Background: Pain, a subjective phenomenon, not fully understood, studied in its various aspects, is manifesting abnormally in some disorders. In the case of schizophrenia, a psychiatric disorder where contact with reality is seriously impaired, pain behaves unpredictable just like the evolution of this mental disorder.

Materials and methods: Throughout this paper, we are going to review these contrasting information regarding pain manifestations in the contest of schizophrenia disease, emphasising on pain status in patients and animal models of schizophrenia.

Results: In this way, there are variations in pain thresholds, some suggesting that they are higher for this disease, while others contradicted these results, pleading for decreased pain perception. However, there are studies that indicate no difference in pain tolerance between controls and schizophrenic patients.

These contrasting results are due to various components of pain system, distinctions between experimental pain and clinical pain, as well as patients experiencing pain versus in animal models of schizophrenia tested on pain thresholds.

Conclusions: Pain perception is modified in schizophrenia and it might be the reason for progress or regress of the psychiatric disease if pain is adequately treated.

P30 Current knowledge regarding the involvement of pain in Alzheimer`s disease

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Background: Alzheimer`s disease is a progressive neurodegenerative disorder which affects memory, cognitive processes, communication abilities and produces important mood changes. A complex psycho-physiological process, pain, is a unique for every individual, being described as an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.

Materials and methods: There have been few studies made on pain involvement in patients with Alzheimer`s disease, making it a field that raises interest more and more.

Results: In this way, patients with Alzheimer`s disease report less clinical pain than their cognitive intact peers. Moreover, patients suffering from Alzheimer`s disease are administered fewer analgesics, as compared with unaffected cognitive subjects with similar level of painful disease or injury. Also, according to the newer hypothesis, perception and pain processing are affected in Alzheimer`s disease and are not diminished as some older studies stated, raising questions about the ways that is dealt with pain in this highly dependent and vulnerable patient group.

Conclusions: It is still unclear whether the observed difference in pain report and management occurs as a result of impaired communication and memory of pain, and/or whether the perception and experience of pain is altered as a result of the progressive degeneration of cortical and subcortical regions involved in the transmission and processing of nociceptive information.

P31 Studying the relevance of alcoholism impact on autolytic ideation and depression

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Background: Alcohol consumption is often encountered as comorbidity in many cases initially submitted for other medical conditions, while also often representing the main etiological factor in those diseases determinism. In terms of psychiatric pathology, most of the have studies shown that nearly half of all patients with psychiatric disorders exhibit abusive consumption of alcohol.

Materials and methods: In this way,the etiopathogenic role of alcoholism can be often ascertained in most psychiatric disorders. Thus, the affective and anxiety disorders, the psychoses, dementias and personality disorders often include alcoholism as comorbidity. In addition, while some mental disorders are caused by abusive or long term consumption of alcohol, other appear due to withdrawal effects, and in other instances, the alcohol consumption aggravates a pre-existing psychiatric disorder. Thus, the present study was designed in order to determine the correlation between abusive consumption of alcohol and depression, as well as the autolytic ideation.

Results: The first objective was to determine the correlation between alcoholism and the level of depression as measured by The Hamilton Depression Scale (HAMD), through the comparison of patients with major depressive disorders without alcohol-related illnesses and patients with major depressive disorder and anxiety. Also,we were interested in determining the impact of alcoholism on suicidal ideation by comparing the presence of suicidal ideation in patients with major depression with and without alcohol-related comorbidity.

Conclusions: In conclusion we demonstrated that the occurrence of alcoholism in patients with depression influence the level of depression measured by the HAMD Scale and also that there is an autolytic ideation in patients with depression influenced by the presence of alcohol consumption.

P32 Current status of knowledge on Alzheimer's disease genetics

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Background: Alzheimer's disease is a progressive neurodegenerative pathological state which occurs mostly due to aging and exhibits varying symptoms by individual, physiological, neurological, psychical, biological and molecular conditions. This process alters the cognitive functions of brain, leading to intellectual abilities and social behavior and individual personality loss.

Materials and methods: The exact causes of Alzheimer's disease are mostly unknown, excepting 1- 5% cases notably identified with obvious genetic variance. In this way, there are many hypotheses that explain the occurrence of Alzheimer's disease: amyloidal hypothesis, taupathy hypothesis, cholinergic hypothesis and so on, but from all of these it seems that the molecular/genetic hypothesis is the most studied of all, because of its relevance to the true pathological mechanism

Results: It seems that some allelic variants and mutations of genes that encode important regulatory molecules in neuronal activity may give a certain predisposition to Alzheimer's disease or to other neurodegenerative diseases, even in young individuals. One good example is the APOE gene that encodes a surface component of triglyceride reach lipoproteins. At the neuronal level, this glycoprotein has an important role in lipid distribution during nerves growth and repair. The APOE gene exists in three allele variants present in human population in different proportions (ε2, ε3, ε4) which in different combinations give to the carrier various predispositions to cholesterol and triglycerides mechanisms disorders, Levy's bodies dementia and Alzheimer's disease (ε4 allele).

Conclusions: In conclusion, Alzheimer's disease can be considered a highly complex disease that exhibits symptoms in all organisms' levels from behavioral changes to subcellular discrepancies. There are many genes and molecular factors involved in Alzheimer's development worth to be discussed and considered as starting points in Alzheimer's pathology, so it would be helpful to consider the molecular level in further Alzheimer's disease and other neurodegenerative diseases research.

P33 Psychological and psychiatric manifestations in cancer patients

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Background: As we will show in this mini-review, there is an increased interest in the literature related to the psychological and psychiatric effects of various malignant diseases, which may be considered to have a greater impact on the patient and his family.

Materials and methods: Moreover, the psychological and psychosocial impacts of the various malignant diseases are often discussed in epidemiological literature, but still they have not been compiled yet into firm conclusions.

Results: During the period following the diagnosis of a life-threatening disease, such as an advanced stage of cancer, patients find themselves in a state of crisis, with physical, social, and psychosocial effects. In this way, all the patients perceived changes in everyday life that included negative psychological, mental and practical changes, but also other changes. Generally, the mental changes could be separated into three categories: despair, uncertainty, as well as the lack of a valid explanation.

Conclusions: There are very few studies regarding these aspects for the patients with pancreatic cancer, a pathology that is very important for our research group and it is analyzed here from various perspectives.

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P34 Combination between paracetamol and tramadol as a treatment of low back pain in elements with amateur athletic activity

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Background: Cases with low back pain in amateur athletes are often situations with complex sensory, emotional, behavioural and organic factors. Pharmacological treatment can resolve these problems and provide a safe path to return back into the physical activity and exercise.

Materials and methods: Aim of this study was to investigate the use of the combination between paracetamol and tramadol as a treatment of low back pain in elements with amateur athletic activity. In 20 amateur athletes with low back pain, we used this combination, 1 caps with 325 mg paracetamol and 37, 5 mg tramadol every 6 hours for a 7 day period.

Results: Results- 18 patients (90%) report satisfied results and 2 patients (10%) poor results.

Conclusions: We need more patients and more investigation but it seems that the combination between paracetamol and tramadol as a treatment of low back pain in elements with amateur athletic activity. has very satisfied and safe results in such cases.

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P35 Dopaminergic effects on jumping to conclusions: A double-blind study

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Background: Hasty decision-making and strong acceptance of one explanation is termed jumping to conclusions (JTC) [1]. This data gathering bias tends to promote delusion formation and serves to perpetuate delusional beliefs in schizophrenia spectrum disorders [2]. However, very little is known about the underlying pathophysiological mechanisms triggering its pathogenesis. Although delusional misbeliefs are amendable to antipsychotic medication, JTC appears resistant to change with antipsychotic treatment [3]. With regard to the prominent dopamine hypothesis, the present study examined the effects of dopaminergic agonists (L-dopa) and antagonists (haloperidol) on JTC after a single-dose administration in healthy participants.

Materials and methods: Dopaminergic agents were administered in a randomized, double-blind, placebo-controlled, three-way cross-over design. Participants were 66 healthy individuals aged 18-40 years. The Bias Against Disconfirmatory Evidence (BADE) paradigm [4] was employed to identify JTC.

Results: Dopaminergic modulation failed to modulate data gathering in healthy participants. Participants did not exhibit hastier decision-making after administration of L-dopa, nor more cautious decision-making with haloperidol.

Conclusions: In line with previous findings, the present results suggest that data gathering responses are unaffected by dopaminergic modulation. Thus, cognitive bias modification programs might constitute a useful adjunct to dopamine antagonists when treating patients with delusions.

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P36 Clinical characteristics of night eating syndrome in outpatients with bipolar disorder

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Background: The aim of this study is to evaluate the clinical characteristics of night eating syndrome (NES) in bipolar disorder outpatients.

Materials and methods: The 14 items of self-reported night eating questionnaire (NEQ) was administered to 84 bipolar patients in psychiatric outpatient clinic. We examined demographic and clinical characteristics, body mass index (BMI), subjective measures of mood, sleep, binge eating & weight-related quality of life using Beck's Depression Inventory (BDI), Pittsburgh Sleep Quality Index (PSQI), Binge Eating Scale (BES) and Korean version of Obesity-Related Quality of Life Scale (KOQoL), respectively.

Results: The prevalence of night eating syndrome in bipolar outpatients was 14.3% (12 of 84). Comparisons between NES group and non-NES group revealed no significant differences in demographic characteristics, BMI and clinical status except economic status and comorbid medical illnesses. However, compared to non-NES, patients with NES was more likely to have binge eating pattern and poorer weight-related quality of life.

Conclusions: This study is to be the first to describe the clinical correlates of night eaters in bipolar outpatients. Although there were few significant correlates of NES in bipolar outpatients, relatively high prevalence of NES suggest that clinicians should be aware to assess the patients with bipolar disorder on NES, regardless of obesity status of patients.

P37 Prevalence and its correlates of restless legs syndrome in outpatients with bipolar disorders

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Background: This study was to assess the prevalence and its correlates of restless legs syndrome (RLS) in outpatients with bipolar disorder.

Materials and methods: A total of 100 clinical stabilized bipolar outpatients were examined. The presence of RLS and its severity were assessed using the International Restless Legs Sydrome Study Group (IRLSSG) diagnostic criteria. Beck's Depression Inventory (BDI), Spielberg's State Anxiety Inventory (STAI-X-1), Pittsburgh Sleep Quality Index (PSQI), Korean version Drug Attitude Inventory (KDAI-10), Subjective Well-Beings under Neuroleptic Treatment Scale-Short Form(SWN-K) and Barnes Akathisia Rating Scale (BARS) were used to evaluate the depressive symptomatology, level of anxiety, subjective quality of sleep, subjective feeling of well-being, drug attitude, presence of akathisia, respectively.

Results: Of the 100 bipolar outpatients, 7 (7%) were met to full criteria of IRLSSG and 36 (36%) have at least one of the 4 IRLSSG criterion. Because of relatively small sample size, non-parametric analysis were done to compare the characteristics among 3 groups (full-RLS, 1≥positive RLS-symptom and Non-RLS). There were no significant differences in sex, age, and other sociodemographic and clinical data among 3 groups. BDI, STAI-X-1 and PSQI are tended to be impaired in RLS and 1≥positive RLS-symptom groups.

Conclusions: This is the first preliminary study for studying the prevalence and its correlates of RLS in bipolar disorder. The results shows that relatively small proportion of RLS was present in bipolar disorder patients when compared to patients with schizophrenia. Same tendencies shown in schizophrenic patients were found that bipolar patients with RLS had more depressive symptoms, state anxiety and poor subjective sleep quality. Further systematic studies may be needed to find the characteristics of RLS in bipolar patients.

P38 Acute low back pain treatment combination between tramadol and meloxicam

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Background: Acute low back pain is a severe pain situation Often affects with complex sensory, emotional, behavioural and organic factors the quality of life and the health related quality of life of the people. Pharmacological treatment can resolve these problems and provide a safe path to return back into the normal life .

Materials and methods: Aim of this study was to investigate the use of the combination between meloxicam and tramadol as a treatment of acute low back pain . In 40 elements (30 men , 75% and 10 women 25 %) with acute low back pain, we used this combination, 2 caps of meloxicam 7,5 mg per day and 4 caps of tramadol 50 mg per day, for 14 days.

Results: 30 patients (75%) report satisfied results and 10 patients (25 %) poor results.

Conclusions: We need more patients and more investigation but it seems that the combination between meloxicam and tramadol as a treatment of acute low back pain in has very satisfied and safe results in such cases.

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P39 Audit of physical health monitoring in young people with psychosis against the NICE guidelines

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Background: Regular physical health checks in people with severe mental illnesses (SMI) are recommended in the NICE guidelines. People with SMI are often in receipt of antipsychotics, antidepressants and mood stabilizers which increase metabolic syndrome risk and CVD

Materials and methods: We audited adherence to NICE guidelines GC 38,43,66,120 and 155 in 97 randomly selected service users records between March and October 2013.

An audit tool was designed for the purpose of this audit according to which all service users should have had a physical health assessment on assessment, and a clear documentation of metabolic syndrome risk, blood tests and ECG. Repeat of physical health assessment in 3 months, one year and then annually.

Results: 1. Personal history of substance use was more frequently assessed than personal of physical health and a high proportion of service users had blood tests during hospitalization.
2. The EIIP had a number of obstacles in monitoring and recording health checks: Not having the equipment, not operating out of a clinic, difficulties in obtaining feedback of results from GPs and difficulties in requesting and obtaining blood results directly from general pathology labs.

Conclusions: Recommendations: The EIIP needs to ensure that local hospitals and primary care share responsibilities with the community mental health services in regards to physical health monitoring and safe prescribing. (i.e. check list of physical health in the initial referral process, increase liaison with GP practices, promote health care awareness to service users etc).

Acknowledgements: This audit was registered with the clinical audit department, Surrey and Borders partnership NHS Foundation Trust, ref: AU/005/11/2012

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P40 Relationship between suicides and crimes in Greece: 2000-2012

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Background: The relationship between criminal and suicidal behavior remains controversial. The aim of this study is to examine the above mentioned relationship in Greece during the period 2000-2012, with particular emphasis given to the period of the current economic crisis (2008-2012).

Materials and methods: Population data and crude data on suicides were obtained from the Hellenic Statistical Authority (EL.STAT.). We assessed the Age-adjusted Standardized Suicide Rates (SSR) for both sexes. Data on crimes (total number and homicides in particular) were also obtained from the Hellenic Statistical Authority (EL.STAT.). The correlation between Suicide Rates and the total number of crimes, as well as the number of homicides, was assessed for the periods 2000-2012, 2000-2007 and 2008-2012. Statistical analysis was performed using the statistical package SSPS v. 21.

Results: During the total time period 2000-2012, a strongly negative statistically significant correlation between SSR and Crimes ($r=-0,818$, $p<0,001$), as well as between Male SSR and Crimes ($r=-0,854$, $p<0,001$) was observed. There were no statistically significant correlations between SSR (in both sexes) and homicides. During the time period 2000-2007 no statistically significant correlation between any of the above indices was observed. During the period of crisis (2008-2012) a strongly negative statistically significant correlation between SSR and Crimes ($r=-0,944$, $p<0,05$), as well as between Male SSR and Crimes ($r=-0,975$, $p<0,005$) were observed.

Conclusions: According to the results of this study a negative correlation between suicide and crimes, mainly during the period of crisis, and among male population was detected.

Acknowledgements: We would like to thank the Hellenic Statistical Authority for data provision.

P41 Suicide and social-economic parameters during financial crisis in Greece

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Background: Suicide constitutes one of the major public health problems worldwide. The aim of this study is to examine the possible correlation of suicide rates in Greece with some social indices during the financial crisis.

Materials and methods: Our study includes all suicide rates recorded in Greece during the time period 2000-2012 (EL.STAT). We assessed the standardized suicide rates (number of suicide cases per 100.000 inhabitants, SSR). We obtained data from EL.STAT. regarding the following social indices: Unemployment, per capita GDP and Divorce Rate (DR). Statistical analysis was performed with the statistical package SPSS v 21.

Results: During the period 2000-2012, a positive correlation of statistical significance is observed between SSR and both Unemployment and DR ($r=0,834$ $p<0,001$ and $r=0,571$ $p<0,05$, respectively). A positive correlation of statistical significance is also observed between the above mentioned indices and Male SSR (Unemployment $r=0,864$ $p<0,001$, DR $r=0.626$ $p<0,05$), Female SSR was not correlated to any of the above indices. Per Capita GDP was not correlated with SSR in both sexes. During the period 2000-2007 no correlation of statistical significance was observed. On the contrary, during the period of economic crisis (2008-2012), our study revealed a statistically significant positive correlation between SSR and Unemployment ($r=0,956$ $p<0,05$). Per Capita GDP was negatively correlated with SSR ($r= -0,927$ $p<0,05$). Among males, SSR was positively correlated with Unemployment ($r=0,956$ $p<0,05$), while Per Capita GDP was negatively correlated with SSR ($r= -0,956$ $p<0,05$). Female SSR was not correlated to any of the above indices, during the period of economic crisis.

Conclusions: The results of this study show that the effect of economic crisis and recession on the aforementioned social parameters in Greece is evident.

Acknowledgements: We would like to thank the Hellenic Statistical Authority for data provision.

P42 Audit of management of manic and hypomanic episodes in adults admitted to an open ward against the NICE guideline CG38

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Background: NICE CG 38 recommends integrated care planning in management of manic / hypomanic episodes, good risk assessment and management, physical health monitoring, medications management and psychological - psychosocial interventions.

Materials and methods: We collected a sample of 37 inpatients falling into the following ICD-10 diagnostic categories: F300, F302, F310, F311,F312,F313,F315,F317 and F319.Patient's demographic characteristics taken into account only in regards to women with child bearing potential. An audit tool based on NICE CG 38 was designed for the purpose of this audit.

Results: 81% of the patients had a capacity and consent to treatment interview. History was taken from 70% of them; 75% had a physical health assessment 91% had a risk assessment and 97% had a mental state examination on admission.

Patients were placed in non-stimulating environment in 97% of the cases, rapid tranquilization and LAI treatments were considered for 72% of the patients.

61% were referred to drug and alcohol services, engagement with activities and established routine was documented in 59% of patients records, but a mood diary was discussed with 5% of the patients.

Conclusions: There is a difference between pharmaceutical and non-pharmaceutical interventions This could indicate a non- holistic care package, could be a result of poor engagement , poor documentation or other factors yet to be identified.

Further improvement on capacity and consent to treatment, history taking, physical health assessment, care plans & care plans distribution, referral to drug and alcohol services and non-pharmaceutical intervention is needed to meet the NICE CG 38 standards.

Acknowledgements: Audit registration ref no: AU/001/07/2014.

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P43 Transcranial Direct Current Stimulation (tDCS) eliminates both acute and chronic elements of pain and modulates mood; A helpful tool in improvement of pain and mood in daily clinical practice

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Background: The sensation of pain is subject not only to modulation during its ascending transmission from the periphery to the cortex but also to segmental modulation and descending control of higher centers. Management of chronic pain, is difficult and may require the coordinated efforts of a pain management specialist team. Reduction of Brain regional blood flow and metabolism particularly in frontal areas has been demonstrated by PET and SPECT in patients with chronic pain and depression. This finding indicates coinciding anatomy of nociceptive and affective pathways.

Transcranial Direct Current stimulation (tDCS) is an effective non-invasive means of provoking polarity dependent changes in neuronal activity and blood flow.

Materials and methods: Seventy nine right-handed patients with a complaint of pain have been studied and categorized in 2 major groups: Group A; Sixty-eight patients (40 F, 28 M)(45±12 years old) with a complaint of chronic pain and duration of 38±10 months and Group B: eleven patients with acute pain 3±2 days (7 M, 4 F 40±9 years old). The pain was originating from upper and/or lower extremities, vertebra and head. The patients with acute pain had a history of some minor blunt trauma to the site of pain in their extremities before the beginning of pain.

The patients underwent the numeric 0-10 pain rating scale and Beck test of depression.

The Group A with a primary pain score of 7±2 and a Beck Depression Score of 21±5 was divided in 2 major subgroups of A1 consisted of 47 patients who first underwent SSRI therapy for 2 months and after that tDCS was performed on them (10 sham cases; A1 control group); and A2 consisted of 21 patients without SSRI therapy that underwent tDCS with the anode in C3-F3 and cathode in right supraorbital site with 1.7±0.2 mA intensity for 20 minutes.
Group B (acute pain) underwent tDCS with anode at C3-F3.

Results: Group A1 after 2 months of therapy with SSRIs showed a significant decrease in Beck score ($p \leq 0.05$) but no significant decrease in pain score. They underwent tDCS and were divided into sham-control (10 patients) and real-tDCS anodal at M1 (47 patients). Both the pain and Beck score decreased significantly ($p \leq 0.001$) after tDCS. Sham group didn't show any significant change. Group B showed a significant ($p \leq 0.001$) decrease of pain score and a significant decrease in Beck score. Analgesia lasted for 48±10 hours after tDCS.

Conclusions: TDCS is a helpful tool to improve mood and treat more adequately and quickly chronic and acute nociceptive pain. It is recommended to be used by professionals in daily clinical use. tDCS modulates different cerebral networks that are still partially recognized and may have effects on both peripheral and central elements of pain along with other psychosomatic symptoms. Our results also show that chronic pain and depression may have coinciding anatomy but different mechanisms may be involved.

P44 Etnopharmacologically active plant extracts involved in Alzheimer's disease therapy

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Background: Regarding the etnopharmacological potential of several plant extracts, there are many active compounds that can be successfully used in Alzheimer's disease therapy.

Materials and methods: Many studies show that the different symptoms of Alzheimer's disease such as depression, memory loss, anxiety or brain tissue degradation can be improved by different mean administration of aqueous, alcoholic or other plant extract.

Results: It seems that the action of these extracts is closely related to their biochemical content and the molecular pathways and ways of interaction between plant active compounds and human body. More than that, it seems that Indian traditional medicine found a way to bypass the blood brain barrier through several administration means this being important in the context that many chemical compounds and even natural ones cannot pass into the brain tissue. By a thorough analysis of the scientific literature, it has been shown that many plant extract can influence the pathology of Alzheimer's disease in the way that it can be slowed, diminished or even stopped or reversed. For example, the lecithin that can be found in Bertholettia excelsa (Brasil nuts) may interact with the acetylcholine synthesis pathway enzymes leading to impressive acetylcholine concentrations due to its capacity to function as an acetylcholine-synthetase substrate. Even neuronal loss can be slowed using plant extracts. For example the strong proapoptotic effect of beta-amyloidic plaques can be diminished through Glycyrrhiza glabra (liquorice) aqueous root extract treatment. It seems that several compounds contained herein can prevent neuronal death. Other ways in which plant compounds can interact with Alzheimer's disease pathways can include energetic impulse generation that lead to acetylcholine synthesis or inflammatory mechanisms inhibition which can prevent brain tissue extended damage.

Conclusions: This article aims to describe in which way several plants commonly known as medicinal plants may interact with specific Alzheimer's disease pathways in order to modulate neurodegeneration, memory loss, depression or other symptoms that can occur during this highly destructive neurodegenerative disease.

P45 Cognitive impairment involves different systems of memory in multiple sclerosis

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Background: Multiple sclerosis (MS) is the most common neuroimmunological disease. Beyond somatic involvement cognitive impairment is observed in several cases that significantly affects social relationships, work capacity, quality of life independently of disability [1]. 22% to 60% of patients are reported to be memory impaired [2] [3]. The variation in figures reflects that different systems of memory may be affected to various degrees in MS. Difficulties may be linked to slower information acquisition process [4]. The aim of our research is to analyse the manifestation of memory impairment in MS.

Materials and methods: The performance of 40 MS patients (16 males and 24 females) was tested. A group of 42 healthy controls (16 males and 26 females) was matched with the sample for gender, age and number of years of schooling. All subjects completed a neuropsychological battery of Rey Auditory Verbal Learning Test, Rey-Osterrieth Complex Figure Test and Digit Span Test.

Results: Memory impairment was defined on two measures compared to healthy control. Namely learning, long-term verbal memory and short-term visuo-spatial memory were involved. Working memory was found to be intact.

Conclusions: Results of our research reflect the findings of clinical studies in the aspect of explicit long-term memory impairment that may be the effect of learning difficulties in multiple sclerosis. Short-term memory is affected in terms of recall of spatial information while the amount of information held in short-term memory store is normal in relation to healthy subjects. The adverse effect of cognitive dysfunction on MS patients' social and everyday functioning outlines the significance of testing and managing impairment.

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P46 Chronic low back pain in elderly patients treatment combination between tramadol and parecetamol

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Background: Patients over 65 years , are more likely to suffer from chronic pain related to degeneration of the joints in the spine. (mainly osteoarthritis and spinal stenosis.). Chronic low back pain affects the quality of life and the health related quality of life of the elderly people.

Materials and methods: Aim of this study was to investigate the use of the combination between tramadol and paracetamol as a treatment of chronic low back pain . In 30 elderly people (>65 years old -15 men , 50% and 15 women 50 %) with chronic low back pain, we used this combination, 1 caps with 325 mg paracetamol and 37, 5 mg tramadol every 8 hours for 14 days.

Results: 20 patients (66,6 %) report satisfied results and 10 patients (33,4 %) poor results.

Conclusions: We need more patients and more investigation but it seems that this combination as a treatment of chronic low back pain in has satisfied and safe results in such cases.

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P47 Using ibuprofen as a treatment for back, neck and shoulder pain in amateur athlets

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Background: Cases with back, neck and shoulder pain in amateur athletes are often situations with complex sensory, emotional, behavioural and organic factors. The early evaluation and the appropriate pharmacological treatment can resolve these problems and provide a safe path to return back into the physical activity and exercise.

Materials and methods: Aim of this study was to investigate the use of the use of ibuprofen as a treatment of back , neck and shoulder pain in elements with amateur athletic activity. In 20 amateur athletes with of back , neck and shoulder pain, we used this combination, 1 caps of 200mg of ibuprofen, 3 times a day for 10 days.

Results: 18 patients (90%) report satisfied results and 2 patients (10%) poor results.

Conclusions: We need more patients and more investigation but it seems that the use of ibuprofen as a treatment of back neck and shoulder, pain in elements with amateur athletic activity. has very satisfied and safe results in such cases.

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P48 Does increased SOD in hearts is related to of closapine induced myocarditis?

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Background: The use of atypical antipsychotics in patients with schizophrenia is widespread and recommended. However their use is associated with a number of adverse effects among them myocarditis takes a special place. Antipsychotic induced release of catecholamines, which may trigger an inflammatory response and disturbed oxidative balance that leads to the clinically observed cardiomyopathy and sudden death even in patients.

Materials and methods: the aim of the present study was to evaluate effects of a 28-day treatment with a daily dose recommended for atypical antipsychotic therapy (Ziprasidone, closapine or sertindole) on copper zinc superoxide dismutase (SOD 1), manganese superoxide dismutase (SOD 2), catalase (CAT), glutathione peroxidase (GPx) and glutathione reductase (GR) activities in harts of 3 months old rats.

Results: Our results show increase in activities of SOD 1 in the hearts of Closapine treated groups as compared to controls. However, GR activities were decreased in the Ziprasidone treated group. SOD2, CAT and GPx activity did not change in any of treated groups.

Conclusions: We point that oxidative stress may be responsible for a side effect of antipsychotic medication, and could be a possible explanation for increase in cardiovascular disease.

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P49 Primary negative symptoms in schizophrenia: Management in "real world"

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Background: Negative symptoms constitute an important diagnostic and therapeutic challenge; the presence of a significant decrease in behavioural or psychological function (1), including problems with motivation, social withdrawal, diminished affective responsiveness, speech, and movement, contribute more to poor functional outcomes and quality of life for individuals with schizophrenia than to positive symptoms (2). Any improvement of negative symptoms, gained by treatment with antipsychotics, is very important, as the long-term outcome of schizophrenia is more closely correlated with severity of negative symptoms than with positive symptoms; despite that there are few treatment trials focused on primary negative symptoms (3).

Materials and methods: We evaluated in an open-label 12-month-study the efficacy of SGA in 32 inpatients (Mean age: 46,03 ys ± 11,72; 12 females; 20 males) with schizophrenia or schizoaffective disorder (DSM-5). Inclusion criteria were persistent negative symptoms with adequate antipsychotic treatment and clinically stable, and minimal psychotic symptoms, depression/anxiety, extrapyramidal side effects, or other significant cause of secondary negative symptoms. Subsequently, the patients were treated with SGAs (clozapine; risperidone; quetiapine, olanzapine) and evaluated at baseline and after 1, 3 , 6, and 12 mouths with following scales: PANSS; Brief Negative Symptoms Scale (BNSS); CDSs; BPRS. Data evaluated by EZanalize /Excel.

Results: Data show significant differences with BNSS and PANSS scales in all SGAs (on negative symptoms. Clozapine patients had a significant reduction in overall BNSS score ($p < .03$),particularly in asociality and avolition subscales. Significant difference was found in PANSS and BNSS total scores in all groups, the quetiapine group showed significant symptoms reduction in the PANSS and BNSS alogia subscale ($p <= .06$).

Conclusions: The therapeutic management of negative symptoms of schizophrenia is currently a major challenge for clinicians in psychiatry. Results are emerging that show that some antipsychotics act preferentially on some specific items of this complex group of symptoms.

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P50 Fast and furious? Jumping to conclusions and overmentalizing in borderline personality disorder

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Background: Patients with Borderline Personality Disorder (BPD) show specific maladaptive cognitive processes that play an important role in behavior [1]. Initial work from our group suggests that BPD patients show a tendency for jumping to conclusions (JTC), i.e. decision-making on the basis of little information [2]. Furthermore, BPD patients often show social cognitive deficits, meaning the ability to perceive and process social cues adequately [3]. Specifically, BPD patients show a tendency towards excessive mental state attribution (overmentalizing) [4]. This study aims to further examine JTC and overmentalizing in patients with BPD compared to healthy controls (HC), as well as the interrelations of these constructs.

Materials and methods: A total of 47 BPD patients and 38 HC were included in the study. JTC was assessed with a computerized probabilistic reasoning task, in which participants are presented a number of colored (red and green) fish in succession and asked to guess which of two lakes with different color ratios (lake A: 80% red, 20% green, lake B: 20% red, 80% green) the presented fish originate from. The number of draws to conclusion, i.e. the number of fish that participants see before reaching a conclusion regarding the origin of the fish, was used as a measure for JTC, similar to previous studies. Furthermore, participants completed an ecologically valid computerized test for the assessment of social cognitive abilities (Movie for the Assessment of Social Cognition; MASC). The MASC includes watching a short movie about a social event. The film is stopped at predetermined time points and participants are asked to answer multiple-choice questions referring to the actors' mental states.

To check for group differences in JTC and overmentalizing, an analysis of variance (ANOVA) with group (BPD versus HC) as between-subject factor was carried out. Subsequently, correlational analyses were conducted to examine the interrelations of these constructs.

Results: Initial results will be presented.

Conclusions: The implications of the results for the understanding and treatment of BPD will be discussed.

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P51 Post traumatic headache in athletes pharmacological treatment

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Background: Head and neck injuries may be mild or severe situations with complex multi-dimensional factors. Pharmacological treatment can resolve these problems and provide a safe path to return back into the physical activity and exercise.

Aim of this study was to investigate the use of the combination between Paracetamol: 400 mg Codeine Phosphate hemihydrate: 10 mg Caffeine: 50 mg as a treatment in cases of athletes with head and neck injuries.

Materials and methods: In 10 athletes with head and neck injuries we used this combination for a 7 day period., 2 times per day.

Results: 9 patients (90%) report satisfied results and 1 patient (10%) poor results.

Conclusions: We need more patients and more investigation but it seems that this combination has very satisfied and safe results in such cases.

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P52 May digital addiction be considered a public health problem? The importance of enhancing our off-line life

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Background: There is a group of teens that the use of internet and smartphone gaming should be viewed as a Public Health Problem, a public health problem that we as society are responsible for addressing and giving solutions.

Those who lose the ability to balance their interest in online activities and off-line activities, experience significant social, emotional, and academic problems.

We will benefit a uniform diagnostic criteria to be able to approach the diagnosis and rigorous effort for understanding the nature of the disease to be able to approach the treatment and prevention. Internet addiction was first identified in the U.S. by Dr. Kimberly Young at 1996 who first developed internet addiction criteria and questionnaire.

Genetic factors, Cerebral blood flow, Dopaminergic function and other neuroimaging studies have been poorly studied and showed alterations in Internet addiction comparing controls.
The prevalence of psychiatric co-morbidity in IA is similar to that in substance use and addictive disorders. It is debating whether internet addiction results in neuropsychiatric diseases or is a symptom of these underlying diseases. We aimed to measure the prevalence of IA in a small portion of teens in Mashhad and its correlation with anxiety and recent educational performance.

Materials and methods: Sixty-eight individuals 16±2 years old (14-19 Y) (55 F, 13 M) with different economical and religious beliefs status and no medication, underwent Beck anxiety test and Young Questionnaire of IA and compared with the grades of their two consecutive educational performance. The Correlation of anxiety score and IA score was measured. Differences between Females and Males and educational performance, economical and religious beliefs status and their objective for their future were compared. They were divided to Internet users (IU) and not users (NIU).

Results: Seven of the students (females) didn't use internet or smartphone because they did not access to internet or smartphone (NIU). 3 of them showed a relatively high anxiety score (23,27,36 score). Among 61 IU, 60% showed high IA score (32±20) and 4 of them (M) were pathologically involved with sever educational performance loss. These 4 males had good economical situation and poor religious belief and no objective for their future. Females didn't show sever educational performance loss. In IU anxiety score and IA score showed a positive correlation. Males differ (60±10) significantly ($p \leq 0.001$) with females (35±12) in IA score and educational performance. 30% of the individuals proposed no particular objective for their future.

Conclusions: There is a comorbidity of anxiety with Internet overuse. Although the number of males is low in this study, these results show that Internet addiction is more severe in Males than Females with severe educational performance loss in males. Low religious beliefs and having no particular aim for future showed to coincide with higher IA score. There is a need for further study if with the progress of unlimited technology we should consider modification of our Daily Living Habits toward the enhancement of our OFF-LINE lives.

Cognitively healthy children are the most precious potential wealth and power of all countries and we should have strategies not to lose it but to improve it.

P53 The relation between depression, anxiety and educational negligence with tendency to addiction among the students

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Background: The purpose of this research was to investigate the relationship between depression, anxiety and educational negligence with tendency to addiction among the students.

Materials and methods: This research was a descriptive co relational study and the statistical population of this research consisted of students of Islamic Azad university,Kohbanan Branch (N=700). A sample of 248 individuals were selected randomly. Negligence Questionnaire (Itken, 1982),Tendency to Addiction Questionnaire (Vedo bancher, 1992) Beck Depression Inventory (Beck, 1995),Beck Anxiety Inventory(Beck,1999)were used as data collection instruments.

Results: The collected data was analyzed with Pearson correlation and multiple regression. Research conclusion showed a significant relationship between depression, anxiety and educational negligence with tendency to addiction, and the predictions power of educational negligence was more than other variables. Also the results showed that a significant relationship between depression and educational negligence with tendency to addiction, and the predictions power of educational negligence was more than depression. Also research conclusion showed that anxiety and educational negligence can significantly explain the variation of tendency to addiction and the contribution of educational negligence in predicting of tendency to addiction was more than anxiety.

Conclusions: According to risk of addiction, identification of risk factors and pre_determinants index to investigating educational failure among university students, specially negligence, depression and anxiety among students cause to reduce the risk of educational failure in them.

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P54 Current aspects regarding the relevance of zebrafish studies in understanding the role of oxytocin in some neuropsychiatric disorders

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Background: Oxytocin is a nonapeptide hormone that is involved, besides its classical functions, in linking social signals with cognition, behaviors and reward. Also, it seems to have a critical role in the regulation of brain-mediated processes that are strongly relevant to many neuropsychiatric disorders.

Materials and methods: In this way, in the present paper we will try to describe the most important and modern aspects regarding the relevance of oxytocin administration in various animal models of neuropsychiatric disorders, as well as in human patients. Also, the relevance of zebrafish studies in this context will be extensively discussed.

Results: Thus, our group is recently interested in performing these type of studies on animal models of neuropsychiatric disorders in zebrafish, since well-being and survival in most of the vertebrates depends critically on social interactions, and disturbed social behavior is a key component of diseases such as autism, schizophrenia, depression and anxiety disorders or their similar behavioral manifestations. Moreover, lately the using of fish to understand the neurobiological substrates of behavior is gaining increased attention and actually it is believed and reviewed that although various neurotransmitter systems have been investigated in zebrafish, the dopaminergic system is by far the most widely studied and could serve to exemplify how brain and behavior studies in fish are useful for modeling relevant disease endophenotypes. Also, oxytocin can be found in most bony vertebrate species and exhibits a great evolutionary stability in its structure, as well as in the locations of main cell groups in the brain. In addition, zebrafish shares a fundamental pattern of neurodevelopment and functional brain organization with other vertebrates, including humans.

Conclusions: Fish models provide the opportunity for a substantial increase in the scale of experimental operation compared to rodents, enabling large-scale behavioral and genetic screens and rapid study of the effects of pharmacological and genetic perturbations during development.

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P55 Restless legs syndrome associated with the combination of citalopram and quetiapine

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Background: Restless legs syndrome (RLS) is a sensorimotor disorder characterized by an urge to move the legs during periods of rest or inactivity, such as lying or sitting. It is frequently associated with physical and mental diseases, but drug-induced RLS still remains an under-diagnosed condition. RLS could be considered as a side effect of SSRIs and case report studies have linked RLS with quetiapine. However, even in cases where each of these agents is not associated with RLS, their combination might be.

Materials and methods: In the following we report on such a case whereby the combination of quetiapine with citalopram was associated to RLS.

Results: A 67 year-old woman was under citalopram 40 mg/day because of depression. She was still suffering from insomnia and she was prescribed quetiapine up to 100mg/qd. After few only doses of quetiapine she complained of an uncomfortable sensation in her calves with an urge to move her legs continuously, which made her stood up and walk around the room through the whole night. After reducing citalopram to 20 mg/qd the discomfort was alleviated. Depressive symptoms reemerged gradually and citalopram was discontinued in order to be replaced by sertraline 100mg/qd without appearance of RLS symptoms.

Conclusions: The close temporal relationship between the concomitant administration of low doses of quetiapine and citalopram and the emergence of RLS may indicate a causative role of this combination. Neither quetiapine alone, nor citalopram alone were associated with RLS to our patient.

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P56 Neuropsychological performance in psychotic depression, preliminary results

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Background: A large number of studies have addressed the neuropsychological profile of depression and cognitive deficits connection with biological indicators, such as cortisol. These findings support the hypothesis of dysfunction of the basal ganglia circuit-prefrontal cortex. In this study we investigated the difference in memory and executive functions in patients with major depressive disorder (MDD) in relation to the existence of melancholic or psychotic features.

Materials and methods: Seventy patients with MDD, twenty of whom had melancholic, thirty of which had psychotic features twenty healthy controls of similar age and educational level, were examined using neuropsychological tests of the Cambridge Neuropsychological Test Automated Battery (CANTAB).

Results: Patients with depression as a whole, compared to controls showed statistically significant deficits in memory screening tests and tests that control executive functions. The patients with melancholic depression performed worse than the non- melancholic in executive function concerning set-shifting. The patients with psychotic depression performed worse than all the others (including the melancholic patients) in one of the memory tests and in both the executive functions tests.

Conclusions: The neuropsychological deficits in depressed patients relate more executive functions and less memory. For patients with melancholic or psychotic features seem to be a quantitative difference in general and qualitative difference in the ability to change the plan. Patients with psychotic depression seem to be more affected than the others. The findings are considered to be associated with further impairment of the ventricular portion of the cingulate and prefrontal orbitofrontal cortex.

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P57 Efficacy of training components of emotional intelligence on social adjustment and communication skills among chronic post traumatic stress disorder patients

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Background: Low communications skills are one of the most common problem in anxiety disorder patients. In regard with the importance effect of appropriate communication among PTSD patients, this study investigated the effects of training components of emotional intelligence on social adjustment and communication skills among PTSD patients of Bam hospital.

Materials and methods: The sample consisted of 36 subjects selected from patient hospital list. The subjects were randomly assigned to two experimental groups and a control group. The experimental group received 8 sessions of 2-hours training. All participants completed the Bar-On Emotional Intelligence Inventory and Qeen Dom Communication Skills Scale twice, pre and post-tests. Data were analyzed by SPSS statistical software.

Results: Results revealed that for the experimental group the mean scores of
emotional intelligence and general Communication skills as well as the social skills and social relationship subscales were significantly increased in post tests. Emotional intelligence training enhanced the social and communication skills among child labor and reduced and modified dysfunctional social communications.

Conclusions: Emotional intelligence training enhance the social and communication skills and reducing and modifying dysfunctional social communications among PTSD patients.

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P58 Combination of ceftriaxone sodium and vancomycin as a treatment after spinal procedures

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Background: Aim of this study was to investigate the use of the combination of ceftriaxone sodium and vancomycin as a treatment after spinal procedures (spinal stenosis,spinal herniation, spinal fixation etc).

Materials and methods: In 20 patients (10 men 50% and 10 women 50 %) after spinal procedures we used this combination, iv sominstration of ceftriaxone sodium and vancomycin for 10 days.

Results: We report very satisfied results in all 20,100% with no infection rates.

Conclusions: We need more patients and more investigation but it seems that this combination as a treatment after spinal procedures has satisfied and safe results in such cases.

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P59 Combination of teicoplanin and piperacillin-tazobactam as a treatment after cranial and brain procedures

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Background: Aim of this study was to investigate the use of the combination of teicoplanin and piperacillin-tazobactam as a treatment after cranial and brain procedures (shunts, hematomas etc).

Materials and methods: In 20 patients (10 men , 50% and 10 women 50 %) after cranial and brain procedures we used this combination, iv sominstration of piperacillin-tazobactam and teicoplanin for 10 days.

Results: We report very satisfied results in all 20,100% with no infection rates.

Conclusions: We need more patients and more investigation but it seems that this combination as a treatment cranial and brain procedures has satisfied and safe results in such cases.

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P60 Predominant polarity as a course specifier for bipolar disorder: A systematic review

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Background: Predominant polarity (PP) is a proposed course specifier for bipolar disorder, which was not incorporated in the DSM-5 as a specifier for the nosology of bipolar disorder (BD). Here we perform a systematic review of original studies about PP.

Materials and methods: The Pubmed, EMBASE and Web of Science databases from inception to October 6th, 2013.

Results: A total of nineteen studies met inclusion criteria. A PP is found in approximately half of BD patients. Most studies that included type I BD patients found the manic PP to be more prevalent, while studies that included type II BD participants found a higher prevalence of depressive PP. A depressive PP has been consistently associated with a depressive onset of illness, a delayed diagnosis of BD, type II BD and higher rates of suicidal acts. The manic PP is associated with a younger onset of illness, a first manic/psychotic episode and a higher rate of substance abuse. Evidence suggests that PP may influence acute treatment responses for bipolar depression as well as the selection of maintenance treatments for BD.

Conclusions: The concept of PP provides relevant information for clinicians. Future studies should investigate the genetic and biological underpinnings of PP.

P61 Results of the Lopez-Ibor Foundation initiative on the possible relationship of suicide rates with economic variables in Europe during 2000-2011

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The Lopez-Ibor Foundation launched an initiative to study the possible relationship of the economic crisis on European suicide rates. The hypothesis to test was that the suicidal rate correlates with the economic situation, which directly impact the everyday life of the population and especially of vulnerable groups. The results revealed that there was a strong correlation of suicide rates with all economic indices except GDP per capita in males and only with unemployment in females. However, the increase in suicide rates occurred several months before the economic crisis emerged. Overall the current study confirms a general relationship of the economic environment with suicidal rate, however it disputes there is a clear causal relationship between the current economic crisis and an increase in the suicidal rate.

P62 Report of the WPA section of pharmacopsychiatry on the relationship of antiepileptic drugs with suicidality in epilepsy

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Background: This Report from the WPA Section on Pharmacopsychiatry examines the possible relationship of antiepileptic drugs with suicide-related clinical features and behaviours in patients with epilepsy.

Materials and methods: A systematic review of the MEDLINE search returned 1006 papers, of which only 7 were considered relevant. A critical analysis of the FDA report on the increase risk for patients under antiepileptics to manifest suicidality is also included in this report.

Results: The analysis of these studies revealed that the data are not supportive of the presence of a 'class effect' on suicide related behaviour; on the contrary there are some data suggesting such an effect concerning treatment with topiramate, lamotrigine and levetiracetam for which further research is needed.

Conclusions: For the majority of people with epilepsy, anticonvulsant treatment is necessary and its failure for any reason is expected to have deleterious consequences. Therefore.clinicians should inform patients and their families of this increased risk of suicidal ideation and behavior but should not overemphasize the issue. Specific sub-groups of patients with epilepsy might be at a higher risk, and deserve closer monitoring and follow up. Future RCTs should specifically focus on issues concerning depression and suicidal thoughts in patients with epilepsy and in any patient population whose treatment includes antiepileptics (e.g migraine, fibromyalgia etc.): systematic analyses of the association should be carried out in large health care systems, and additional cohort and case-control studies should be conducted.

P63 Rapid cycling In bipolar disorder: A systematic review

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Background: Bipolar Disorder (BD) is a highly prevalent disorder, heterogeneous in phenomenology, course and outcome. The long term course is typified by recurring mood episodes of opposite polarity as well as mixed states. Rapid cycling BD (RCBD) refers to the presence of atleast four mood episodes in the previous 12 months that meet the criteria for manic, hypomanic, or major depressive episode.This systematic review synthesizes data regarding prevalence, clinical correlates and familial/genetic aspects related to RC in BD.

Materials and methods: A systematic MEDLINE search through September 2013, using the keywords “rapid-cycling” or “rapid cycling” and “bipolar disorder” was performed. The PRISMA method was used.

Results: The literature suggests that RCBD affects a significant proportion of bipolar patients, and is related to a longer course of illness, to an earlier age of onset and to more illegal drug and alcohol abuse and increased suicidality. Year prevalence of RCBD ranges between 5%-33.3% (mean 18.1%), while lifetime prevalence ranges between 25.8%-43% (mean 31.4%). The etiology remains unclear although a causal or triggering role for the use of antidepressants andhypothyroidism are implicated. Furthermore, the frequently reported connection with female gender and depressive predominance is not adequately supported. It seems to represent a transitory phenomenon, rather than a stable pattern that characterizes the individual patient. Probably it constitutes a deterioration of the underlying disorder and it is related to a worse outcome.

Conclusions: RCBD is a frequent, although under-recognized condition in BD, and it constitutes a worsening of the primary disorder. There is no good evidence that RCBD is a discrete subtype. Early recognition of this pattern can leads to better treatment strategy and improvement of the long term course. Conceptualizing RCBD according to Research Domain Criteria (RDoC) criteria will be an important advance.

P64 Rate of suicide and suicide attempts and their relationship to unemployment in Thessaloniki Greece (2000-2012)

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Background: Recently there was a debate concerning the relationship between the economic crisis and an increase in attempted and completed suicides in Europe and especially in Greece. The aim of the current study was to calculate the rates of attempted and completed suicide per year in the county of Thessaloniki, Macedonia, northern Greece, for the years 2000-12, and to investigate their relationship with unemployment.

Materials and methods: The archive of the Emergency Outpatient Units of three hospitals was investigated and the results were projected to the county population. Data from the Hellenic statistics authority concerning regional general population and suicides and unemployment were used.

Results: The rate of attempted suicides was 16.69-40.34 per 105inhabitants for males and 41.43-110.82 for females. Medication was the preferred method for 95.93%. The completed suicide rates varied from 3.62-5.47 for males and from 0.19-1.95 per 105inhabitants for females. The male attempt rate correlated negatively with regional male unemployment (-0.63). For females the respected value was similar (-0.72). Concerning competed suicide rates, the respected values were 0.34 and 0.65. The attempt was repeated by 15.34%; almost half repeated within the same year and 75% within two years. The female to male ratio varied significantly across years with 2:1 (more females) being the probable value for attempts and 1:3.6 (more males) for completed suicides.

Conclusions: This is the first study from Greece reporting rates on the basis of hospital archives. Attempt and suicide rates are low in Greece. Attempts are negatively and suicides are positively correlated with unemployment.

P65 Burning issues in the meta-analysis of pharmaceutical trials for depression

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During the last decade a number of meta-analytic studies were published and they triggered a debate on the true clinical usefulness of antidepressants. The current article comments on the problems within the randomized controlled trials design, the study samples, the psychometric scales, the methods of meta-analysis, the interpretation of the results and the reporting of conflicts of interest. Although the meta-analyses published so far, agree that medication works in severe depression,they question its efficacy in mild cases. However, several methodological issues should be clarified before conclusions are definite. Different methods give different results and similar results seem to entertain a variety of interpretations. In the future it is important to address all the problems mentioned above, and to improve methodology on the basis of clinically informed choices. Otherwise meta-analysis risks alienation from clinical reality and thus risks becoming the 21st century psychoanalysis.

P66 The pharmacodynamic properties of lurasidone and their role in its antidepressant efficacy in bipolar disorder

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The treatment of bipolar depression is one of the most challenging issues in contemporary psychiatry. Currently only quetiapine, the olanzapine-fluoxetine combination and recently lurasidone are officially FDA-approved against this condition. The neurobiology of bipolar depression and the possible targets of bipolar antidepressant therapy remain elusive. The current study investigated whether the pharmacodynamic properties of lurasidone fit to a previously developed model which was the first to be derived on the basis of the strict combination of clinical and preclinical data with no input from theory or opinion.

The authors performed a complete and systematic review of the literature to identify the pharmacodynamic properties of lurasidone. The original model suggests that a constellation of effects on different receptors are necessary but the serotonin reuptake inhibition does not seem to play a significant role for bipolar depression. On the contrary norepinephrine activity seems to be very important. Probably the early antidepressant effect can be achieved through an agonistic activity at 5HT-1A and antagonism at alpha1 noradrenergic and 5-HT2A receptors, but the presence of a norepinephrine reuptake inhibition is essential in order to sustain it. Overall the properties of lurasidone fit well the model and add to its validity. A point that needs clarification is norepinephrine reuptake inhibition which is not yet studied for lurasidone.

P67 Post traumatic seizures after severe brain injuries-Pharmacological treatment

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Background: Post traumatic seizures after severe brain injuries (GCS <8) may cause secondary serious brain damages as a result of factors like 1. Increased metabolic demands 2. raised ICP 3. neurotransmitter release.

Aim of this study was to examine the effect of prophylactic anti-epileptic agents in traumatic cases after severe brain injuries (GCS <8).

Materials and methods: We studied 10 cases of severe traumatic brain injuries. In all cases (10,100%). In all patients we put , prophylactic anti-epileptic agents(5 cases -50%- levetiracetam, 5 cases -50%, phenytoin).

Results: Prophylactic anti-epileptics was effective in reducing seizures in all 10 patients , but there is no evidence that this treatment minimize the occurrence of late seizures, or has any effect on death and neurological disability. The use of anti-epileptic drugs after severe traumatic brain injury does decrease seizures. We need more evidence and more cases to determine whether this decreases other consequences (death, disability).

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P68 The relevance of some gastrointestinal deficiencies in autism spectrum disorder pathology

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Background: Autism spectrum disorder (ASD) is consisting of some serious neurodevelopmental conditions that are diagnosed based on the presence and severity of core behavioral symptoms-deficient social interactions, impaired communication and the presence of repetitive behavior or restricted interests (1).

Also, lately there are increased reports that in fact the microbiota can modulate behavioral and physiological abnormalities associated with most of the neurodevelopmental disorders (2).

In this way, it seems that children with autism frequently exhibit gastrointestinal signs and symptoms, with constipation being the most commonly reported digestive symptoms and also diarrhea, gas and bloating, abdominal pain, esophageal reflux and vomiting (3).

Materials and methods: Thus, in the present report, we want it to understand if children with autism tend to suffer from severe gastrointestinal problems and why from the many medical comorbidities associated with autism, the digestive one has gained significant attention, especially considering its reported prevalence and association with specific autistic symptoms severity.

Results: In this way, the main results from the literature are showing that even 7 out of the 11 children with autism are described as having eating/feeding or dietary problems (1). Moreover, some other results are indicating that anxiety, sensory over-responsivity and digestive manifestations are probably interacting with each other in autistic children and may have common underlying mechanisms (4). Even more, a significant association was observed between children with language regression, a family history of autoimmune disease and gastrointestinal symptoms (5).

Conclusions: In conclusion, further studies regarding the impact of digestive risk factors in autism could provide a valuable insight into a molecular basis for medical comorbidities seen in autistic individuals. In addition, examining how digestive disturbances affect brain and behavior in animal models for autism (especially since our group has some very recent advances on a valproic acid-induced model of autism) can reveal further promising targets for the understanding of various mechanisms and therapeutics of autism.

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P69 The effects of the atypical antipsychotic asenapine in a strain specific battery of tests for mania-like behaviors

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Asenapine is indicated for the treatment of schizophrenia and manic episodes in bipolar disorder (BPD). There is a paucity of information on asenapine effects in animal models ofBPD but such work is essential to discoverits scope of effectsandits mechanisms of therapeutic action. This study evaluates asenapine effects in a validated test battery for manic-like behaviors in Black Swiss (BS) mice.

Male BS mice received asenapine at 0.03, 0.1, and 0.3 mg/kg twice daily for 7 days and tested for spontaneous activity, sweet solution preference, forced swim test, social interaction and amphetamine-induced hyperactivity.

Asenapine treatment resulted in dose dependent, clinically relevant plasma levels. Asenapine, at the 0.1 mg/kg and 0.3mg/kg doses reduced activity with the 0.3 mg/kg dose resulting also in increased time in centerof an open field, increased immobility in the FST and reduced amphetamine-induced hyperactivity. Asenapine had no effects in the social interaction or sweet solution preferencetests.

The results suggest that asenapine has antimanic-like effects in some of the behavioral tests performed in black Swiss mice. These data supports the utilization of asenapine in the treatment of BPD.

P70 Introducing female black Swiss mice: minimal effects of sex in a strain-specific battery of tests for mania-like behavior and response to lithium

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Recent researchdemonstrated that black Swiss (BS) mice may be an advantageous model strain for domains of mania. However, one of the limitations of the BS model is that all experiments to date were performed with male mice whereas BPD is equally prevalent in women and men. The present study was designed to examine the possibility of using both males and females BS mice in future studies. Groups of male and female BS mice were compared with each other, with or without chronic lithium treatment, in behavioral tests for domains of mania-like behavior including spontaneous activity in an open field, sweet solution preference, elevated plus maze, forced swim test and amphetamine-induced hyperactivity test.

The findings indicate mostly a similarity between female and male BS mice, both naïve and after chronic lithium treatment. The results are discussed in the context of the deficiency in utilizing female mice in animal models research.

It is therefore suggested that when using BS mice to model domains of mania-like behavior it is now recommended to use both males and females.

P71 Partial effects of the AMPAkine CX717 in a strain specific battery of tests for manic-like behavior in black Swiss mice

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AMPA receptors are highly expressed throughout the central nervous system and are suggested to be involved in mood regulation. Studies found changes in glutamate, its metabolites and AMPA receptors in patients with bipolar disorder (BPD) or major depression (MD) and in animal models of stress. Additional data suggests that the glutamatergic system and AMPA receptors specifically, have an important role in modulating the therapeutic effect of mood stabilizers. Further research on the role of AMPA receptors in mood regulation can be done using AMPAkines, positive modulators of AMPA receptors. AMPAkines have been studied for cognitive enhancement in neurodegenerative disorders and some were also examined in preclinical studies of mood disorders. In that context, the present study was designed to test the effects of the AMPAkine CX717 in a strain specific battery of models for mania-like behaviors.

Black Swiss male mice were sub-chronically treated with 5 different doses of CX717 or vehicle and tested in a battery of behavioral tests including spontaneous activity, sweet solution preference, resident-intruder, forced swim and amphetamine-induced hyperactivity.

Data show that CX7171 doses of 30mg/kg and above, but not lower, reduce activity levels. Moreover, 45mg/kg and above reduce interactions in the resident-intruder test and ameliorate amphetamine-induced hyperactivity.

The results therefore show a partial effect of CX717 on manic-like behavior, somewhat similar to previously demonstrated effects of atypical antipsychotic drugs in this strain. It is therefore suggested that further work related to AMPAkines in the treatment of affective disorders might be warranted.

P72 Chronic lithium treatment enhances the number of quiescent neural progenitors but not the number of DCX-positive immature neurons

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Cellular plasticity and resilience are now considered core research area in the field of affective disorders in general and bipolar disorder in particular. In this context, it has been suggested that deficiencies in hippocampal neurogenesis, may, at least in part, underlie the pathophysiology of bipolar disorder and that the therapeutic effects of mood stabilizers are related to their effects to enhance neurogenesis. In rodents, chronic treatment withthe prototypic mood stabilizer lithiumis known toincrease dentate-gyrus neurogenesis and to induce mood stabilizing-like effects in behavioral tests.The present study was therefore designed to explore the role of neurogenesis in the therapeutic-like behavioral effects of chronic treatment with lithium in mice.To achieve this objective, the study tested the effects of inhibition of cellular proliferation (and therefore neurogenesis) on the behavioral effects of lithium in two animal models, the amphetamine-induced hyperactivity model of mania and the forced swim test model of depression.Our results demonstrate that arresting neurogenesis with the cytostatic agent MAM did not influence the behavioral effects of lithium in animal models related to the drug's mood stabilizing-like activity including the forced swim test and the amphetamine-induced hyperactivity test. These results suggest that the effects of lithium in these models are independent of its effect to induce neurogenesis. Namely, the results of the present study do not support the hypothesis that lithium-induced neurogenesis mediates the drug therapeutic effects.

P73 Clinical implications of predominant polarity and the polarity index of drugs in maintenance treatment of bipolar disorder: A naturalistic study

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Background: Predominant polarity, defined as at least twice as many episodes of one pole over the other, is among the strongest predictors of recurrence into a specific episode in Bipolar Disorder (BD), and should be considered when implementing maintenance therapy. Our group has recently developed the Polarity Index (PI), a metric indicating antimanic versus antidepressive potential of drugs [1]. The purpose of this study was to determine the role of PI in clinical decision-making. Secondary aim was to assess differences between predominantly manic and depressed patients, with a special focus on their pharmacological treatment.

Materials and methods: The study sample was composed of 604 patients aged ≥18, with BD I or II, who signed an informed consent, enrolled in the systematic prospective follow up study of the Bipolar Disorders Program of the Hospital Clinic of Barcelona, Spain. Patients who fulfilled criteria for either Manic (MPP) or depressive (DPP) were compared regarding soio-demographic, clinical and therapeutic characteristics.

The PI, a numeric expression of the efficacy profile of a given drug, derives from Number Needed to Treat (NNT) for prevention of depression and NNT for prevention of mania ratio, as emerging from the results of randomized placebo-controlled trials [1, 2]. Drugs with PI >1 have stronger antimanic prophylactic properties, while those with PI<1 are more effective for preventing depressive episodes than the manic ones. The PI of drugs for maintenance treatment of BD was: 12.09 for risperidone, 4.38 for aripiprazole, 3.91 for ziprasidone, 2.98 for olanzapine, 1.39 for lithium, 1.14 for quetiapine, and 0.40 for lamotrigine [1]. PI for patients' current treatment was calculated as mean value of all prescribed drugs in each patient.

Results: 257/604 (43%) of patients with BD-I or II fulfilled criteria for manic (MPP) or depressive PP (DPP). 143 patients (55.6%) fulfilled criteria for DPP and 114 (44.4%) for MPP.
Total PI, as well as Antipsychotics' PI and Mood Stabilizers PI were higher, indicating a stronger antimanic action, in MPP (Table 1).

MPP presented higher prevalence of BD-I, male gender, younger age, age at onset and at first hospitalization, more hospitalizations, primary substance misuse and psychotic symptoms. DP correlated with BD-II, depressive onset, primary life events, melancholia and suicide attempts. The prescription of First Generation Antipsychotics and Second Generation Antipsychotics Olanzapine and Risperidone was significantly more frequent among MPP patients, whilst use of Lamotrigine, Selective Serotonin Reuptake Inhibitors, Serotonin–Norepinephrine Reuptake Inhibitors, Tricyclic Antidepressants and Benzodiazepines was more prevalent amongst DPP patients.

Conclusions: The results of this naturalistic study confirm the usefulness of the PI. In this large sample, clinical differences among these groups justify differential treatment approach. The PI appears to be a useful way to operationalize what clinicians do for maintenance therapy in BD.

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P74 Risk factors for suicide in schizophrenia: Systematic review and clinical recommendations

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Background: Approximately 2-12% of all suicides are attributable to schizophrenia and suicide is the leading cause of premature death among patients with schizophrenia [1]. The aim of this study was to identify risk factors associated with suicide of patients with schizophrenia and provide clinical recommendations which integrate research findings into a consensus based on clinical experience and evidence.

Materials and methods: A steering committee formed of Spanish experts was formed to review the evidence base for suicide and schizophrenia, and to formulate clinical recommendations. Subsequently, 52 clinicians attending I Vive 2013 meeting were asked to express their consent with the proposed recommendations using a Delphi method. Initial survey items were based on systematic review of the literature. Subsequent surveys included items that needed to be rerated. This process resulted in the final clinical recommendations on recognition and management of risk factors for suicide in schizophrenia.

Results:

1. Schizophrenic in-patients should be closely monitored if they present any of the following: history of suicide attempt, depressed mood or higher psychiatric admissions rates.
2. An immediate assessment of the suicide risk should be performed in all patients after admission.
3. Close monitoring and out-patient treatment of patients immediately after discharge from hospital are required.
4. The family history of suicide should be considered in all patients when assessing suicide risk and administering interventions.
5. Younger schizophrenic patients and those in the early course of the illness should be monitored more closely given the high suicidal risk.
6. Presence of a comorbid drug abuse should be investigated in all schizophrenic patients.
7. Presence of depressive mood and hopelessness should be carefully assessed in all schizophrenic patients.
8. All patients with schizophrenia should be directly asked regarding the presence of suicidal ideation during every clinical interview.

9. Adherence to treatment should be verified during each clinical interview.
10. Impulsivity should be assessed in all patients diagnosed with schizophrenia.
11. In-patient wards should be in possess of all reasonable means needed to prevent suicide behaviour in hospital settings.
12. Caregivers (immediate family members or those living with a patient) of people diagnosed with schizophrenia who have expressed suicidal ideation should be informed of the means available for the prevention of suicide.
13. In presence of past suicide attempt in a patient diagnosed with schizophrenia a thorough history should be collected from the patient and care-givers, and the circumstances related to the suicide should be assessed.
14. Patients diagnosed with schizophrenia in acute episode that express suicidal ideation should be hospitalized.

Conclusions: Identification of risk factors for suicide in individuals diagnosed with schizophrenia is imperative in order to improve clinical management and develop strategies to reduce the incidence of suicide in this population. This study provides the critical overview of available data and clinical recommendations on recognition and management of the abovementioned risk factors.

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P75 Polarity Index of drugs and psychotherapies in maintenance treatment of bipolar disorder

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Background: Implementing effective treatments for maintenance therapy of Bipolar Disorder represents a significant clinical challenge. The current first-line pharmacological agents for long term treatment of BD are represented by lithium, lamotrigine, valproate, olanzapine, quetiapine, aripiprazole, risperidone (in the long-acting injectable formulation) and ziprasidone. Our group has recently introduced a metric named Polarity Index (PI) in order to characterize the drugs according to their ability to prevent depressive vs. manic episodes.
Although various psychotherapeutic therapies in adjunction to pharmacological therapies have proved effectiveness in long-term management of BD, no attempt was made to classify them according to their ability to prevent manic vs. depressive episodes. The aim of our study is to define profiles of all treatments available for maintenance of BD, both pharmacological and psychotherapeutic by the means of Polarity Index.

Materials and methods: Polarity Index is an innovative metric indicating antimanic and antidepressive prophylactic potential of drugs, retrieved by calculating Number Needed to Treat (NNT) for prevention of depression and NNT for prevention of mania ratio, as emerging from the results of randomized placebo-controlled trials. Included trials were randomized and double blind, with a minimal duration of 24 weeks, assessing effectiveness of a mood stabilizer or antipsychotic drug alone or in combination with a mood stabilizing agent versus a placebo [1] or a psychotherapy vs. a placebo comparator in BD maintenance treatment[2].
Polarity Index value above 1.0 indicates a relatively higher antimanic prophylactic efficacy, number below 1.0 a relative greater antidepressive efficacy [3].

Results: The Polarity Index for the drugs used in maintenance therapy for bipolar disorder was 12.09 for risperidone, 4.38 for aripiprazole, 3.91 for ziprasidone, 2.98 for olanzapine, 1.39 for lithium, 1.14 for quetiapine, and 0.40 for lamotrigine. Polarity index of valproate and oxcarbazepine may not be reliable due to the failure of their maintenance trials [2].
The Polarity Index for the psychotherapies used in maintenance therapy for bipolar disorder was 0.73 for psychoeducation, 0.33 and 0.63 for cognitive-behavioural therapy at 12 months and 30 months, respectively; 1 for enhanced relapse prevention, 1.40 for family-focused therapy; 3.36 for brief technique-driven interventions and 1.78 for caregiver group psychoeducation. Polarity Index of brief technique- driven interventions and enhanced relapse prevention may not be reliable due to the failure of their maintenance trials.

Conclusions: Overall, our findings indicate that anticonvulsants appear more effective for prevention of depressive episodes, while atypical antipsychotics and lithium may have a preponderant mania recurrence- preventing action. Regarding psychotherapies, patient-directed interventions appear more antidepressive while family-oriented ones more anti-manic. Whatsoever, Polarity Index of valproate and oxcarbazepine alongside with Polarity Index of brief technique-

driven interventions and enhanced relapse prevention might be misleading and should be interpreted with caution.

The polarity index provides a measure of how much antidepressant versus antimanic an intervention is and may guide the choice of therapy in the context of individualized long-term treatment of BD.

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P76 Anticonvulsants in schizophrenia: Evidence from randomized studies

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Background: Anticonvulsants are commonly used in schizophrenia.

Aim: To review the existing randomized studies examining the efficacy of anticonvulsants on schizophrenia symptoms.

Materials and methods: We searched pubmed with a relevant feedback strategy using the keywords: (adjunctive OR add-on) AND randomized AND (schizophrenia OR schizoaffective). We then conducted separate searches with the following search terms: randomized AND schizophrenia OR schizoaffective AND X, where the X term corresponded to the name of relevant add-on anticonvulsant agents identified during the first search.

Results: One meta-analysis suggested that that carbamazepine is effective for overall symptoms in schizophrenia, although it showed that it could worsen positive symptoms. Three meta-analyses showed that the addition of lamotrigine is beneficial for overall symptoms refractory to treatment. However, the findings on its impact on positive and negative symptoms are contradictory. The adjunctive use of valproate could be justified for the management of aggression according to one meta-analysis. Another meta-analysis found that topiramate might be useful for positive symptoms. One randomized study suggested that the addition of zonizamide to ongoing antipsychotic treatment might improve overall symptoms and metabolic parameters. One randomized study which studied the role of adding beclamide to antipsychotics produced inconclusive results.

Conclusions: The addition of carbamazepine and lamotrigine to antipsychotics is beneficial for overall symptoms, whereas the addition of valproate could reduce aggression in schizophrenia.

P77 Cognitive remediation could reduce symptoms of schizophrenia: A pilot study

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Background: Recent studies have suggested that cognitive remediation not only improves cognitive functioning but has also beneficial effects on symptoms.

Aim: To examine the effects of a cognitive remediation programme on schizophrenia symptoms.

Materials and methods: 17 patients with schizophrenia who had completed the cognitive remediation programme (CR group) which was developed in our Unit were compared with 12 patients who were trained in computer skills (controls). Schizophrenia symptoms were assessed with the Positive and Negative Syndrome Scale (PANNS).

Results: The two groups did not differ in gender, age, duration of illness and education. The CR group showed a significant improvement in total (mean= 63.29, SD=14.1 versus mean 73.07, SD= 14.2, t=2.43, df=13, p=0.03), and positive PANSS scores (mean=12.86, SD=4.38, versus mean=15.94, SD=3.78, Wilcoxon z=-2.28, N=14, p=0.023) and in the insight item of PANSS (mean= 2.79, SD= 1.85 versus mean=3.35, SD=1.17, Wilcoxon z=-2.165, N=14, p=0.03). There were no significant changes in PANSS scores before and after the training in computer skills.

Conclusions: Cognitive remediation could be associated with improvements in schizophrenia symptoms, mainly positive symptoms and insight. Further investigation of these pilot data using a larger sample is underway.

Speakers' & Chairpersons' Index

Authors' Index

L

M

N

O

P

Q

R

S

T

V

W

Y

Z

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Akiskal Hagop S.
Distinguished Professor of Psychiatry and Director of the International Mood Center at the University of California at San Diego, USA

After matriculating with a baccalaureate in mathematics, he qualified in Medicine (AOA honors) at the American University of Beirut. As an undergraduate, he published poetry and wrote a thesis on metaphysics. As a senior medical student, he won first prize for his monograph, *Genes, Learning, and Sexual Behavior,* that was adapted for a course in the medical school curriculum. He obtained his psychiatric training at the Universities of Tennessee (Memphis) and Wisconsin (Madison), and research training at the Wisconsin Primate Laboratory. Appointed Professor of Psychiatry and Pharmacology at the University of Tennessee (1972-90), where he also served as research director of the Sleep Center and Neurophysiological Laboratory. He was subsequently recruited as the Senior Science Advisor to the Director of the National Institute of Mental Health (1990-94), followed by a brief stint as Special Advisor to the Director of Mental Health of the WHO (Geneva). **He is presently Distinguished Professor of Psychiatry and Director of the International Mood Center at the University of California at San Diego,** where he has concurrently served on the faculty of International Health and Cross-Cultural Medicine. He has also served as visiting clinical professor at McGill and Université Laval (Quebec, 1987-92). He is a foreign member of the **Académie Nationale de Médecine** [Paris], and he has received *doctor honoris causae* from the Universities of Lisbon (2003), Aristotle at Thessaloniki (2005), and the Armenian National Academy of Sciences (2007). Following the devastating 1988 Spitak earthquake, he led a US psychiatric delegation to Armenia. For a decade, he also served as Honorary President of the Hungarian Psychiatric Suicide Prevention Society and l'Union Nationale des Dépressifs et des Maniaco-dépressifs (Paris). He is distinguished life fellow of the American Psychiatric Association, honorary member of the Royal College of Psychiatrists (UK), founding fellow of the International Society of Affective Disorders, founding chair of the private practice section of the World Psychiatric Association, honorary fellow of the Egyptian psychiatric association, and honorary member of Argentine, Peruvian, and Mexican Psychiatric Associations.

His advisory positions include, among others, European Science Foundation, the Stella Maris Foundation, and the Fundación Juan José López-Ibor. His 1973 paper in *Science*, "Unified Theory of Depression," bridged the challenging divide between psychosocial and biomedical perspectives. His research on chronic depressions as treatable mood disorders provided hope to mil-

lions of sufferers. His mood clinics have had worldwide appeal because of his philosophy of delivering high quality care while conducting clinical training and research. His research on the offspring of bipolar patients was among the first to delineate juvenile bipolarity. His concept of bipolar spectrum contributed to early diagnosis and recognition, thereby ushering the new era of research in bipolar disorders worldwide. Jointly with Kareen Akiskal, they developed the Temperament Evaluation of Memphis, Pisa, Paris and San Diego [TEMPS], now translated into over 25 languages. The couple has also studied the creativity of Blues musicians and Parisian writers and painters: Their research on cyclothymia in artists has been replicated at Harvard, Stanford, and Calgary (Italy). The TEMPS has been instrumental in identifying 4 genes involved in the temperamental pathways to bipolar disorder, and with Norwegian collaboration, genes shared by cyclothymia and migraines.

Prof. Akiskal is the author of over 400 journal articles, and is listed by Thomson ISI "top-10 most-cited researchers in psychiatry and psychology." He is also listed in Top Doctors and Best Doctors in America. In Biomed Experts, he is listed #1 in mood disorders and the psychometrics of Temperament. Fluent in 5 languages, he has been invited to lecture in over 70 countries. His most favorite presentations include "Bridging Art, Science and Practice" at the New Parthenon Museum (Athens) and a Radio City Show (New York) to de-stigmatize mental illness. He has organized numerous congresses, of which, his favorites are: "Can We Use Laboratory Tests in Psychiatric Diagnosis?" (Memphis, 1975) and "Fifty Years of Bipolar Treatments" (Monte Carlo, 2002). He is Editor-in-Chief of the *Journal of Affective Disorders* (Amsterdam) and Honorary Editor of *Psychopathology* (Heidelberg). Of his 20 books, *Bipolar Psychopharmacotherapy: Caring for the Patient* (2011, ed 2) is the latest. He has been decorated with numerous national and international prizes: Jean Delay Prize of the World Psychiatric Association, Gold Medal of the Society of Biological Psychiatry, German Anna Monika Prize, the NARSAD Prize for Affective Disorders, the Ig Noble prize for "the chemistry of romantic love," the Italian Aretaeus Prize, as well as "the lifetime achievement award" of the European Bipolar Forum (IRBD), the Mkhitar Heratsi Gold Medal [Yerevan State Medical University], and the "lifetime achievement award" of the Armenian American Medical Society of California, special commendations for service to the community from Governor Schwarzenegger and the Mayor of Memphis, Ellis Island Medal of Honor "for exceptional national humanitarian service", and the Aristotle Gold Medal "for distinguished contributions to psychiatry, science, and humanity."

Alevizos Basileios
Associate Professor of Psychiatry,
Athens University, Greece

1958-1964: Medical studies in Athens University Medical School
1971: Certificate of specialization in Psychiatry and Neurology
1972: Registrar, Department of Psychiatry, University of Athens
1974-1976: Postgraduate student in Institute of Psychiatry, London University
1987: Assist. Professor of Psychiatry in Athens University
1994-1996: Professor of Psychiatry, Crete University
1996-2005: Assoc. Professor of Psychiatry, Athens University (Clinical Psychopharmacology)
Chair of the organizing committee of the 1st and 2nd Congress of Clinical Psychopharmacology of the Hellenic Psychiatric Association (2012, 2015)
Board member of Hellenic Psychiatric Association (18 years)
President, Section of Clinical Psychopharmacology of Hellenic Psychiatric Association
Founder and chairman of Hellenic Society for Psychopharmacology
Secretary of Greek Society of Preventive Psychiatry
Member of 11 Greek and 4 International Societies
Representative in European Board of Psychiatry (UEMS), European Union
Main investigator in 8 international multicenter trials

Teaching activities

Academic teaching (33 years) in Department of Psychiatry, University of Athens
Continuing medical education in clinical psychopharmacology, psychosomatic medicine, psychiatric ethics et.c.
Organizer of more than 120 seminars in clinical psychopharmacology for psychiatrists in different parts of the country (2006-2012)
Organizer and active participant with more than 300 lectures in symposia and round tables
Series of lectures on clinical psychopharmacology for young psychiatrists (2014 - today)

Publications

170 international journal articles, book chapters and abstracts
More than 150 articles in Greek Journals, book chapters and abstracts
8 books, 2 monographs

Alexopoulos Panagiotis
Head of the Neurobiological Laboratory, Department of Psychiatry and Psychotherapy, Technische Universität München, Germany

Dr. P. Alexopoulos (male) is clinical psychiatrist and head of the neurobiological laboratory of the Department of Psychiatry and Psychotherapy ofTechnischeUniversitätMünchen, as well as senior lecturer at the University of Patras. He has more than ten years of experience in studies related to AD and other neurodegenerative diseases (e.g. frontotemporal dementia) as well as to clinical entities (e.g. late-onset depression) pertaining to cognitive impairment. His current research is focused on the development of new cerebrospinal fluid and blood biomarkers of AD but also on neuroimaging, genetics and neuropsychology. Dr. Alexopoulos' research has been published in over 50 peer-reviewed articles.

Andreou Christina
Department of Psychiatry and Psychotherapy, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

Personal Information

- Date of Birth: September 8, 1973
- Nationality: Greek

Education / Training

- 1991-1997: Aristotle University of Thessaloniki, School of Health Sciences, Medical Department.
- 20.12.2005: Board certification examination, acquisition of the license to practice the medical specialty of psychiatry
- 22.10.2005-21.10.2006: Completion of training in Cognitive-Behavioral-Therapy (Beck Institute for Cognitive Therapy and Research, Extramural Training Program)
- 20.06.2007: Acquisition of Ph.D. title for the thesis "Neuropsychological and psycholinguistic investigation of context-dependent information processing in schizophrenia"

Positions

- 01.05.2011-ongoing: Department of Psychiatry and Psychotherapy, University Medical Center Hamburg-Eppendorf, Germany
- 10.05.2010-30.04.2011: Department of Psychiatry, Braunschweig General Hospital, Braunschweig, Germany
- 12.03.2007-07.05.2010: Hellenic Center of Mental Hygiene and Research, Thessaloniki, Greece
- October 2005 - October 2011: Honorary research assistant, 1st Psychiatric Department of the Aristotle University of Thessaloniki

Recent Publications

- Andreou C, Bozikas VP, Ramnalis A, et al. Semantic priming in remitted patients with bipolar disorder. J Behav Ther Exp Psychiatry 2012;44(1):48-52.
- Moritz S, Woznica A, Andreou C, Köther U. Response confidence for emotion perception in schizophrenia using a Continuous Facial Sequence Task. Psychiatry Res. 2012, in press
- Moritz S, Favrod J, Andreou C, et al. Beyond the Usual Sus-

pects: Positive Attitudes Towards Positive Symptoms Is Associated With Medication Noncompliance in Psychosis. Schizophr Bull. 2012, in press
- Bozikas VP, Andreou C. Longitudinal studies of cognition in first episode psychosis: a systematic review of the literature. Aust N Z J Psychiatry. 2011;45(2):93-108.

Current grant support

- NARSAD Young Investigator Grant, Brain & Behavior Research Foundation
- Research Grant, German Research Foundation (Deutsche Forschungsgemeinschaft, DFG)

Basta Maria
Associate Professor of Psychiatry,
University of Crete, Greece

Dr Maria Basta was born in Heraklion/Crete/Greece. She graduated the Medical School of Crete in 1997. She completed her residency in Psychiatry in the Department of Psychiatry / University Hospital of Crete in 2006. During her residency she was trained in Sleep Medicine for 6 months in the Sleep Research and Treatment Center, Pennsylvania State University, Hershey, PA. She acquired her PhD Diploma from the Medical School of Crete in 2003 in Sleep Medicine. Between 2006-2007 she did a 13months postodoctoral fellowship in Sleep Medicine in the Sleep Research and Treatment Center, Pennsylvania State University, Hershey, PA, USA.

From 2007 until 2012 she worked as an Attending Psychiatrist in Venizeleio General Hospital/Heraklion/Crete/Greece, in the Mental Health Center of Heraklion/ Crete/Greece and in the Department of Psychiatry/University Hospital/Heraklion/ Crete/Greece.

Since January 2013- until today she holds the position Assistant Professor of Psychiatry, University of Crete, Greece, School of Medicine and is on charge of the Acute Psychiatric Unit /Department of Psychiatry/University Hospital of Heraklion .

She has published over 30 original articles/review articles, most of them on field of Sleep Medicine.

Dr Basta is currently involved in the following research grants as a co-investigator:

- "Multidisciplinary Network for the study of Alzheimer's Disease", Program THALIS, (as co-investigator), Principal Investigator: A.N. Vgontzas (accepted: 2012)
- "Evaluation Center of the course and treatment of chronic psychiatric disorders in Crete". Program: " ESPA: 2007-2013", Principal Investigator: A.N. Vgontzas

She is member of the European Sleep Research Society (ESRS) and the American Association of Sleep Medicine (AASM)

Boksay Istvan
Clinical Professor of Psychiatry, School of Medicine, New York University (NYU), USA

Istvan J.E. Boksay MD PhD is a Clinical Professor of Psychiatry at School Of Medicine, New York University (NYU), U.S.A. where he is a member of the Pharmaceutical and Therapeutic Committee, The Quality Assurance Committee and the Medication Safety Committee. He was a president of the New Jersey Psychiatric Association. Dr. Boksay is a Distinguished Life Fellow of the American Psychiatric Association. He served several years as a member of the Council on Aging. Dr. Boksay is a geriatric Psychiatrist, published extensively and lectured worldwide. He did major contributions to describe the course of Dementia and the effect of medical conditions on the course of Dementia. He was the first who reported stage specific medical conditions in demented patients and reported behavioral and cognitive aspects of patients with NPH before and after VP shunt. He graduated Summa Cum Laude from the Semmelweis University of Medical Sciences in Budapest, Hungary and obtained a Doctor of Pharmacology and Toxicology from the University of Frankfurt in Germany.

Bouras Constantin
Professor, Division of Neuropsychiatry, Department of Mental Health and Psychiatry, University Hospitals and University of Geneva, Switzerland

Professor Constantin Bouras (M.D.) has worked since 1973 in the Department of Psychiatry, Division of Neuropsychiatry of the Geneva University Hospitals. He obtained his medical diploma in 1973 at the University of Athens (Swiss Diploma in 1982 at the University of Geneva) and acquired the title of specialist in pathology in 1988 at the University of Athens; recognized in 2004 in Switzerland. In 1987 he obtained the "Diplôme d'Etudes Approfondies en Neurosciences " at the Medical University of Marseille. Since 1992 he is Visiting Associate Professor of Neurobiology at the Mount-Sinai School of Medicine. "*Privat docent" in 1990 and "chargé de cours" (senior lecturer) in 1994, he was named professor in 2004. Since 1994 he works as Chief of the Division of Neuropsychiatry in the Department of Psychiatry. He is currently Co-director of the Swiss Reference Center for the neuropathological diagnosis of neurodegenerative disease. He is active in diagnostic, teaching and research activities.*

His main research interests are clinicopathological correlations in the different types of dementia, mainly Alzheimer's disease. In the last years his group has also focused on vascular brain lesions which can have an important role in the development of cognitive decline. He is author or co-author of more than 175 peer reviewed publications with an h-index of 49.

Cervone Alba
Psychiatrist, Psychotherapist, Italy

Born in Italy, November 23th, 1982
Spoken and written languages: Italian, English, French
Clinical medical competence; experienced in recovery
Profile

- Psychiatrist at Community Mental Health Service, Department of Mental Health, AUSL Foggia 1, Foggia (Italy) from the 15 June of 2014
- Psychotherapist from December, 1st of 2012
- Psychiatry Consultant for American Department of Veterans Affairs and American Social Security from September 2013
- Experienced in clinical medical practice till to the present

Education

- 2007: Medical Degree (110/110) at University of Naples (Italy) "Federico II"

Post Graduated Training

2012: Specialization in Psychiatry at University of Naples (Italy) "Federico II"
2012: Specialization in Psychotherapy at SIPI in Casoria, Naples (Italy)

Professional Experiences

- from May 2011 to May 2012: volunteer for a Psychodrama Project for recovery of psychiatric patients
- from July 2012 to June 2013: Psychiatrist Consultant, Department of Mental Health, AUSL Modena, Modena, I - Italy
- from July 2013 to January 2014: Psychiatrist Consultant at "Villa dei Pini", Avellino, Italy
- from March 2014 to June 2014: Psychiatrist Consultant at "Villa Camaldoli", Avellino, Italy
- from June 2014 to now: Psychiatrist at Community Mental Health Service, Department of Mental Health, AUSL Foggia, Foggia, I - Italy

Professional Experiences: Congress Partecipation as Speaker

- Oral Presentation of a Poster: "Efficacy, tolerability and remission: a 15 years switching study from oral antipsychotics" at EPA 2014 in February, , 2014, Munich, Germany
- "Metabolic alterations associated with first and second generation antipsychotics: a twenty-years open study" at "The Psychiatry beyond the DSM-5" in November, 13th - 15th, 2014 - Iseo, Italy
- "Neuroscience of Love" at "The Psychiatry beyond the DSM-5" in November, 13th - 15th, 2014 - Iseo, Italy

Professional Experiences: Teaching and Researcher Activities

- from July 2012 to June 2013: Psychiatrist for Regional Project "The Onset of Psychosis", Department of Mental Health, AUSL Modena, Modena, I - Italy
- from July 2012 to June 2013: Psychiatrist Consultant for Regional Team "Mental Health in Prison", Department of Mental Health, Emilia Romagna, I - Italy
- from September 2013 to June 2014: Psychiatric Teacher, School of Music therapy, Gesualdo (AV) - Italy

Cousins David
Clinical Fellow and Honorary Consultant Psychiatrist, Newcastle University, UK

Dr David Cousins studied medicine at Newcastle University, UK. Whilst at medical school, he undertook an intercalated degree in the imaging of bipolar disorder, and was awarded first class honours. Pursuing an interest in the affective disorder, he entered clinical training in both neurology and psychiatry, gaining Membership of the Royal College of Physiciansin 2000 and Membership of the Royal College of Psychiatrist in 2003. He defended his PhD thesis in 2011. Consistently funded by the Medical Research Council, he currently holds a Clinician Scientist Fellowship and leads a team investigating markers of response to lithium (www.teamlithium.co.uk).

Dr Cousins' research explores the use of novel magnetic resonance techniques to better understand the effects of lithium on the brain, with a view to predicting response to treatment in bipolar disorder. His work has provided new insights into the apparent effect of lithium on brain structure as well as accelerating multinuclear acquisition strategies. His latest project seeks to identify imaging biomarkers of lithium response through the development and application of true 3D lithium imaging in conjunction with multimodal proton magnetic resonance sequences. As a member of ConLiGen (www.ConLiGen.org), his findings will be interpreted within emerging genotype-phenotype relationships.

Dikeos Dimitrios
Associate Professor of Psychiatry, 1st Department of Psychiatry of Athens University Medical School, Athens, Greece

Dimitris G. Dikeos is an Associate Professor of Psychiatry at the 1st Department of Psychiatry of Athens University Medical School, Athens, Greece and a Visiting Research Associate at the Division of Psychological Medicine, Institute of Psychiatry, King's College London, London, UK. His research activities have focused on psychiatric genetics, sleep research, psychopharmacology and clinical studies in psychiatry. He has participated in various Multicentre Research Programmes in Europe and the U.S.A. such as: European Science Foundation, European Collaborative Studies of Affective Disorders, Johns Hopkins Genetic Epidemiology Schizophrenia Program, Meta-analysis of Sleep Laboratory Studies on Tolerance and Rebound Insomnia with Rapidly Eliminated Hypnotics, Maudsley Family Study, European Collaborative study by the Group for the Study of Resistant Depression, International Multicentre Study "FACTOR", etc. He is or has been member of various scientific and professional Societies and Boards, as well as member of the Executive Committees of the Hellenic Sleep Research Society, the International Neuropsychiatric Association, the Athens Medical Society, the Hellenic Society for the Advancement of Psychiatry and Related Sciences. He has also served as member of the Editorial Board of the "Archives of Hellenic Medicine" and

is a reviewer in many international Journals. Dr. Dikeos is the author or co-author of more than 100 full publications, out of which 50 articles in SCI Journals, among which: American Journal of Medical Genetics, British Journal of Psychiatry, Current Opinion in Psychiatry, International Clinical Psychopharmacology, Journal of Psycho¬somatic Research, Molecular Psychiatry, Nature Genetics, Psychiatric Genetics, and Science.

Dimellis Dimos
Consultant, 424 General Military Hospital, Thessaloniki, Greece

Graduated from the Medical School of Aristotle University of Thessaloniki in 1994, and completed his residency in psychiatry in 2002. He served as consultant, Psychiatric department, 404 General Military Hospital, Larissa, Greece (2003-2004) and currently is consultant at the rank of Lieutenant Colonel, Psychiatric department, 424 General Military Hospital, Thessaloniki, Greece, and also private practice ("EGO IDEAL", Private Institute of Mental Health). He is scientific associate, 2nd Psychiatric Department, Aristotle University of Thessaloniki (2006 - Today) and responsible for the continuous seminars of "Psychobiology" and "Psychopharmacology". As from 2007 he prepares his doctorate thesis ("Detection of bipolarity in Major Depressive disorder"). His interests include Psychopharmacology, Schizophrenia and other Psychotic disorders, Bipolar Spectrum disorders. He has participated in more than 50 International and Regional and meetings and congresses and was invited speaker for various scientific associations.

Dimitraka Maria
Psychiatrist in Adult General Psychiatry, Psychotherapist, Greece

Born in Greece (30.01.1976) and lives in Piraeus.
Married and mother of three children.
Earned medical degree from the ¬ University of Medicine and Pharmacy "G.T.POPA" in Iasi-Romania.
Completed psychiatric residency at the Psychiatric Hospital of Attica , in October 2011.
Trained in systemic therapy, CBT and psychodynamic psychotherapy.
Carried out publications covering the fields of psychopharmacology, geriatric psychiatry, and forensic psychiatry.
Member of the Hellenic Psychiatric Association, the Hellenic Forensic Psychiatric Association and the Severe and Enduring Mental Disorder Association.
Current position as psychiatrist at OKANA (Organization against drugs), private psychiatrist and scientific personnel of the 5th psychiatric department at the Psychiatric Hospital of Attica.

Dimopoulou Trisevgeni
Senior Research Fellow, "Aghios Charalambos" Mental Health Clinic, Heraklion, Crete, Greece

Dr Trisevgeni Dimopoulou, BSc, MSc, PhD is a research psychologist who completed educational studies and a psychology Master Degree at Lancaster University, UK. She went on to earn a PhD in health sciences from Coventry University (on the role of catastrophic cognitions in clinically anxious asthma patients). Since August 2013, she works as a senior research fellow at the "Aghios Charalambos" Mental Health Clinic in Heraklion, Crete, Greece. Her primary research interests includepsychosis, cognitive determinants of behaviour and quality of life. She is involved in several ongoing projects and is the author of three publications currently under review by major international journals.

Douzenis Athanasios
Associate Professor of Psychiatry and Forensic Psychiatry, Director of the Second University Psychiatry Department, Attikon Hospital, Greece

Athanassios Douzenis qualified in Medicine in 1985 from the Ioannina Medical School and did higher psychiatric training in the UK receiving an M. Med. Sci from Sheffield University Medical School. He trained in psychiatry in England (Sheffield and London) and became MRCPsych in 1992. He completed his doctorate in Athens University Medical School on Forensic Psychiatry under the supervision of Prof. Stefanis. Since his return in Greece (1995), he worked with OKANA where he helped establish the first substitution programme in Greece and was head of the largest methadone unit in Athens. He became a lecturer in Forensic Psychiatry in 2000 and Assistant Professor on the same subject in 2005. Initially he worked in Eginition Hospital and later moved on with Prof Soldatos and Lykouras to establish the Second Athens University Psychiatry Department in Attikon Hospital. He is has published 2 books about Forensic Psychiatry, has written more than 30 chapters in psychiatric books (3 with international publishers) and has 36 SCI publications. He has participated in numerous national and international psychiatric conferences. He is heading the Forensic Psychiatric Unit in the Second Psychiatry Department which is the only Forensic Unit in Greece.
He is President of the Section of Forensic Psychiatry of the Greek Psychiatric Association and is the publisher of the journal "Ate" (Ἄτη)
He is married and has three children

Einat Haim
Professor, School of Behavioral Sciences, Tel Aviv-Yaffo Academic College, Tel-Aviv, Israel

Haim Einat is a professor at the School of Behavioral Sciences, Tel Aviv-Yaffo Academic College in Israel and an adjunct professor at the Dept. of Clinical Biochemistry and Pharmacology, Ben-Gurion University of the Negev, Israel and in the College of Pharmacy at the University of Minnesota, USA. Professor Einat received diverse education with an undergraduate degree in biomedical sciences from the Hebrew University of Jerusalem, followed by graduate degrees in zoology (from Tel-Aviv University) and in neuroscience and behavioral sciences (McMaster University, Canada) and finally a Ph.D. in psychopharmacology from Ben-Gurion University of the Negev in Israel. Professor Einat received additional training as a post-doctoral fellow at the National Institute for Mental Health in Bethesda, MD and in 2004 accepted a faculty position at the College of Pharmacy, University of Minnesota. In 2011, Professor Einat moved back to his home country Israel and took his current position.
Professor Einat is using a combined behavioral, biochemical and molecular approach to study the underlying biology of affective disorders and to identify possible novel drug targets. His work is highly recognized by the scientific community with over 80 publications in the professional literature, numerous conference presentations and over 2000 citations. Professor Einat also serves on the editorial boards of a number of journals in his field of research and serves as an ad hoc reviewer most scientific journals in the field as well as a reviewer for many of the granting agencies

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Elisei Sandro
Professor of Psychiatry, University of Perugia, Italy

Sandro Elisei is a Professor of Psychiatry at the University of Perugia, Italy, where he teaches at the Faculty of Medicine and Psychology and schools of specializations: psychiatry, internal medicine, gynecology and geriatrics.
He conducts clinical activity at the “S. Maria della Misericordia Hospital” (Perugia) where is responsible for clinical psychopharmacology. In its research activities in the field of psychopathology, psychotherapy and psychopharmacology, he has published approximately 150 articles in national and international journals.
He is a member of the Italian Society of Psychiatry and the IAAP (International Association for Analytic Psycholgy). For six years he has been the Secretary of Italian Society of Psychiatry for the Umbria region.
In the year 2013 he has been appointed for scientific merits as “Senior Research Fellow” of the Bedforshire Center for Mental Health Research in association with the University of Cambridge.

Ferenidou Fotini
Psychiatrist in Training,
Eginiteion University Hospital of
Athens, Greece

Fotini Ferenidou MD, MSc, FECSM (Fellow of the European Board of Sexual Medicine) graduated from the Medicine School of the Aristotle University of Thessaloniki in 2004. She continued her studies at the same University and completed her Master degree on "Medical research methodology" in 2006.
Her major domain of interest is Sexual Medicine and since 2006 she is a research associate at the Center of Sexual and Reproductive Health (Institute for the Study of Urologic Diseases) of the Aristotle University of Thessaloniki, taking part in sexual dysfunction research. Her scientific work included her participation in the research, educational and clinical activities of the centre (men's health outpatient clinic, clinical trials, seminars, help-line etc). She completed the "Sexual Medicine Specialist training course" organized by the European Society for Sexual Medicine, as well as the 2-year postgraduate course on the "Therapy of Psychosexual dysfunctions" (2011) organized by the University Mental Health Research Institute of Athens, being part of the organizing committee since then.
She is a member of the European Society of Sexual Medicine (ESSM) since 2006, the year that she was awarded at the 9th ESSM annual congress in Vienna, the award for the "Best Presentation on Female Sexual Dysfunctions".
She has 5 scientific publications in the Pubmed, which have received 76 citations, 3 scientific publications in the Greek literature, while she has presented around 30 oral and poster presentations in Greek and International congresses.
Nowadays, she is working as a Psychiatrist in training at the Eginiteion Hospital of the University of Athens, while she is completing her PhD thesis in Female Sexuality, at the Medicine School of the Aristotle University of Thessaloniki.

Förstl Hans
Professor and Director, Department
of Psychiatry and Psychotherapy of
TUM-MED, Germany

Prof. Dr. H. Förstl (male) is the director of the Department of Psychiatry and Psychotherapy of TUM-MED. He is a clinical psychiatrist, neurologist and psychogeriatrician with extensive clinical and research experience. His clinical and research interests include many facets of the diagnosis and treatment of neuropsychiatric disease, particularly degenerative dementias, including clinical, neuroimaging, neurogenetic, and neurochemical studies. His scientific work has been published in over 300 peer-reviewed journal articles.

Fotiadis Petros
Director of Military Community Mental Health Center, at rank of Lieutenant Colonel, 424 General Military Hospital, Thessaloniki, Greece

Director of Military Community Mental Health Center, at rank of Lieutenant Colonel, 424 General Military Hospital, Thessaloniki, Greece.

Petros Fotiadis received his medical degree at Aristotle University of Thessaloniki (A.U.TH.), Greece in 1993. He was specialized in the 2nd Psychiatric department of A.U.TH, and completed his residency in psychiatry in 2002.

He served as consultant at rank of Major, Psychiatric department, 496 General Military Hospital, Didimoteixo, Greece (2002-2003), and as consultant at rank of Lieutenant Colonel, Psychiatric department, 424 General Military Hospital, Thessaloniki, Greece (2004-2012). He also works in his private practice (2002-Today).

He has received a 2 years Fellowship, 3rd Psychiatric department (A.U.TH), Greece (2012-2014), in "Neuropsychological Assessment of Cognitive deficits in Schizophrenia and other Organic Psychiatric disorders". He is director of Military Community Mental Health Center of 424 General Military Hospital.

His areas of clinical and research interest are Schizophrenia, Bipolar spectrum disorders, Organic Psychiatric disorders, Military and Disaster Psychiatry and Psychopharmacology.

He is in charge on Depot-clinic of MCMHC.

He has participated in more than 100 International and Regional meetings and congresses, in some of which as a speaker for specific areas of interest.

He has authored and co-authored in more than 20 papers delivered in Greek and International congresses.

He is also in collaboration with the National and Kapodistrian University of Athens, Faculty Nursing, in Post Graduate program "Disaster Medicine and Crisis Management".

He has participated at several Training Meetings and Masterclassesandat the translation of*Judith S.Beck book "Cogniteve Therapy Basics and Beyond" 1995 The Guilford Press.*

Also participated in the preparation of therapeutic recommendations for schizophrenia, in the framework of the project «Psychodiabasi».

Fountoulakis Konstantinos N.
Associate Professor of Psychiatry of the Aristotle University of Thessaloniki, AHEPA University Hospital, Thessaloniki, Greece

Konstantinos N. Fountoulakis, MD, is Associate Professor of Psychiatry at Aristotle University of Thessaloniki, AHEPA University Hospital, in Thessaloniki, Greece.

Dr. Fountoulakis received his medical degree (1989), performed his residency in psychiatry (1998), and earned his doctorate in psychiatry (1999) at the Aristotle University of Thessaloniki. He received a 3-year fellowship in psychosomatic medicine and a 1-year postdoctoral fellowship for research from the State Scholarships Foundation of Greece. Until 2003 he served as a medical officer in the Greek Armed forces retired with the rank of major. In 2005, Dr. Fountoulakis was a Research Fellow in the Department of Psychiatry, Division of Neuropsychiatry, at the University of Geneva in Switzerland.

Dr. Fountoulakis' areas of clinical and research interest are reflected in the topics that he teaches: general psychiatry, biological psychiatry, psychopharmacology, mood disorders, schizophrenia and personality disorders. He is an active member of a number of national and international professional organizations, including the EPA, APA, WPA, CINP, ECNP, ISAD, ISBD, EBF and others, peer referee for the Cochrane Collaboration and was most recently a member of the Collegium Internationale Neuro-Psychopharmacologicum (CINP) Advisory Board to the Task Force on the Usefulness of Antidepressants and the Mental Health Economics Task Force of the International Psychogeriatric Association (IPA).

In 2009 was appointed member and in 2012-4 chair of the Greek Ministry of Health Committee for the Administrative, Economic and Scientific Supervision of the Mental Health Units of the deinstitutionalization project. In 2013 was appointed chair of the Independent Committee of Experts for the Assessment of Mental Health Services of the Greek Ministry of Health.

He chairs the ISNP and since 2006, he served as Secretary, since 2008 as co-chair, and currently as Chair of the Private Practice Section and currently is chair of the section of Research Methods in Psychiatry, of the World Psychiatric Association. He served as Chair of the CINP Credentials and Membership Committee (2010-2) and currently he chairs the Neuropsychological and Psychometric Instruments Section, of the Greek Psychiatric Association.

Dr. Fountoulakis is Editor in Chief of *Annals of General Psychiatry* and is Section Editor of *Current Opinion in Psychiatry*. He has coauthored more than 350 papers delivered to congresses and more than 190 of them are published in international journals such as the *LANCET, BMJ, Am J Psychiatry, British Journal of Psychiatry, Biological Psychiatry, International Journal of Neuropsychopharmacology, Journal of Affective Disorders, Schizo-*

phrenia Research, Psychiatry Research, Bipolar Disorders, and the *Annals of General Psychiatry* among others, with over 2700 citations and h=32.

He authored or co-authored a number of chapters in books including the Mood disorders chapter for the Wiki project of the World Psychiatric Association (WPA). He has authored the book 'Bipolar disorders: An Evidence-Based Guide to Manic Depression' (Springer-Verlag, 2015). He has received a number of national and international research awards, including the 2012 Kraepelin-Alzheimer medal of the University of Munich. Since 2014 he is honorary member of the WPA.

Franza Francesco
Director of Psychiatric Department, Mental Health Department "Villa dei Pini", Avellino, Italy

Dr. Franza was born in Naples February 29, 1960.

Currently, he is a Director of Psychiatric Department at Mental Health Dept. "Villa dei Pini", Avellino - Italy. He graduated in Medicine and Surgery from the Naples University. At Psychiatry Institute of Naples (Director Prof. Mario Maj) he specialized in Psychiatry in 1994. Since 1992 he worked as a psychiatrist at Mental Health Dept. "Villa dei Pini", Avellino - Italy, where he directs First Neuropsychiatric Division of the Psychiatric Department (from 2001). Dr. Franza is now a member of several scientific associations (ECNP, EPA, Cent.Stu.Psi, WFSBP, AAS), and coordinator of scientific research and organization scientific events.

He's the author of several studies and articles.

The following are the main:

- Franza F., Cervone A. "Metabolic alterations associated with first second generation antipsychotics: a twenty-year study". Psychiatria Danubina, 26 (Suppl,1) 184-187, 2014
- Franza F., Cervone A. "Neuroscience of love". Psychiatria Danubina, 26 (Suppl,1) 266-268, 2014
- Franza F., Calabrese L., De Guglielmo S., Solomita B., Vecchione E., Fasano V.. La relazione tra care- giving e l'anziano depresso: il ruolo della fatica della compassione. Psicogeriatria, IX, 1 (supp), 144, 2014
- Franza F., Cervone A., Battista A., Calabrese L., Fasano V., Fiorentino N., Iandoli M., Mazziotti di Celso R., Soddu A., Solomita B. Metabolic alterations associated with first and second generation antipsychotics: an twenty-years open study. Article: EPA-0395; Topic: P27 - Psychopharmacology and Pharmacoeconomic , 22st European Congress of Psychiatry EPA 2014, Munich, Germany, 1-4 March, 2014
- Franza F, Fiorentino N, Soddu A, Fasano V, Calabrese L, Iandoli M, Mazziotti di Celso M, Battista A, Del Buono G. Ten-year antipsychotic treatment: longitudinal open-study on metabolic parameters. European Neuropsychopharmacology. P3.d.031. S476-S477, 2013

- Franza F, Aquino K, Fasano V, Soddu A, Fiorentino N, Mazziotti R, Calabrese L, Iandoli M, Battista A. Efficacy, tolerability and remission in switching antipsychotics study: nineteen years of schizophrenia. E-poster n. 263 Session Schizophrenia. 21st European Congress of Psychiatry EPA 2013, Nice 6-9 April 2013
- Franza F, Dinelli G, Fiorentino N, Mazziotti di Celso R, Dinelli E, Soddu A, Fasano V, Battista A. Efficacy, tolerability and remission: a 15 years switching study from oral antipsychotics (from typical to atypical…. and back) European Neuropsychopharmacology, 22, sup 2, S317, 2012
- Franza F Aquino K, Fasano V, Dinelli G, Dinelli U, Battista A . A real picture on treatment with aripiprazole for long-time on metabolic syndrome. P.3.c. European Neuropsychopharmacology, 17, S4, S425-424, 2007
- Monteleone P., Steardo L., Franza F., Maj M.. Neuroendocrine effect of short-term activation of GABAergic system in schizophrenia with and without tardive diskinesia. Neuroendocrinol Lett 10 (4), 1988

Giannakopoulos Panteleimon
Professor of Psychiatry, University of Geneva, Switzerland

Prof. P. Giannakopoulos, born in Athens, Greece in 1965, where he achieved his education and medical studies before specializing at the Faculty of Medicine in Geneva where he graduated as privat docent in 1997. In 1999 he achieved the board certification as specialist in psychiatry and psychotherapy followed in 2008 by the board certification in Old Age psychiatry and psychotherapy and in 2010 he added the Board certification in Liaison psychiatry. In 2005, he becomes Head of the Psychiatry Department of the Geneva University Hospital. Prof. P. Giannakopoulos developed an early interest in Dementia as well as in Alzheimer Disease which led him to be granted several times by the Swiss National Fund for Research since 1994.

The ongoing work at the Faculty of Medicine at the Geneva University is a patient-oriented research together with a translational research addressing the following topics.

Patient-oriented research

Identification of EEG markers of cognitive decline in mild cognitive impairment

Identification of biological and neuropsychological markers of cognitive decline in elderly patients with late-onset depression and bipolar disorders

Cognitive impact of vascular lesions in brain aging

Furthermore, a European research fund has granted prof. P. Giannakopoulos together with other main researchers in the topic of the identification of functional and structural biomarkers of AD.

Gold Gabriel
Professor, University of Geneva, Switzerland

Professor Gabriel Gold is currently Chief of Service in the Department of Rehabilitation and Geriatrics of the University Hospitals of Geneva where he is responsible for a 146 bed sector of the Geriatrics Hospital, including a unit specializing in acute medical care for demented patients. His service also includes a large outpatient Memory Clinic. He has trained in France and in the United States where he received his board certifications in Internal Medicine and in Geriatrics. He has extensive clinical experience in geriatrics and the care of people with cognitive disorders. His main research interests include dementia and cognitive impairment focusing more specifically on diagnosis, clinicopathologic correlations and vascular lesions. He is the author of more than 100 peer-reviewed articles in this field with over 2'000 citations and an H index of 24.

Gonda Xenia
Assistant Professor, Department of Clinical and Theoretical Mental Health, Semmelweis University, Budapest, Hungary

Xenia Gonda MA PharmD PhD is a clinical psychologist and pharmacist currently working as assistant professor at the Department of Clinical and Theoretical Mental Health at Semmelweis University, Budapest. She is also affiliated with the Department of Pharmacodynamics at Semmelweis University, with theNeuropsychopharmacology and Neurochemistry Academic Research Group of Hungarian National Academy of Sciences and Semmelweis University, and the Laboratory for Suicide Research and Prevention of the National Institute of Psychiatry and Addictions. Currently she is recipient of the Bolyai Janos Research Fellowship of The Hungarian Academy of Sciences. She is engaged in full clinical work in addition to teaching at various universities and research. Her main research fields include the genetic background of personality and psychiatric illnesses, pharmacotherapy of bipolar disorders and biopsychosocial approach to suicidal behaviour as well as psychological aspects related to the female reproductive cycleShe is the author of more than 150 scientific publications, primarily on the biopsychosocial and genetic aspects of personality, mood disorders, and suicide.

Gonidakis Fragiskos
Lecturer of Psychiatry in Athens University, Medical School, Athens, Greece

Fragiskos Gonidakis is a Lecturer of Psychiatry in Athens University, Medical School. He is currently the Head of Eating Disorders Unit of Athens University 1st Psychiatric Department at Eginition Hospital. He has trained in Cognitive Behavioral Therapy, Systemic Family Therapy and Dialectical Behavioral Therapy. His clinical and research interests are focused on Eating Disorders, Transcultural Psychiatry and Borderline Personality Disorders. He has worked extensively in training and supervising both in Greece and abroad mental health experts in the psychotherapeutic treatment of Eating Disorders. He is the co-writer of three books on Eating Disorders: "Anorexia Nervosa" and "Talking about Eating Disorders" by F. Gonidakis and E. Varsou and "Eating Disorders. Cognitive Behavioral approach" by F. Gonidakis and D. Charila. In the past he held the positions of president and secretary of "Hellenic Student Comittee for Blood Donation", secretary of the greeek delegation of "Doctors of the World" and secretary of the "Greek Association of Psychiatric Trainees". He is currently the president of the "Greek Association of Behavioral Research".

Kanaki Aikaterini
Forensic Pathologist, Department of Forensic Sciences, University Hospital of Heraklion, Crete

Kanaki Katerina, MD, PhD, is a Forensic Pathologist at the Department of Forensic Sciences, of the University Hospital of Heraklion, Crete. She followed postgraduate studies at the Forensic Department of Lihigh Valley Hospital, Allentown Pennsylvania USA, as well as at the Forensic Department of Glasgow University, Great Britain and at the Forensic Department, Iasi Romania. Her book "Basic Forensic Pathology" was donated to Hellenic Police Academy, and represents the main police students and post-graduate police students book since 2010. She collaborates scientifically with a lot of Forensic Departments worldwide, with the Department of Medicine and Genome Sciences, University of Seattle, USA, as a research associate and other Medical departments. Her research interests include suicide research, deaths caused by motor vehicle accidents, drowning cases, fatal firearm's cases, deaths caused by pointed and sharp-edged weapons and others.

Kara Nirit Z.
PhD candidate, Department of Clinical Biochemistry, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beersheba, Israel

Education:

October 2011 - present

PhDcandidate, Department of Clinical Biochemistry, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beersheba, Israel. Mentors: Profs. GalilaAgam and Haim Einat. Anticipated completion: Dec 2015.

2009 - 2011

M.Sc.Department of Clinical Biochemistry, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beersheba, Israel. Mentors: Profs. GalilaAgam and Haim Einat.

2005-2007

B.EMS, Department of Emergency Medicine, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beersheba, Israel.

Employment:

Oct. 2014 - present

Associate Faculty, Tel Aviv-Yaffo Academic College.

Nov. 2011 - present

Research Assistant and laboratory supervisor, Psychobiology laboratory, Tel Aviv-Yaffo Academic College, Tel-Aviv, Israel.

Nov. 2011 - present

Ad hoc tutoring and mentoring for undergraduate students, Tel Aviv-Yaffo Academic College, Tel-Aviv, Israel.

Nov. 2011 - present

Teaching assistant, Physiological Psychology, Tel Aviv-Yaffo Academic College (including frontal teaching).

Dec.2004- Jul.2009

Natali Seculife-Advanced Medical and Emergency Services, Paramedic in mobile intensive care units

Aug.2002- Nov.2004

Israel Defense Forces, Paramedic and instructor in military mobile intensive care units.

Research awards

Dec 2012 - present

Challenges in Biomedicine Scholarship, Ben-Gurion University of the Negev.

March 2014

Meritorious Poster Award, The 18th annual meeting of the Israel Society for Biological Psychiatry, Hagoshrim, Israel.

Sept 2013

Travel Award.The National Institute for Psychobiology in Israel.

Sept 2013

Excellence based Travel Award, Dean of Health Sciences, Ben-Gurion University of the Negev, Israel.

Karavelas Vangelis
Research Associate, 3rd Department of Psychiatry, Aristotle University of Thessaloniki, Greece

Dr Karavelas received his degree in Medicine in 2002 from the Medical school from the University of Ioannina, Greece, and spent his residency in Psychiatry in the 3rd Department of Psychiatry at the Aristotle University of Thessaloniki. He is active as speaker and researcher for the last few years and currently he works on his PhD on Bipolar Disorder. He is Research Associate in the 3rd Department of Psychiatry at the Aristotle University of Thessaloniki and works in private practice. Among other activities, he participated in the workgroup for the development of the Treatment Guidelines for Bipolar Disorder in Greece. Since 2014 he is Secretary of the section on Private Practice psychiatry of the World Psychiatric Association.

Kasper Siegfried
Professor of Psychiatry and Chairman of the Department of Psychiatry and Psychotherapy, Medical University of Vienna, Austria

Dr. Siegfried Kasper is Professor of Psychiatry and Chairman of the Department of Psychiatry and Psychotherapy at the Medical University of Vienna, Austria. Born in Salzburg, Austria, he was educated at the medical schools of the University of Innsbruck, Austria and the Universities of Freiburg and Heidelberg, Germany. Dr. Kasper gained clinical and research experience in psychiatry at the Central Institute of Mental Health, Mannheim, Germany, the Psychiatric Department of the University of Heidelberg, Germany, the Clinical Psychobiology Branch of the National Institute of Mental Health, Bethesda, Maryland/USA, and the Psychiatric Department of the University of Bonn, Germany; in neurology at the Neurological Department of the University of Heidelberg in Mannheim; and psychotherapeutic and psychoanalytic training at the Ausbildungsinstitut für Psychotherapie und Psychoanalyse in Heidelberg/Mannheim, Germany.

Dr. Kasper published 520 in PubMed listed publications (Citation Index: 16.373, Hirsch-Index: 62) and more than 250 books or book chapters, in various areas of psychiatry. He concentrates on the biological bases of mental disorders and their possible treatment approaches. Furthermore, he has conducted studies in psychopathological as well as clinical areas. Dr Kasper is a frequent national and international speaker and continues to be actively involved in research programmes studying depression, anxiety, psychosis, and dementia.

Dr. Kasper serves/served on the executive committees and advisory boards of several national and international societies, such as the European College of Neuropsychopharmacology (ECNP) and the European Psychiatric Association (EPA). He has been elected to the Executive Committee of the International College of Neuropsychopharmacology (CINP) for the period of 2012 to 2016. Moreover Dr. Kasper is Chair of the World Psychiatric Association (WPA) Section of Pharmacopsychiatry. He

is Founding President of the Austrian Society of Drug Safety in Psychiatry (ÖAMSP) and of the Austrian Society of Neuropsychopharmacology and Biological Psychiatry (ÖGPB). Furthermore, he is an Honorary Member of the Czech and Romanian Societies of Neuropsychopharmacology, the Hungarian Psychiatric Association and a Fellow of the Royal College of Psychiatrists, UK, as well as of the Ukrainian Association of Psychiatry. Furthermore, he has been appointed Honorary Professor at the University of Hong Kong, China in 2005and Honorary Professor of the Universidad Andrés Bello Santiago de Chile in 2014. In 1997, he was President of the 10th ECNP Congress, was Chairman of the Local Organizing Committee of the WPA Thematic Conference in 2004 and Co-Chair of the Local Organizing Committee of the WFSBP Congress 2005 and in 2007 Local Advisor for the ECNP congress in Vienna. In 2009, he was President of the WFSBP Congress in Paris.From 2005 to 2009 Dr. Kasper was President of the World Federation of Societies of Biological Psychiatry (WFSBP) and has been appointed as Honorary President of the WFSBP in 2013.

Dr. Kasper serves on the editorial boards of numerous learned journals, including The Lancet Psychiatry, Journal of Clinical Psychiatry,CNS Spectrums, Journal of Affective Disorders, Pharmacopsychiatry, European Archives of Psychiatry and Neuroscience. He is Chief-Editor of the World Journal of Biological Psychiatry and the International Journal of Psychiatry in Clinical Practice, and Field Editor of the International Journal of Neuropsychopharmacology.

As a result of his research expertise he is the receipient of numerous national and international scientific and public awards and prizes and has recently been acknowledged with the Commander's Cross II-nd class of the Republic of Austria.

Kastanaki Anastasia E.
Clinical Psychologist, General Hospital of Chania, Crete, Greece

Anastasia E. Kastanaki, MSc, PhD, is a clinical psychologist at the General Hospital of Chania, Crete, scientifically responsible of the Psycho-Oncology Center, and also she collaborates with the Department of Forensic Sciences, Faculty of Medicine, University of Crete, Greece, as a research associate. Her research interests include clinical and health psychology, psychotherapy, psychiatric epidemiology, mental illness, suicide research and self-harm, suicide prevention, psycho-oncology, psychosocial/behavioral interventions for cancer patients, and positive adaptation to chronic illness.

Kontaxakis Vasileios
Professor of Clinical and Social Psychiatry in the Athens University, 2nd Psychiatric Department, «Attikon» General Hospital, Athens, Greece

Dr. Vassilis Kontaxakis is Professor of Clinical and Social Psychiatry in the Athens University, 2nd Psychiatric Department, "Attikon" General Hospital, Athens, Greece. He is Editor-in-Chief of the Journal "Psychiatriki"-the official journal of the Hellenic Psychiatric Association (HPA)-and Chair of the Section on Preventive Psychiatry of the World Psychiatric Association (WPA). He is, also, Chairman of the Athens Division and the Preventive Psychiatry Section of the HPA. He has made presentations on various aspects of Psychiatry in both national and international congresses (social psychiatry, deinstitutionalization, clinical psychopharmacology, psychopathology, suicide behaviour etc). He has around 250 full papers in national, international journals as well as chapters in books. He has been editor of two international (English) books and eleven Greek books. He has received awards for papers presented in three national and in two international congresses.

Kouniakis Filippos
Psychiatrist, Thessaloniki, Greece

Philippos Kouniakis graduated from the Aristotle University of Thessaloniki, Medical School in 1996, completed his residency in psychiatry in the 2nd University Psychiatric Department, Aristotle University of Thessaloniki in 2003 and obtained his doctorate in 2011. He worked during 2003-2011 as consultant in the Psychiatric department, Unit of Social Care "St Panteleimon" and also since 2003 works in private practice. Since 2004 he is Scientific Associate, 2nd Psychiatric Department, Aristotle University of Thessaloniki. He has participated in a number of congresses, workshops and meetings as speaker and trainer. His scientific interests include psychopharmacology, Schizophrenia and other Psychotic disorders, Bipolar Spectrum disorders and Group Psychotherapy. He is author and co-author of several scientific papers, published in well-known psychiatric journals.

Koupidis Sotirios
Occupational Medicine Specialist, Athens, Greece

Dr Koupidis was born in 1975 in Veroia - Macedonia. He graduated from the Aristotle University of Thessaloniki School of Medicine and the National School of Public Health (MSc in Health Management). He completed his PhD at the University of Athens School of Medicine.
He served as Deputy CEO and CEO in three Psychiatric Hospitals and in the case of Chania and Corfu those two Psychiatric Hospitals were transformed in Community based Mental Health Services Network.
He was a doctor in the program "Promotion, Prevention and Public Health", emphasizing in assessing and restoring health for immigrants in a novice social context in the Municipality of Athens.
He was the administrative coordinator of the administration

task force of the Ministry of Health for the first nation-wide epidemiological surveys for mental disorders in adults.
Dr Koupidis also has significant teaching experience, namely in the Technological Educational Institute of Kalamata, the National Centre for Public Administration, on subjects such as Epidemiology and Public Health, Health Services Organization and Management and Healthcare Systems.
Mr Koupidis was a member of the Scientific and Technical Support Secretariat of the Independent Committee of Special Experts for the Healthcare System (Task Force for Health).
He has accomplished 16 publications in official journals with a significant Impact Factor, 90 free papers in conferences and 33 attendances in round tables.
He is an occupational doctor. He attended his residency in the General Hospital of Athens "Evaggelismos" and as part of his training he attended a three months specialty training at Mount Sinai Medical School, Department in Epidemiology Center of Occupational and Environmental Health in New York. He is also working as an expert in a WHO project for the implementation of reform in the Primary Health Care in Greece.
He has received three awards for most important administrative work, on issues concerning the improvement of functioning of health services.

Kövari Enikö
Unit of Biomarkers, Division of General Psychiatry, Department of Mental Health and Psychiatry, University School of Medicine, Geneva, Switzerland

Enikö Kövari has worked since 1995 in the Department of Psychiatry, Division of neuropsychiatry of the Geneva University Hospitals. She obtained her medical diploma in 1981 at the Medical University of Budapest, Hungary (Swiss Diploma in 2001 at the University of Geneva) and acquired the title of specialist in pathology in 1985 at the Medical University of Budapest; recognized in 2007 in Switzerland.
"Médecin adjointe" since 2004, she obtained the title: *"Privat docent"* in 2006 and "chargé de cours" (senior lecturer) in 2009 at the University of Geneva with her studies on the neuropathology and clinicopathological correlations of non-Alzheimer type of dementias. She participates in neuropathological diagnosis, teaching and research activities. She is a key participant in the Swiss Reference Center for the neuropathological diagnosis of neurodegenerative disease. Her main research interests are clinicopathological correlations in the different types of dementia, mainly in vascular, Parkinson and Alzheimer's diseases. She is author or co-author of more than 70 peer reviewed publications with an *h-index* of 25.

Kurz Alexander
Head of the Centre for Cognitive Disorders at the Department of Psychiatry and Psychotherapy of Technische Universität München, Germany

Professor Dr. Alexander Kurz is head of the Centre for Cognitive Disorders at the Department of Psychiatry and Psychotherapy of Technische Universität München, Munich. His research is currently focused on enhancing public awareness and understanding of dementia; investigating the symptomatic and potentially disease-modifying effects of cognitive and physical exercise in older adults with or without ongoing neurodegeneration, as well as on improving the management of people with early onset dementias by supporting their carers through educational, web-based, interactive e-learning programmes. Dr. Kurz has extensive experiences with performing clinical trials evaluating not only symptomatic, but also potentially disease-modifying treatment strategies in Alzheimer's disease. Dr. Kurz has authored or co-authored more than 300 peer-reviewed scientific papers and book chapters.

Leicht Gregor
Department of Psychiatry and Psychotherapy, University Medical Center Hamburg-Eppendorf, Germany

Membership
Organization for Human Brain Mapping (OHBM)
German Society for Psychiatry, Psychotherapy and Neurology (DGPPN)
Awards
OHBM (Organization for Human Brain Mapping): Travel Award 2007
DGPA (Deutsche Gesellschaft für Psychophysiologie und ihre Anwendung):
Young Scientist Award 2012
Ad hoc Reviewer
Archives of General Psychiatry
Biological Psychiatry
Journal of Psychiatric Research
Schizophrenia Research
Neuropharmacology
Current Pharmaceutical Biotechnology
MD thesis
12/2007
Topic: „The early auditory evoked gamma-band response and ist sources in the auditory and anterior cingulate cortex: influence of task difficulty and mental effort" under the guidance of Prof. Dr. U. Hegerl, Department of Psychiatry and Psychotherapy, Ludwig-Maximilians-University of Munich („magna cum laude")
Affiliation
since 01/2010
Department of Psychiatry and Psychotherapy, University Medical Center Hamburg-Eppendorf (Head: Prof. D. Naber)
Resident physician and scientific assistant of the Psychiatry Neuroimaging Branch (PNB, Head: Prof. C. Mulert)

Member of the Collaborative Research Centre 936 "Multi-Site Communication in the Brain"
12/2005-12/2009
Department of Psychiatry und Psychotherapy, Ludwig-Maximilians-University Munich (Head: Prof. H.J. Möller)
Resident physician and scientific assistant of the Clinical Neurophysiology and Functional Imaging Branch
2001-2005 Student research assistant, Clinical Neurophysiology and Functional Imaging Branch, Department of Psychiatry and Psychotherapy, Ludwig-Maximilians-University Munich

University education

05/2005 MD
1998-2005 Medicine (Ludwig-Maximilians-University Munich)

Lionis Christos
Professor of General Practice and Primary Health Care, School of Medicine, University of Crete
Head of the Clinic of Social and Family Medicine, School of Medicine, University of Crete, Greece

Lionis Christos, MD, PhD, HonFRCGP is a Professor of General Practice and Primary Health Care at the School of Medicine, University of Crete and Head of the Clinic of Social and Family Medicine at the School of Medicine, University of Crete. With a passion for the importance and the value of PHC and Family Medicine, Christos is actively involved in the development of Primary Care and General Practice on Crete, particularly in rural areas. He currently co-ordinates a thriving GP network with 18 GPs, and is also responsible for the supervision of a number of PhD students. Christos and his research team at the University of Crete are involved in four FP7 European funded projects (one as coordinator). Christos is involved in an editorial and advisory capacity with a number of international journals. Also is a member of the Executive Boards of various professional organisations and has published 260 papers in international journals (cited in PubMed).

Mavreas Venetsanos
Professor of Psychiatry of the University of Ioannina
Director, Department of Psychiatry, University Hospital of Ioannina, Greece

Professor Venetsanos Mavreas was born in Athens in 1951. He studied medicine at the University of Athens and specialized in Neurology and Psychiatry in Athens. From 1983 to 1988, he worked at the Maudsley Hospital and the Institute of Psychiatry in London, where he took his Ph.D. in 1990. From 1988 to 2000, he worked at the Department of Psychiatry of the University of Athens Medical School and the University Mental Health Research Institute in Athens. From 2000 to date, he is Professor of Psychiatry at the University of Ioannina Medical School and Director of the Department of Psychiatry of the University Hospital of Ioannina. The main topics of his work is psychiatric epidemiology, social and community psychiatry, trans-cultural psychiatry and research methodology in mental health. He is member of the Hellenic Psychiatric Association, the World Psychiatric Association and President of the Hellenic

College of Academic Psychiatry. He has been advisor of the World Health Association in issues of mental health, psychiatric classifications, research instruments and disability. He is deputy member of the Health Central Council of Health. He has published over 100 scientific papers in international and Greek scientific journals and books.

Michopoulos Ioannis
Assistant Professor of Psychiatry, School of Medicine, University of Athens, Greece

Ioannis Michopoulos, psychiatrist and Assistant Professor of Psychiatry in the School of Medicine, National and Kapodistrian University of Athens in Greece. He is a teaching cognitive psychotherapist and responsible of the Eating Disorders Unit of the 2nd Department of Psychiatry in Attikon Hospital. He has more than 40 international publications and more than 100 citations in the international literature. His studies include clinical and neuropsychological interests, mainly in mood disorders.

Miziou Stella
Psychologist, Thessaloniki, Greece

Stella Miziou is a Psychologist in Thessaloniki, Greece. Ms Miziou received her degree in Psychology in 2009 at the Aristotle University of Thessaloniki. In 2010 she started a postgraduate degree at the Hellenic School of Research for Behavior with a major in Cognitive-Behavioral Psychotherapy (CBT). Simultaneously Ms Miziou was working at a Private Psychiatric Clinic in Veria, Imathia from March 2010 till July 2011. As part of her undergraduate studies, Ms Miziou voluntarily assisted at the General Hospital of Trikala in the Department of Psychiatry and also at the Municipal House for Psychosocial Rehabilitation, where both positions were held in the summer of 2008 from June till September. Since 2005 till now, she has been attending Conferences and Seminars held in Northern Greece and has worked as assistant in a number research projects.

Moeller Hans-Jürgen
Emeritus Professor of Psychiatry, Ludwig-Maximilians University, Munich, Germany

Hans-Jürgen Möller has been working in the field of psychiatry for 30 years. After obtaining his Doctor of Medical Science in 1972 from the Universities of Göttingen and Hamburg, Germany, he then specialised in psychiatry and postgraduate training at the Max Planck Institute of Psychiatry in Munich. Professor Möller completed a postdoctoral thesis (habilitation) in psychiatry in 1979. From 1980 to 1988 he was professor of psychiatry at Munich Technical University, and from 1988 to 1994 full professor of psychiatry and chairman of the Psychiatric Department at the University Bonn, Bonn, Germany. He is currently full professor of psychiatry and chairman of the Psychiatric De-

partment at the Ludwig-Maximilians-University, Munich.
Professor Möller's main scientific contributions include clinical and neurobiological research into psychiatry, schizophrenia and depression and clinical psychopharmacology. He has been a member of the boards (executive committees) of several national and international psychiatric societies. Currently, he is president of the European Psychiatric Association (EPA). He serves as chairman of the Section on Pharmacopsychiatry of the World Psychiatric Association (WPA). For two years he has been a member of the executive committee of the Collegium Internationale Neuro-Psychopharmacologicum (CINP), where he is now president-elect. From 1997 to 2001 he was president of the World Federation of Societies of Biological Psychiatry (WFSBP), where he is now honorary president.
In addition to authoring and co-authoring over 1000 international publications and several books, he is also chief editor of The World Journal of Biological Psychiatry, main editor of European Archives of Psychiatry and Clinical Neuroscience, and editor of two psychiatric journals, Nervenarzt and Psychopharmakotherapie. He holds positions on the editorial boards of numerous national and international psychiatric journals.
In 2008 Professor Möller was awarded the prestigious Jean Delay Prize from the World Psychiatric Association.

Moeller-Leimkühler Anne Maria
Department of Psychiatry, Ludwig-Maximilians University,
Munich, Germany

Qualifications

2011	Extraordinary professorship or "Social Science in Pschiatry"
2005	Habilitation for `Sociological Psychiatry´ at the Medical Faculty, University of Munich, Germany
1988	Doctoral degree in Social Science, University of Wuppertal, Germany
1980	Diploma in Social Science, University of Bochum, Germany

Positions

since 1998:	Senior social scientist at the Department of Psychiatry, Ludwig-Maximilans-University of Munich
1991-1997:	Lecturer on Public Health, University of Düsseldorf
1982-1998:	Scientific collaborator, Department of Psychiatry, University of Düsseldorf

Main activities

Main research fields: gender and mental health, caregiver burden, patient satisfaction.
Chair of the expert group "Gender" of the German National Suicide Prevention Program
Scientific consultant of the German Society of Men and Health and of the Foundation Men´s Health, Berlin

Moysidou Stefania
Psychologist at Hellenic Police, Division of Aliens and Border Protection, Department of illegal Migration and Psychological Consultant with Sports Academies, Greece

Stefania Moysidou, is psychologist at *Hellenic police, Division of Aliens and Border Protection, Department of illegal migration,* research associate *with the* Aristotle University of Thessaloniki and psychological consultant with s*ports Academies*. She received her degree in psychology (2006) from the Aristotle University of Thessaloniki. She has training, clinical and research experience in the fields of Cognitive - Behavioral Psychotherapy and neuropsychology and psychometrics. She has worked on a voluntary basis for various NGOs. She has participated as a speaker and trainer in a number of Greek and international conferences and workshops.

Mulert Christoph
Professor of Psychiatry and Head of the Psychiatry Neuroimaging Branch, Department of Psychiatry and Psychotherapy, Hamburg University, Germany

Current position:
Professor of Psychiatry
Head of Psychiatry Neuroimaging Branch
Academic education
06/2000
License to practise medicine (Approbation), Medical Association Berlin
11/1998
Medical state examination, Free University, Berlin
10/1993 - 10/1998
Study of Medicine, Free University, Berlin
Academic degrees
01/2008 - 11/2009
Lecturer (Privatdozent) in Psychiatry and Psychotherapy, Ludwig-Maximilians-University, Munich
12/2007
Habilitation in Psychiatry and Psychotherapy, Ludwig-Maximilians-University, Munich (supervisor: Prof. Dr. H.-J. Möller)
09/2002
Medical doctorate (Dr. med.), Free University, Berlin (supervisor: Prof. Dr. W.M. Herrmann) “summa cum laude”
Professional experience
03/2010 - present
Consultant Psychiatrist, Dept. of Psychiatry and Psychotherapy, Hamburg University
12/2009 - present
Professor of Psychiatry and Head of the Psychiatry Neuroimaging Branch, Dept. of Psychiatry and Psychotherapy, Hamburg University
12/2007 - 11/2009 Consultant Psychiatrist, Department of Psychiatry and Psychotherapy, Ludwig-Maximilians-University,

Munich
12/2006 - 11/2009
Head of the Functional Brain Imaging Group, Department of Psychiatry and Psychotherapy, Ludwig-Maximilians-University, Munich
08/2008 - 11/2008
Visiting Associate Professor, Department of Psychiatry, Harvard Medical School, Boston

Other academic functions and honors

2007
Research Award Imaging in Psychiatry of the German Society of Psychiatry and Psychotherapy
2007
Travel Award, Society for Human Brain Mapping
2006
Early career contribution award, International Society for Neuroimaging in Psychiatry and the EEG & Clinical Neurophysiology Society
2006
Sponsorship award, German Society for Biological Psychiatry

Nystazaki Maria
Mental Health Nurse, Agioi Anargyroi, University Hospital of Athens, Greece

Mrs Maria N. Nystazaki, MSc, is a fully qualified mental health nurse who graduated from the University of Athens, Faculty of Nursing, earned the MSc in Mental Health Nursing offered by the same university, and is currently a PhD candidate there. She is employed by the University of Athens Agioi Anargyroi Hospital. Mrs Nystazaki has lead responsibility in training mental health nurses on the administration of depot/long acting antipsychotic injections. She has worked as part of a research team both as a translator and a biostatistician for 5 years and has good experience in project and team management. She is currently completing her PhD thesis at the University of Athens under the supervision of Professor Giorgos Alevizopoulos, titled “Monitoring of the Decision Making Competence and Adherence of Patients with Schizophrenia and Schizoaffective Disorder on LAI Treatment”. Mrs Nystazaki has translated and validated the Glasgow Antipsychotic Side-Effect Scale (GASS) in the Greek language.

Papadopoulou Styliani
Consultant General Adult Psychiatrist, "Aghios Charalambos" Mental Health Clinic, Heraklion, Crete, Greece

Dr Styliani Papadopoulou, MD, is a Consultant General Adult Psychiatrist. She studied medicine at the Aristotle University of Thessaloniki, Greece, and trained in psychiatry at the University of Crete General Hospital in Heraklion (Greek Board Certification in Psychiatry, 2013). She has also worked at the Centre Hospitalier Universitaire Vaudois (CHUV) in Lausanne, Switzerland. She is currently completing her PhD thesis at the University of Crete under the supervision of Professor P. Simos, titled "Association of Neuropsychological Deficits and Imaging Findings in Patients with Head Injuries". Dr Papadopoulou's main clinical focus is mood and anxiety disorders, with a special interest in female mental health. Since April 2014, she is a fellow at the Female Mental Health Unit of Eginition University Hospital in Athens, headed by Professor I. Zervas. She works in the private sector, both at her own consulting rooms and the "Aghios Charalambos" Mental Health Clinic in Heraklion, Crete, Greece.

Papageorgiou Charalambos
Professor of Psychiatry, University of Athens, Greece

Charalabos C. Papageorgiou was born in Arcadia, Greece, in 1954. He trained in medicine at Athens University Medical School (graduaded, 1980) and he received his Certificate of the Specialty of Neurology and Psychiatry in 1987, following board examinations.

He received a scholarship from 1980 until 1983 for specialization in the 'Forschunstelle fuer Psychotherapy' University Ulm Germany. His doctoral thesis was presented to the University of Ulm Medical School Germany at 1983.

He also received a scholarship from the State Scholarships Foundation (post-doc) study in the Institute of Communications & Computer Systems, National Technical University of Athens regarding the application of the Neural Networks Technology in the Psychophysiology (1991-1993).

He is currently Professor of Psychiatry at University of Athens Medical School and Chairman of the 1nd Department of Psychiatry University of Athens Medical School, Eginition Hospital (since September 2014). He was chairman of the 2nd Department of Psychiatry, University of Athens Medical School, Attikon Hospital (2013-2014). He is the Head of the Psychophysiology Laboratory, 1st Department of Psychiatry, University of Athens, Greece, and the Head of the Psychophysiology Laboratory at the University Mental Health Research Institute (UMHRI) Athens, Greece.

He has been Staff Psychiatrist and Research Assistant at the Athens University Medical School Department of Psychiatry (1987-1991). He served as: Lecturer at the Department of Psychiatry, University of Athens (1991-1996); Assistant Professor

at the Department of Psychiatry, University of Athens (1996-2006), Associate Professor at the Department of Psychiatry, University of Athens (2006-2012), Professor at the Department of Psychiatry, University of Athens (2012-now).
Dr. Papageorgiou' research activities have focused on psychophysiology, psychosomatic, and clinical studies in psychiatry. He has participated in various Research Programs in Germany, Greece and Europe.
He is member of various scientific and professional Societies and Boards, and is the author or co-author of more than 160 articles in peer-reviewed journals and invited chapters in edited books. He is reviewer in many Scientific Journals.

Perneczky Robert
Co-head of the Neuroepidemiology and Ageing (NEA) Research Unit, Neuroepidemiology and Ageing Research Unit of the Imperial College of Science, Technology and Medicine, London, UK

Professor Dr. Robert Perneczky is the co-head of the Neuroepidemiology and Ageing (NEA) Research Unit of Neuroepidemiology and Ageing Research Unit of the Imperial College of Science, Technology and Medicine, London. He has previously been responsible for the biochemical research laboratory at Technische Universität München, Department of Psychiatry and Psychotherapy, Munich. His research focuses on the development of new cerebrospinal fluid and blood biomarkers of Alzheimer's disease and other neurodegenerative conditions. Other main scientific interests include neuroimaging, neurogenetics, and the phenomenon of cognitive and brain reserve. Dr Perneczky's research has been published in over 100 peer-reviewed articles. He spent research sabbaticals at New York University, Center for Brain Health and University of Cambridge, Department of Clinical Neurosciences.

Popovic Dina
Bipolar Disorders Program of Hospital Clinic, University of Barcelona, Spain

Dr. Dina Popovic has received her degree in Medicine, cum laude, from the University of Bologna (Italy) and completed residency in Psychiatry at the University of Pisa. Alongside with active clinical practice Dr. Dina Popovic performs clinical research at Bipolar Disorders Program of Hospital Clinic, University of Barcelona, Spain, headed by Dr. Eduard Vieta, and is a PhD student at the Department of Psychiatry, Neurobiology, Pharmacology and Biotechnology of University of Pisa, Italy under the guidance of Dr. Giulio Perugi. Her scientific interests and publications primarily include Bipolar disorder, cyclothymia and dual diagnosis, with a special focus on clinical, pharmacological, genetic and neurophysiological aspects of mood disorders.

Ritter Philipp
University of Dresden, Germany

Dr. Philipp Ritter, born in 1975, studied medicine at University College London (Great Britain). After working in general medicine & surgery (Great Britain), emergency medicine (Australia) and neurology (Germany) he trained as a psychiatrist in Hamburg and Dresden (Germany). For the past six years Dr. Ritter has been part of the affective disorders group at the University of Dresden, mainly working in the outpatient department with a special focus on bipolar disorder.
Dr. Ritter's research focusses on chronobiological facets of bipolar disorder as well as pharmacological treatment options. He is currently assisting Prof. Bauer (Dresden) in the coordination of a Germany wide research project investigating various aspects of bipolar disorder and leads his own working group in the investigation of melatonin suppression and phase shifts in bipolar patients.

Schulze Thomas G.
Professor and Director of the Institute of Psychiatric Phenomics and Genomics, Ludwig-Maximilans-University of Munich, Germany
Department of Psychiatry, The Johns Hopkins University, Baltimore, USA

Professor Thomas G. Schulze, born in 1969, studied medicine in Germany, the USA, and Catalonia. He trained as a psychiatrist and held positions in Germany (Bonn, Mannheim, Göttingen) and the USA (Chicago, Bethesda, Baltimore). Since 2014, he has held the position of Chair and Director of the Institute of Psychiatric Phenomics and Genomics at the Ludwig-Maximilans-University of Munich (IPPG). He is also on Faculty at Johns Hopkins University's Department of Psychiatry.
Dr. Schulze's research focuses on genotype-phenotype relationship in psychiatric disorders. He coordinates a German-wide center grant on longitudinal psychosis research (www.kfo241.de ; www.PsyCourse.de) and spearheads an international study on the genetic basis of response to lithium treatment in bipolar disorder (www.ConLiGen.org), comprising several research groups from Europe, the Americas, Asia, and Australia.
He has authored close to 200 papers. In addition to national German awards, he is the 2006 recipient of APPA's Robins-Guze-Award and the 2006 recipient of the Theodore-Reich-Award of the International Society of Psychiatric Genetics (ISPG). He is a member of the American College of Neuropsychopharmacology and in 2011 was elected Chair of the Section on Psychiatric Genetic of the World Psychiatric Association (WPA), which he is an Honorary Member of. Since 2012, he has held the office of Secretary of the ISPG and in 2014 he was elected President-Elect of the APPA.

Squassina Alessio
Lecturer, University of Cagliari, Italy
Adjunct Assistant Professor of Psychiatry, Dalhousie University, Halifax, Canada

Dr. Alessio Squassina, born in 1975, studied Biology at the University of Cagliari, Italy. He trained as a pharmacologist and molecular biologist in Italy (University of Cagliari) and Canada (CAMH, University of Toronto). Dr. Squassina has a PhD in neuroscience and a specialty in applied pharmacology with a specific focus on psychotropic medications. He has held a position as lecturer at the University of Cagliari since 2012 and is adjunct assistant professor at the department of Psychiatry, Dalhousie University, Halifax, Canada.

Dr. Squassina's research focuses on the investigation of the genetic underpinnings of psychiatric and neurodegenerative disorders and on pharmacogenomics of psychotropic medications.

Dr. Squassina has published 38 papers in peer-reviewed journals, two book chapters on personalized medicine and lithium molecular effects. Heis involved in several international collaborative projects, and is member of the International Consortium on Lithium Genetics (ConLiGen), member of the scientific advisory committee of Genomic Medicine Alliance and of the International Program Committee for the XXII and XIII World Congress of Psychiatric Genetics.

Steinmann Saskia
University Medical Center Hamburg-Eppendorf, Department of Psychiatry and Psychotherapy, Psychiatry Neuroimaging Branch, Hamburg, Germany

Membership
German Society for Mountain and Expedition Medicine (BExMed).

University education
11/2004 10/2009
Psycholinguistics (Subsidiary subjects: Psychology and Medicine) at Ludwig-Maximilians-University, Munich, Germany.

Academic appointments
Since 01/2010
Ph.D.-student at Psychiatry Neuroimaging Branch (PNB, Head: Prof. C. Mulert), Department of Psychiatry and Psychotherapy, University Medical Center Hamburg-Eppendorf (Head: Prof. D. Naber) and at the Faculty of Biological Psychology and Neurophysiology, University Hamburg (Scholarship by Otto Werner Foundation).
10/2009 - 12/2009
Internship at Department of Clinical Neurophysiology and Functional Neuroimaging, Department of Psychiatry and Psychotherapy, Ludwig-Maximilians-University Munich (Head: Prof. H.J. Möller).
03/2009
Completion of master's thesis. Topic: "Psycholinguistic basics for the conception of a manual about high altitude medicine to improve the communication between mountaineers, sherpas

and carriers" under the guidance of Prof. G. Kegel (Department of Psycholinguistics, Ludwig-Maximilians-University of Munich) and Prof. S. Noachtar (Department of Neurology, Ludwig-Maximilians-University of Munich) (Grade: 1,0).
01/2007 - 12/2008
Student research assistant at the high altitude research project SCITREX-2008 (Dr. B. Feddersen), Department of Neurology, Ludwig-Maximilians-University of Munich. Topic: "Medical, psychological and psycholinguistic investigations of 30 expedition participants during the ascent of Chulu West Peak (6419m) in Nepal".
04/2008 - 05/2008
Research visit in Nepal, Data acquisition for master's thesis.

Tavormina Giuseppe
President of the Psychiatric Studies Centre, Italy

Dr Giuseppe Tavormina (born in 1963) is a Psychiatrist and works exclusively in Private Practice as a clinician since 1998.
He also worked in a Mental Health Institute for more then five years (from Oct 1992 to May 1998);
before the hospital career, he worked for two years as Penitentiary Phisician.
In the month of June 2000 he co-founded a no-profit Scientific Association of which he is the President ("Psychiatric Studies Centre", or "Cen.Stu.Psi." - www.censtupsi.org), that has its first purpose in encouraging and stimulating the scientific, clinical and diagnostic research while carefully gathering current studies of all psychiatric subject matters.
During 2006-2007 years, he has been a Founding Member (and actually its General Secretary) of two NGO associations, the "European Depression Association" ("EDA", headquartered in Brussels, Belgium), and "EDA Italia Onlus - Associazione Italiana sulla Depressione" (headquartered in Provaglio d'Iseo, Italy): their main role and aim is to create and co-ordinate in all European countries and Italian regions the annual event named "European Depression Day".
During October 2007 he has been appointed for scientific merits as "Senior Research Fellow" of
the Bedforshire Center for Mental Health Research in association with the University of Cambridge.
He joined during past 15 years to more then 70 national and international congresses presenting personal scientific papers.
He also is a Member of ECNP and EPA (in Europe), and SOPSI and SINPF (in Italy).
He published 56 articles in international scientific magazines, mainly about bipolar spectrum topic, beginning actually one of the European experts in the field of bipolar spectrum mood disorders.

Between these publications: he co-edited the issue "The management of bipolar spectrum
disorder" of the "Psychiatric Edge Psychiatry in Practice" (SEPT, 2013 - CEPiP.org); he is the main author of the informative book directed to all population with the title "Throwing light on a dark problem - A short guide to mood disorders" (Sardini publisher, 2013 - www.sardini.it).

Theodorakis Pavlos
CEO & Chairman of the Attica Mental Health Hospitals Trust, Athens, Greece

Dr. Pavlos Theodorakis, MD, MSc, DipLSHTM, PhD, is the CEO & Chairman of the Attica Mental Health Hospitals Trust with the aim to transform them to a community based mental health network. He is the National Counterpart for Greece to the World Health Organization for Mental Health (2005-2009 and 2012-present). He studied Health Policy, Planning and Financing at the London School of Economics, where he also worked as a research associate. He studied systematic reviews and evidence based medicine at the University of Oxford in 2003-2004. During 2000 he was a clinical and research fellow at the Medical School of the University of Linkoping in Sweden in the evaluation of primary health care services in the Balkans. He was awarded his PhD at the Medical School of the University of Ioannina, Greece in 2003, on the evaluation of the quality of primary care on the Greek-Albanian border. He graduated as a Medical Doctor in 1996, and obtained his General Practitioner title in 2002. Between 2004-2006 he served as the CEO of the Psychiatric Hospital of Chania and closed it down after deinstitutionalized all of its patients in the community. Between 2005-2008 he was the National Coordinator for Greece of the Health Sector Stability Pact for Southeastern Europe, and has served as the representative of Greece to the European Commission for the development of the Green Paper in Mental Health. Between 2007-2010, he was the senior health policy advisor to the Mayor of Athens. He has lectured at several universities in Greece and abroad and has published more than 30 papers in peer reviewed international scientific journals.

Touloumis Charalampos
NHS Director, Psychiatric Hospital of Attiki, Athens Greece

Dr Touloumis was born in Chalkis of Evia, in Greece. He graduated from Medical School of Athens University and received his specialty in Psychiatry from Psychiatric Hospital of Athens and Evangelismos Hospital.
Since 1987, he has been working as Psychiatrist in Psychiatric Hospital of Athens (nowadays in the position of Deputy Clinic Director in the 10th Psychiatric Department). He has published more than 50 scientific publications through greek and international biomedical magazines. He has made more than 70 scientific presentations in medical conferences. He is interested specifically in Clinical Psychiatry and Psychopharmacology.

Tsapakis Evangelia Maria
Director of the "Aghios Charalambos" Mental Health Clinic, Heraklion, Crete, Greece

Dr Evangelia Maria Tsapakis, BSc(Hons), MBBS, MSc, MRCPsych, PhD(Lond), is a Consultant Psychiatrist (CCT in General Adult Psychiatry, UK, 2011) who studied pharmacology at King's College London and medicine at St. George's Hospital Medical School, University of London. Having earned the first prize in psychological medicine (the Arthur Crisp Prize), she went on to train in psychiatry at the Royal Bethlem and Maudsley Hospitals. She has worked under Ross Baldessarini's mentorship at Harvard Medical School whilst on the 2003 Traveling Fellowship awarded by the Royal College of Psychiatrists. In 2007, she earned a Masters in Affective Neuroscience from the University of Maastricht. In 2009, she earned a PhD in pharmacogenetics (on the role of metabolic enzyme variants in response to treatment with psychotropic agents) and pharmacogenomics (on the differential gene expression induced by antidepressants in juveniles) at the Institute of Psychiatry, London. She has co-authored several original articles and a book titled: "Handbook of Schizophrenia", published in 2005. Dr Tsapakis' awards include a Young Scientist Award at the 11th Biennial Winter Workshop on Schizophrenia (2002), a Research Award at the 5th International Neuropsychiatry Congress (2004), a Young Investigator Award for the 20th International Congress in Schizophrenia Research (2005), and a Poster Prize at the 3rd International Congress on Brain and Behaviour (2007). She is a member of several international professional organizations including ECNP, BAP and WSPG. Dr Tsapakis is currently a visiting research associate and collaborator at the International Bipolar Program at Harvard Medical School, Boston, MA. Since 2011, she directs the "Aghios Charalambos" Mental Health Clinic in Heraklion, Crete, Greece, whilst pursuing her research interests through several collaborations with the Universities of Crete and Athens in Greece, the University of Potsdam in Germany, the University of Alberta in Canada, and Harvard Medical School in the USA. In 2013, she received a Greek Ministry of Education grant (as a PI) to study clinical pharmacogenetics in the treatment of psychosis.

Tsitsipa Eirini
Cognitive - Behavioral Psychotherapist,Thessaloniki, Greece

Eirini Tsitsipa received her degree in Psychology (2012) from the Aristotle University of Thessaloniki. During her studies, she specialized in "dementias" at the Hellenic Association of Alzheimer's Disease and Related Disorders and she completed her internship at the 1st Neurological clinic of the Aristotle University of Thessaloniki. She has a Diploma in clinical training of mental health provided by the 1st Psychiatric clinic of the Aristotle University of Thessaloniki. She is competent in the use of neuropsychological and psychometric instruments. She has attended a number of workshops and also, she has participated in psychiatric conferences. At the present, she is specialized in Cognitive - Behavioral Psychotherapy and she is working in Hellenic Police providing psychological support to illegal immigrants.

Tsopelas Christos
Consultant Psychiatrist in Adult Psychiatry, Psychiatric Hospital of Attica, Athens, Greece

Dr Tsopelas is a graduate of the Medical School of Athens. His psychiatric training was completed in Aeginition Hospital, Athens, and Charring Cross Psychiatric training Scheme, London, UK. He has worked in London in various posts, like Community Drug and Alcohol Teams and Crisis Resolution Home Treatment team. The last post was as Consultant psychiatrist in Community Mental Health Team at South London and Maudsley Trust before he returned to Greece in late 2005. Since then he has been part of Greek National Health system and worked for the last 5 years at the Psychiatric Hospital of Attica.

He completed his MSc in Psychiatric Research at Institute of Psychiatry, London, UK. He is in the process of finishing his PhD. He has training in Brief Solution Focused Therapy and Interpersonal Psychotherapy.

His special interests include Epidemiology, Forensic Psychiatry, patients' rights and community psychiatry. He has been secretary of Forensic Psychiatric Section of Hellenic Psychiatric Association and actively involved in organizing and teaching at European co-funded educational programs about de-institutionalization, community psychiatry and forensic psychiatry. Now he is also member of the Board of the Hellenic Psychiatric Association and Secretary of the newly formed Greek Forensic Psychiatric Association.

Tzeferakos George
Psychiatrist, Scientific Associate of the Forensic Psychiatric Unit, 2nd Department of Psychiatry, "Attikon" University Hospital of Athens, Greece

George Tzeferakos is a psychiatrist, who completed his specialization in the 1st Department of Psychiatry/"Aeginition" Hospital - University of Athens. He is a scientific associate to the Forensic Psychiatric Unit of the 2nd Department of Psychiatry/"Attikon" Hospital - University of Athens. He also works into the Psychiatric Hospital of the Correctional Facility of "Koredallos". He is the chief editor of the newsletter of the Forensic Psychiatric Branch of the Hellenic Psychiatric Association and also the secretary of this branch.

Vgontzas Alexandros
Professor of Psychiatry, Department of Psychiatry and Behavioral Sciences, Faculty of Medicine, University of Crete
Director of the Inpatient and Outpatient Clinical Services of the Department
Director of the Community Psychiatric Programs, Heraklion, Crete, Greece

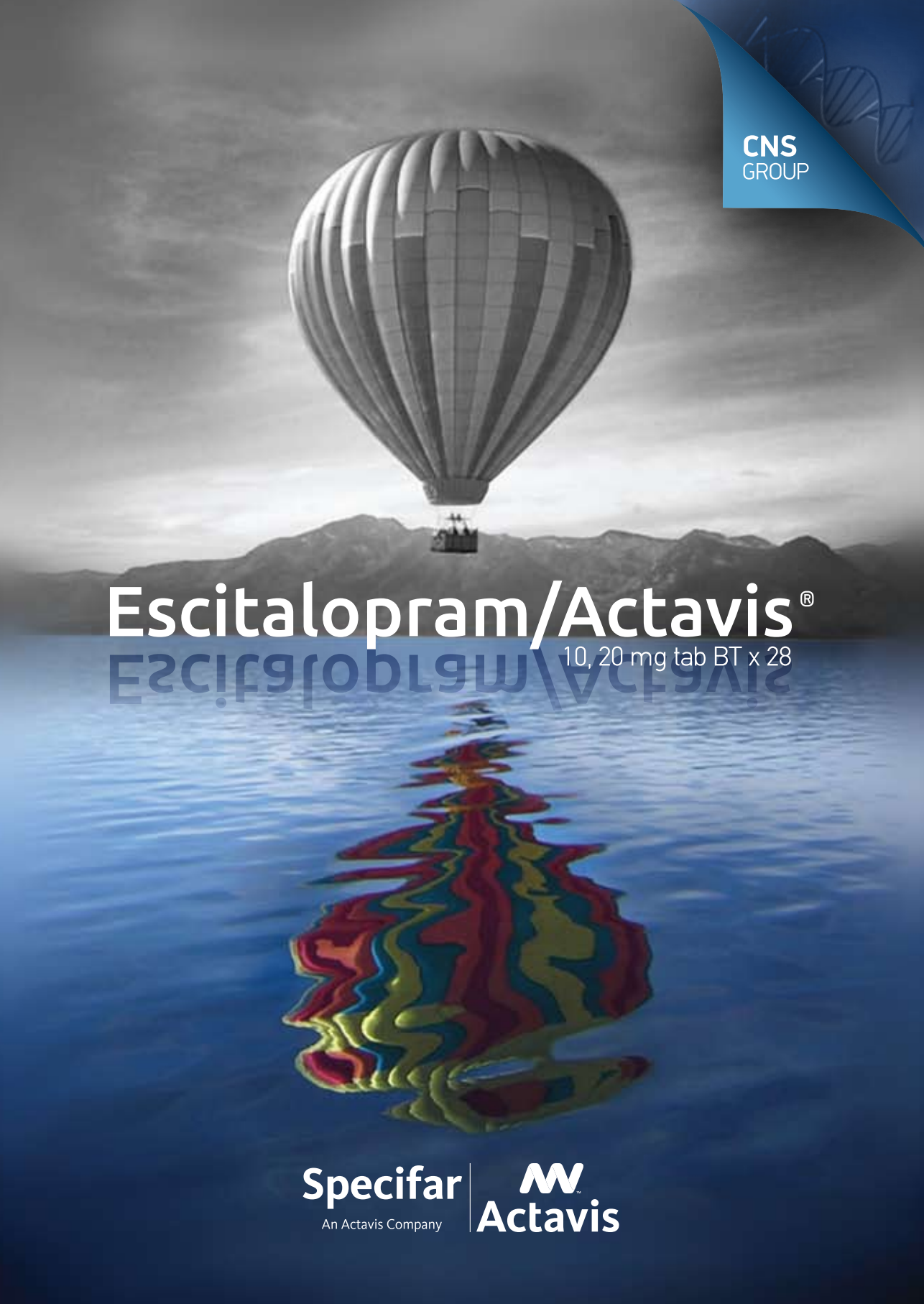
Professor Alexandros Vgontzas graduated from the Medical School of the University of Athens in 1978 where he completed his doctoral thesis. After completing his residency in Psychiatry-Neurology at the University Hospital in Athens he pursued a second full residency in psychiatry at Penn State University College of Medicine, USA (1985-1989). In 1989, he became Assistant Professor of Psychiatry at the same university and in 2000 he rose to the rank of tenured full Professor of Psychiatry at Penn State University and he was awarded the endowed Chair of Sleep Disorders Medicine. He has served for many years as Director of the Sleep Research and Treatment Center in this university. Since 2009, he is Professor of Psychiatry at the Department of Psychiatry and Behavioral Sciences, Faculty of Medicine, University of Crete, Director of the Inpatient and Outpatient Clinical Services of the Department, and Director of the Community Psychiatric Programs in the region of Heraklion with main focus on chronic mental illness. He is also in charge of the educational curriculum of medical students, psychiatric residents, and pre-doctoral and post-doctoral fellows in Behavioral Sciences. Professor Vgontzas has a very rich clinical, teaching, research and writing work. He has published more than 150 original scientific papers and the number of citations is more than 12000 (Google Scholar). He has been funded continuously for more than 20 years from the National Institutes of Health (NIH) (USA) and more recently he has received competitive funding from European and National Funding Institutes. His research interests include major areas of psychiatry, such as the epidemiology, psychophysiology, neuroendocrinology, and neuroimmunology of sleep and sleep disorders, such as insomnia and sleep apnea, in adults and children. More recently, his research interests has expanded to areas, such as aging cognitive decline and Alzheimer's, as well as the family aspects of schizophrenia.

Yildiz Ayşegül
Professor of Psychiatry, Department of Psychiatry, Dokuz Eylül University, Izmir, Turkey and Harvard Medical School International Consortium for Bipolar Disorder Research, Boston, USA

Dr. Yildiz completed her medical training at the Hacettepe University, Medical School (Eng) and her psychiatric residency at the Dokuz Eylül University in Turkey. After completing research fellowships at the Center for Magnetic Resonance Research, University of Minnesota; McLean Hospital Brain Imaging Center and Massachusetts General Hospital Bipolar Clinic, Harvard Medical School, she returned to Turkey and started first adequately powered proof-of-concept study in bipolar acute mania. This study, published at the Archives of General Psychiatry in 2008, represents a rare example of how basic neuroscience can lead to the hypothesis-driven investigation of a novel treatment principle in a psychiatric disorder. After completing this project in 2006 she returned to United States and worked as a faculty at the Harvard Medical School Brain Imaging Center and International Consortium for Bipolar Disorder Research Program.

Dr. Yildiz is the recipient of the American Psychiatric Association/Astra Zeneca Young Minds in Psychiatry Award (2004) and Fellowship Award from the European College of Neuropsychopharmacology-ECNP (2002). She is also recipient of research grants from the Stanley Medical Research Institute (2002, 2003), Pfizer-USA (Independent Investigator Award, 2002), Harvard Medical School, Stanley Foundation Bipolar Research Center (2003), and International Sleep Research Foundation (2004). Dr. Yildiz has authored more than eighty articles in peer-reviewed journals and has been an invited speaker at numerous national and international scientific meetings. Her areas of clinical and research interest include evaluation of therapeutic effects of putative anti-manic agents; psychopharmacology, neuroimaging, and meta-analytic evidence synthesis of unipolar and bipolar mood disorders.

Dr. Yildiz currently works as a Professor of Psychiatry at the Dokuz Eylül University and Harvard Medical School International Consortium for Bipolar Disorder Research Program. She is a member of the Scientific Advisory Panel at the European College of Neuropsychopharmacology (ECNP), and the President of the Institutional Review Board at the Dokuz Eylül University.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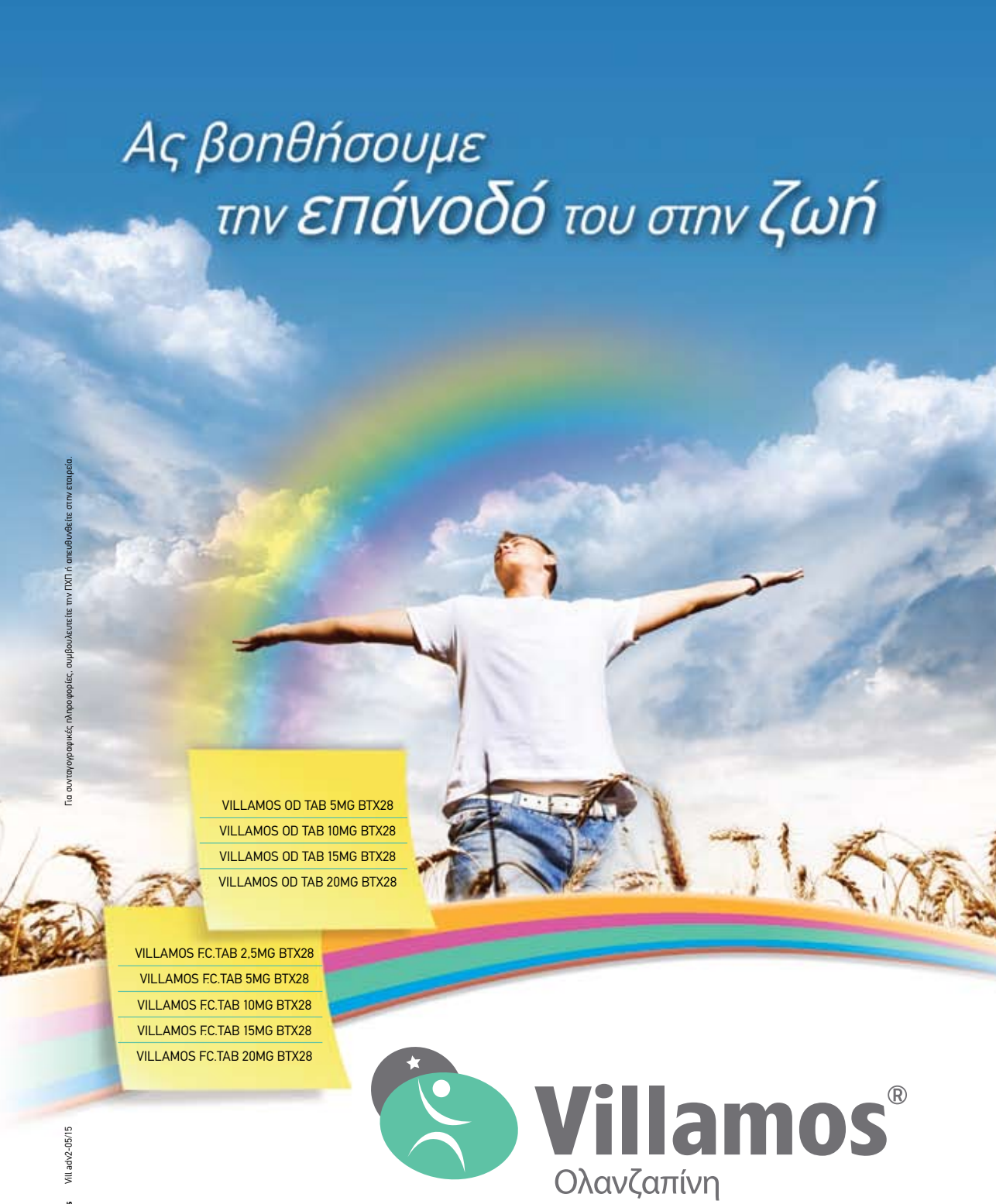

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Acknowledgements

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ΠΕΡΙΛΗΨΗ ΧΑΡΑΚΤΗΡΙΣΤΙΚΩΝ ΠΡΟΪΟΝΤΟΣ

ΟΝΟΜΑΣΙΑ: ZYPADHERA 210 mg, 300 mg και 405 mg κόνις και διαλύτης για ενέσιμο εναιώρημα παρατεταμένης αποδέσμευσης. **ΠΟΙΟΤΙΚΗ ΚΑΙ ΠΟΣΟΤΙΚΗ ΣΥΝΘΕΣΗ:** Κάθε φιαλίδιο περιέχει παμοϊκή μονοϋδρική ολανζαπίνη ισοδύναμη με 210 mg, 300 mg ή 405 mg ολανζαπίνης, αντίστοιχα. Μετά την ανασύσταση κάθε ml εναιωρήματος περιέχει 150 mg ολανζαπίνη. **Θεραπευτικές ενδείξεις:** Για τη θεραπεία συντήρησης ενήλικων ασθενών με σχιζοφρένεια οι οποίοι είχαν σταθεροποιηθεί ικανοποιητικά κατά τη διάρκεια της οξείας θεραπείας με από του στόματος ολανζαπίνη. **Δοσολογία και τρόπος χορήγησης** Το ZYPADHERA 210mg, 300mg και 405mg κόνις και διαλύτης για ενέσιμο εναιώρημα παρατεταμένης αποδέσμευσης δεν πρέπει να συγχέεται με την ολανζαπίνη 10 mg κόνις για ενέσιμο διάλυμα. Δοσολογία: Οι ασθενείς, αρχικά θα πρέπει να έχουν λάβει από του στόματος ολανζαπίνη, πριν τη χορήγηση του ZYPADHERA, για να επιτευχθεί ανεκτικότητα και ανταπόκριση. Για να προσδιοριστεί η πρώτη δόση ZYPADHERA για όλους τους ασθενείς, θα πρέπει να ληφθεί υπόψη το δοσολογικό σχήμα στον **Πίνακα 1: Συνιστώμενο δοσολογικό σχήμα και συσχέτιση της από του στόματος χορηγούμενης ολανζαπίνης και του ZYPADHERA**

Στοχευόμενη δόση από του στόματος ολανζαπίνης	Συνιστώμενη αρχική δόση ZYPADHERA	Δόση συντήρησης μετά από 2 μήνες θεραπείας με ZYPADHERA
10 mg/ημερησίως	210 mg/2 εβδομάδες ή 405 mg/4 εβδομάδες	150 mg/2 εβδομάδες ή 300 mg/4 εβδομάδες
15 mg/ημερησίως	300 mg/2 εβδομάδες	210 mg/2 εβδομάδες ή 405 mg/4 εβδομάδες
20 mg/ημερησίως	300 mg/2 εβδομάδες	300 mg/2 εβδομάδες

Προσαρμογή της δόσης Οι ασθενείς θα πρέπει να παρακολουθούνται προσεκτικά για σημεία υποτροπής κατά τη διάρκεια του πρώτου ενός έως δύο μηνών θεραπείας. Κατά τη διάρκεια της αντιψυχωτικής θεραπείας, η βελτίωση της κλινικής κατάστασης του ασθενούς μπορεί να διαρκέσει αρκετές ημέρες έως μερικές εβδομάδες. Οι ασθενείς θα πρέπει να παρακολουθούνται στενά κατά τη διάρκεια αυτής της περιόδου. Κατά τη διάρκεια της θεραπείας, η δόση μπορεί διαδοχικά να προσαρμόζεται με βάση την κλινική κατάσταση του κάθε ασθενή. Μετά την κλινική επαναξιολόγηση, η δόση μπορεί να ρυθμιστεί με εύρος δόσεων από 150 mg έως 300 mg κάθε 2 εβδομάδες ή από 300 mg έως 405 mg κάθε 4 εβδομάδες (Πίνακας 1). *Συμπληρωματική χορήγηση* με από του στόματος ολανζαπίνη δεν εγκρίθηκε σε διπλές-τυφλές κλινικές μελέτες. Εάν η συμπληρωματική χορήγηση με από του στόματος ολανζαπίνη ενδείκνυται κλινικά, τότε η συνδυασμένη συνολική δόση ολανζαπίνης και από τις δύο μορφές δεν πρέπει να υπερβαίνει την αντίστοιχη μέγιστη δόση της από του στόματος ολανζαπίνης των 20 mg/ημερησίως. Η χορήγηση του ZYPADHERA δε συστήνεται σε ασθενείς >75 ετών. Μια μικρότερη δόση έναρξης (150 mg κάθε 4 εβδομάδες) θα πρέπει να εξεταστεί για αυτούς τους ασθενείς. *Παιδιατρικός πληθυσμός:* Η ασφάλεια και η αποτελεσματικότητα του ZYPADHERA σε παιδιά και εφήβους κάτω των 18 ετών δεν έχει τεκμηριωθεί. Τα ήδη υπάρχοντα διαθέσιμα δεδομένα περιγράφονται παρακάτω, ωστόσο δεν μπορεί να γίνει καμία σύσταση δοσολογίας. Τρόπος χορήγησης **ΜΟΝΟ ΓΙΑ ΕΝΔΟΜΥΪΚΗ ΧΟΡΗΓΗΣΗ. ΝΑ ΜΗ ΧΟΡΗΓΕΙΤΑΙ ΕΝΔΟΦΛΕΒΙΑ Ή ΥΠΟΔΟΡΙΑ** από επαγγελματία υγείας εκπαιδευμένο στην κατάλληλη τεχνική ένεσης και σε χώρους όπου η παρακολούθηση μετά την ένεση και η παροχή κατάλληλης ιατρικής φροντίδας μπορούν να παραχωρεθούν σε περίπτωση υπερδοσολογίας. Μετά από κάθε ένεση, οι ασθενείς πρέπει να παρακολουθούνται σε χώρους παροχής υγειονομικών υπηρεσιών από κατάλληλα ειδικευμένο προσωπικό για τουλάχιστον 3 ώρες για σημεία και συμπτώματα υπερδοσολογίας από ολανζαπίνη. Αμέσως πριν από την έξοδο από τους χώρους παροχής υγειονομικών υπηρεσιών θα πρέπει να επιβεβαιωθεί ότι ο ασθενής είναι σε ετοιμότητα, πνευματικά προσανατολισμένος και δεν παρουσιάζει σημεία και συμπτώματα υπερδοσολογίας. Εάν υπάρχει υποψία υπερδοσολογίας, θα πρέπει να συνεχιστεί η στενή ιατρική επίβλεψη και παρακολούθηση μέχρι η εξέταση να δείξει ότι τα σημεία και τα συμπτώματα έχουν παρέλθει. Για τους ασθενείς που παρουσιάζουν σημεία ή συμπτώματα σχετιζόμενα με την υπερδοσολογία ολανζαπίνης το χρονικό διάστημα παρακολούθησης των 3 ωρών θα πρέπει να παραταθεί όπως κρίνεται κλινικά απαραίτητο. **Αντενδείξεις:** Υπερευαισθησία στη δραστική ουσία ή σε κάποιο από τα έκδοχα. Ασθενείς με κίνδυνο εμφάνισης γλαυκώματος κλειστής γωνίας. **Ειδικές προειδοποιήσεις και προφυλάξεις κατά τη χρήση** Πρέπει να λαμβάνεται ειδική προσοχή στην εφαρμογή της κατάλληλης τεχνικής ένεσης έτσι ώστε να αποφευχθεί η από αμέλεια ενδοαγγειακή ή υποδόρια ένεση. Σύνδρομο μετά από ένεση Κατά τη διάρκεια των κλινικών μελετών πριν από την κυκλοφορία του προϊόντος στην αγορά, αντιδράσεις με σημεία και συμπτώματα που σχετίζονται με υπερδοσολογία ολανζαπίνης, παρουσιάστηκαν σε ασθενείς μετά από ένεση με ZYPADHERA. Οι αντιδράσεις αυτές παρουσιάστηκαν σε ποσοστό < 0,1% των ενέσεων και σε περίπου 2% των ασθενών. Οι περισσότεροι από αυτούς τους ασθενείς παρουσίασαν συμπτώματα καταστολής (που κυμαίνονταν από μέτρια σε σοβαρότητα έως και κώμα) και/ή παραλήρημα (που περιλαμβάνει σύγχυση, αποπροσανατολισμό, διέγερση, άγχος και άλλη νοητική δυσλειτουργία). Άλλα συμπτώματα που παρατηρήθηκαν περιλάμβαναν εξωπυραμιδικά συμπτώματα, δυσαρθρία, αταξία, επιθετικότητα, ζάλη, αδυναμία, υπέρταση και σπασμούς. Στις περισσότερες περιπτώσεις, τα αρχικά σημεία και συμπτώματα που σχετίζονται με την αντίδραση αυτή εμφανίστηκαν μέσα σε 1 ώρα μετά από την ένεση και σε όλες τις περιπτώσεις αναφέρθηκε πλήρης ανάρρωση μέσα σε 24-72 ώρες μετά από την ένεση. Αυτές οι αντιδράσεις παρατηρήθηκαν σπάνια (< 1 για κάθε 1.000 ενέσεις) εντός των 1-3 πρώτων ωρών και πολύ σπάνια (< 1 για κάθε 10.000 ενέσεις) μετά τις 3 ώρες. Οι ασθενείς θα πρέπει να ενημερώνονται γι' αυτόν τον πιθανό κίνδυνο και την ανάγκη να παρακολουθούνται για 3 ώρες σε χώρους παροχής υγειονομικών υπηρεσιών κάθε φορά που τους χορηγείται ZYPADHERA. Μετά από κάθε ένεση, οι ασθενείς θα πρέπει να παρακολουθούνται σε χώρους παροχής υγειονομικών υπηρεσιών από κατάλληλα ειδικευμένο προσωπικό για τουλάχιστον 3 ώρες για σημεία και συμπτώματα σχετιζόμενα με υπερδοσολογία ολανζαπίνης. Αμέσως πριν από την έξοδο του ασθενή από τους χώρους παροχής υγειονομικών υπηρεσιών θα πρέπει να επιβεβαιωθεί ότι ο ασθενής είναι σε ετοιμότητα, έχει αίσθηση προσανατολισμού και δεν παρουσιάζει σημεία και συμπτώματα υπερδοσολογίας. Εάν υπάρχει υποψία υπερδοσολογίας, η στενή ιατρική επίβλεψη και η παρακολούθηση πρέπει να συνεχιστούν μέχρι η εξέταση να δείξει ότι τα σημεία και τα συμπτώματα έχουν παρέλθει. Για τους ασθενείς που παρουσιάζουν σημεία ή συμπτώματα σχετιζόμενα με την υπερδοσολογία ολανζαπίνης το χρονικό διάστημα παρακολούθησης των 3 ωρών θα πρέπει να παραταθεί όπως κρίνεται κλινικά απαραίτητο. Για το υπόλοιπο της ημέρας μετά από την ένεση, οι ασθενείς θα πρέπει να συμβουλεύονται ανάλογα, για να είναι σε επαγρύπνηση για σημεία και συμπτώματα υπερδοσολογίας δευτερεύοντα των μετά την ένεση σοβαρών ανεπιθύμητων ενεργειών, να είναι σε θέση να ζητήσουν βοήθεια εάν χρειαστεί και να μην οδηγούν ή να χειρίζονται μηχανές. Συστήνεται προσεκτική αξιολόγηση της κλινικής κατάστασης για την αποφυγή υπερβολικής καταστολής και καρδιοαναπνευστικής καταστολής εάν παρεντερικώς χορηγούμενες βενζοδιαζεπίνες είναι απαραίτητες για τη διαχείριση των μετά την ένεση ανεπιθύμητων ενεργειών. Ανεπιθύμητες ενέργειες σχετιζόμενες με το σημείο της ένεσης Η συνηθέστερα αναφερόμενη ανεπιθύμητη ενέργεια στο σημείο της ένεσης ήταν το άλγος. Η πλειοψηφία των αντιδράσεων αναφέρθηκαν από 'ήπιας' έως 'μέτριας' σοβαρότητας. Στην περίπτωση εμφάνισης ανεπιθύμητης ενέργειας σχετιζόμενης με το σημείο της ένεσης, θα πρέπει να λαμβάνονται κατάλληλα μέτρα για να αντιμετωπιστούν αυτά τα περιστατικά. **Ανεπιθύμητες ενέργειες:** Περίληψη δεδομένων ασφάλειας: *Ανεπιθύμητες ενέργειες που έχουν παρατηρηθεί με την παμοϊκή ολανζαπίνη* Περιστατικά συνδρόμου μετά την ένεση έχουν παρουσιαστεί με τη χορήγηση του ZYPADHERA και οδηγούν σε συμπτώματα σχετιζόμενα με υπερδοσολογία με ολανζαπίνη. Άλλα συμπτώματα που παρατηρήθηκαν περιλάμβαναν εξωπυραμιδικά συμπτώματα, δυσαρθρία, αταξία, επιθετικότητα, ζάλη, αδυναμία, υπέρταση και σπασμούς. Άλλες ανεπιθύμητες ενέργειες που παρατηρήθηκαν σε ασθενείς που λάμβαναν ZYPADHERA ήταν παρόμοιες με εκείνες που παρατηρήθηκαν στους ασθενείς που λάμβαναν από του στόματος ολανζαπίνη. Σε κλινικές δοκιμές με ZYPADHERA, η μόνη ανεπιθύμητη ενέργεια που παρατηρήθηκε σε στατιστικά σημαντικά υψηλότερο ποσοστό στους ασθενείς υπό ZYPADHERA έναντι των ασθενών υπό εικονικό φάρμακο ήταν η καταστολή (ZYPADHERA 8,2%, εικονικό φάρμακο 2,0%). Μεταξύ όλων των ασθενών που έλαβαν ZYPADHERA, η καταστολή παρουσιάστηκε στο 4,7% αυτών. Σε κλινικές δοκιμές με ZYPADHERA η πιθανότητα εμφάνισης ανεπιθύμητων αντιδράσεων που σχετίζονται με τη θέση ένεσης ήταν περίπου 8%. Η πιο συχνά αναφερόμενη ανεπιθύμητη αντίδραση στη θέση ένεσης ήταν το άλγος (5%). Κάποιες άλλες ανεπιθύμητες αντιδράσεις που σχετίζονται με τη θέση ένεσης ήταν (με φθίνουσα συχνότητα): αντιδράσεις με τη μορφή οζιδίων, αντιδράσεις με τη μορφή ερυθήματος, μη ειδικές αντιδράσεις στη θέση ένεσης, ερεθισμός, αντιδράσεις τύπου οιδήματος, μώλωπας, αιμορραγία και αναισθησία. Τα περιστατικά αυτά εμφανίστηκαν σε περίπου 0,1 με 1,1% των ασθενών. Βάσει ανασκόπησης δεδομένων ασφάλειας από κλινικές μελέτες και μεμονωμένες αναφορές μετά την κυκλοφορία του προϊόντος, το απόστημα της θέσης ένεσης έχει αναφερθεί σπάνια (≥ 1/10.000 έως < 1/1.000). Ανεπιθύμητες ενέργειες και τα εργαστηριακά ευρήματα που παρατηρήθηκαν κατά τη διάρκεια κλινικών δοκιμών και αυθόρμητων αναφορών. Πολύ συχνές (≥1/10), συχνές (≥ 1/100 έως < 1/10), όχι συχνές (≥ 1/1.000 έως < 1/100), σπάνιες (≥ 1/10.000 έως < 1/1.000), πολύ σπάνιες (< 1/10.000), μη γνωστές (δε μπορούν να εκτιμηθούν με βάση τα διαθέσιμα δεδομένα). **Διαταραχές του αιμοποιητικού και του λεμφικού συστήματος** *Συχνές:* Ηωσινοφιλία, Λευκοπενία, Ουδετεροπενία *Σπάνιες:* θρομβοκυτοπενία **Διαταραχές του ανοσοποιητικού συστήματος** *Όχι Συχνές:* Υπερευαισθησία **Διαταραχές του μεταβολισμού και της θρέψης** *Πολύ Συχνές:* Αύξηση βάρους *Συχνές:* Αυξημένα επίπεδα χοληστερόλης, Αυξημένα επίπεδα γλυκόζης, Αυξημένα επίπεδα τριγλυκεριδίων, Γλυκοζουρία, Αύξηση της όρεξης *Όχι Συχνές:* Εμφάνιση ή παρόξυνση διαβήτη που περιστασιακά έχει συσχετισθεί με κετοξέωση ή κώμα περιλαμβανομένων και μερικών θανατηφόρων περιστατικών *Σπάνιες:*Υποθερμία **Διαταραχές του νευρικού συστήματος** *Πολύ Συχνές:*Υπνηλία *Συχνές:* Ζάλη, Ακαθησία, Παρκινσονισμός, Δυσκινησία *Όχι Συχνές:*Επιληπτικές κρίσεις όπου στις περισσότερες περιπτώσεις είχαν αναφερθεί ιστορικό επιληπτικών κρίσεων ή παράγοντες κινδύνου για επιληπτικές κρίσεις, Δυστονία (περιλαμβανομένης της περιστροφής των οφθαλμικών βολβών), Βραδυκινησία, Αμνησία, Δυσαρθρία *Σπάνιες:* Νευρολεπτικό Κακόηθες Σύνδρομο, Συμπτώματα απόσυρσης **Καρδιακές διαταραχές:** *Όχι Συχνές:* Βραδυκαρδία, Παράταση του διαστήματος QTc *Σπάνιες:* Κοιλιακή ταχυκαρδία/ μαρμαρυγή, αιφνίδιος θάνατος **Αγγειακές διαταραχές** *Πολύ Συχνές:* Ορθοστατική υπόταση *Όχι Συχνές:* θρομβοεμβολή (περιλαμβανομένων της πνευμονικής εμβολής και της θρόμβωσης των εν των βάθει φλεβών) **Διαταραχές του αναπνευστικού συστήματος, του θώρακα και του μεσοθωρακίου** *Όχι Συχνές:* Επίσταξη **Διαταραχές του γαστρεντερικού συστήματος** *Συχνές:*Ήπιες, παροδικές αντιχολινεργικές επιδράσεις, μεταξύ των οποίων δυσκοιλιότητα και ξηροστομία *Όχι Συχνές:* Διάταση της κοιλίας *Σπάνιες:* Παγκρεατίτιδα **Διαταραχές του ήπατος και των χοληφόρων** *Συχνές:* Παροδικές, ασυμπτωματικές αυξήσεις των ηπατικών αμινοτρανσφερασών (ALT, AST), ιδιαίτερα στην έναρξη της θεραπείας *Σπάνιες:* Ηπατίτιδα (περιλαμβανομένης της ηπατοκυτταρικής, της χολοστατικής ή της μικτής ηπατικής βλάβης) **Διαταραχές του δέρματος και του υποδόριου ιστού** *Συχνές:* Εξάνθημα *Όχι Συχνές:* Αντίδραση από φωτοευαισθησία, Αλωπεκία **Διαταραχές του μυοσκελετικού συστήματος και του συνδετικού ιστού** *Συχνές:* Αρθραλγία *Σπάνιες***:** Ραβδομυόλυση **Διαταραχές των νεφρών και των ουροφόρων οδών** *Όχι Συχνές:* Ακράτεια ούρων, Κατακράτηση ούρων, Δυσκολία στην ούρηση **Καταστάσεις της κύησης, της λοχείας και της περιγεννητικής περιόδου** *Μη Γνωστές:* Σύνδρομο από απόσυρση φαρμάκου των νεογνών **Διαταραχές του αναπαραγωγικού συστήματος και του μαστού** *Συχνές:* Στυτική δυσλειτουργία στους άνδρες, Μειωμένη γενετήσια ορμή στους άνδρες και στις γυναίκες *Όχι Συχνές:* Αμηνόρροια, Διόγκωση μαστού, Γαλακτόρροια σε γυναίκες, Γυναικομαστία/ διόγκωση μαστού στους άνδρες. **Γενικές διαταραχές και καταστάσεις της οδού χορήγησης** *Συχνές:* Εξασθένιση, Κόπωση, Οίδημα, Πυρεξία, Άλγος στη θέση ένεσης *Σπάνιες*: Απόστημα στη θέση ένεσης **Παρακλινικές εξετάσεις** *Πολύ Συχνές:* Αυξημένα επίπεδα προλακτίνης του πλάσματος *Συχνές:* Αυξημένη αλκαλική φωσφατάση, Υψηλή κρεατινική φωσφοκινάση, Υψηλή γάμα γλουταμυλτρανσφεράση, Υψηλό ουρικό οξύ *Όχι Συχνές:* Αυξημένη ολική χοληερυθρίνη. Αναφορά πιθανολογούμενων ανεπιθύμητων ενεργειών: Η αναφορά πιθανολογούμενων ανεπιθύμητων ενεργειών μετά από τη χορήγηση άδειας κυκλοφορίας του φαρμακευτικού προϊόντος είναι σημαντική. Επιτρέπει τη συνεχή παρακολούθηση της σχέσης οφέλους-κινδύνου του φαρμακευτικού προϊόντος. Ζητείται από τους επαγγελματίες του τομέα της υγειονομικής περίθαλψης να αναφέρουν οποιεσδήποτε πιθανολογούμενες ανεπιθύμητες ενέργειες μέσω**:** Εθνικός Οργανισμός Φαρμάκων, Μεσογείων 284, GR-15562 Χολαργός, Αθήνα, Τηλ: +30 21 32040380/337, Φαξ: +30 21 06549585, Ιστότοπος: http://www.eof.gr **Υπερδοσολογία** Θα πρέπει να λαμβάνονται κατάλληλα προστατευτικά μέτρα εάν παρατηρηθούν σημεία και συμπτώματα υπερδοσολογίας σχετιζόμενα με το σύνδρομο μετά την ένεση. Παρόλο που η υπερδοσολογία με την παρεντερική μορφή είναι λιγότερο πιθανή από την από του στόματος μορφή, σχετικές πληροφορίες για την υπερδοσολογία από του στόματος παρατίθενται παρακάτω: **Σημεία και συμπτώματα:** Πολύ συχνά συμπτώματα της υπερδοσολογίας (με ποσοστό εμφάνισης > 10%) περιλαμβάνουν ταχυκαρδία, διέγερση / επιθετικότητα, δυσαρθρία, ποικίλα εξωπυραμιδικά συμπτώματα και μειωμένο επίπεδο συνείδησης, το οποίο κυμαίνεται από καταστολή έως κώμα. Άλλα κλινικά σημαντικά συμβάματα της υπερδοσολογίας περιλαμβάνουν παραλήρημα, επιληπτικές κρίσεις, κώμα, πιθανό νευροληπτικό κακόηθες σύνδρομο, αναπνευστική καταστολή, εισρόφηση, υπέρταση ή υπόταση, καρδιακές αρρυθμίες (ποσοστό εμφάνισης < 2% των περιπτώσεων υπερδοσολογίας) και καρδιοαναπνευστική ανακοπή. Θανατηφόρες εκβάσεις έχουν αναφερθεί με οξείες υπερδοσολογίες από το στόμα τόσο χαμηλές όσο τα 450 mg, αλλά έχει επίσης αναφερθεί και επιβίωση μετά από οξεία υπερδοσολογία με περίπου 2 g από του στόματος ολανζαπίνη. **Αντιμετώπιση** Δεν υπάρχει ειδικό αντίδοτο για την ολανζαπίνη. Η συμπτωματική αντιμετώπιση και ο έλεγχος των λειτουργιών των ζωτικών οργάνων μπορούν να εφαρμόζονται ανάλογα με την κλινική κατάσταση του ασθενούς, περιλαμβανομένης της αντιμετώπισης της υπότασης, της κυκλοφορικής κατέρρευψης και της υποστήριξης της αναπνευστικής λειτουργίας. Μη χρησιμοποιείτε επινεφρίνη, ντοπαμίνη ή άλλες συμπαθητικομιμητικές ουσίες με β-αγωνιστική δραστηριότητα, επειδή η διέγερση των β-υποδοχέων ενδέχεται να επιδεινώσει την υπόταση. Η καρδιαγγειακή παρακολούθηση είναι απαραίτητη για τον έλεγχο πιθανών αρρυθμιών. Στενή ιατρική επίβλεψη και παρακολούθηση είναι απαραίτητη μέχρι ο ασθενής να ανακάμψει πλήρως. **Διάρκεια ζωής** 2 χρόνια. Μετά από την ανασύσταση στο φιαλίδιο: 24 ώρες. 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