

#### Introduction

The European College of Neuropsychopharmacology (ECNP) was established in 1987 on the initiative of scientists and clinicians working in Europe in the convergent disciplines in neuropsychopharmacology and related neurosciences.

ECNP aims to widen knowledge in regard to central nervous system disorders, and to increase awareness, recognition and improvement of the treatment of these disorders. To fulfill this aim ECNP organizes, amongst others, yearly the ECNP Congress that comprises at least 3 plenary lectures, 28 symposia and 6 educational update sessions. The latter sessions target issues such as updates on evidence-based treatment and new developments in the preclinical area that influence the clinical field. The annual meeting attracts more than 7,000 participants and is considered to be the largest event in neuropsychopharmacology in Europe.

ECNP also supports on an annual basis participation of 100 young psychiatrists and researchers in an intensive three-day Workshop in Nice. Other activities of ECNP include the journal *European Neuropsychopharmacology* that promotes scientific knowledge along with publishing consensus statements. These consensus statements are products of an annual meeting with delegates from the scientific community in neuropsychopharmacology (scientists and clinicians), European regulators and industry in which discussion about issues such as use of placebo, guidelines for long-term maintenance are discussed. In addition, since 2009 ECNP organizes a summer school of neuropsychopharmacology in Oxford and since 2012 a child and adolescent school of neuropsychopharmacology in Venice.

Finally, ECNP organizes seminars, as the one you have been invited to participate, in areas where there are less opportunities for psychiatrists to participate in international meetings. We have previously organized a Seminar in Russia. So far, besides our previous meeting in your country, ECNP has organized this meeting in Poland, Estonia, Turkey, Bulgaria, Slovak Republic, Hungary, Czech Republic, Moldova, Romania,



Greece, Latvia. Interaction is the keyword at these meetings and they have proved very successful both for the participants and for the faculty.

Please see the ECNP website (**www.ecnp.eu**) where you can find information about the above initiatives and additional information.

I look forward to a fruitful and inspiring meeting in Macedonia!

Celso Arango, MD

Chair ECNP Educational Committee



# Programme ECNP Seminar in Neuropsychopharmacology 4-6 April 2014, Macedonia

#### FRIDAY 4 APRIL 2014

Arrival of participants and experts

19.00 Welcome and dinner

#### **SATURDAY 5 APRIL 2014**

09.00 - 09.15	Introductions to the programme
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Joseph Zohar, Israel

09.15 – 10.00 Suicide

Gil Zalsman, Israel

10.00 – 10.45 Drug addiction

Wim van den Brink, The Netherlands

10.45 - 11.30 Coffee break

11.30 – 12.15 Bipolar disorders

Francesc Colom, Spain

12.15 – 12.30 How to prepare a scientific presentation

Joseph Zohar, Israel

12.30 - 13.30 Lunch

Presentations participants in 3 groups in 3 parallel workshops					
Round 1 13.30 – 15.00	Joseph Zohar and Kadri Hadzihamza	Wim van den Brink and Mirjana Savevska	Francesc Colom and Pavlina Ilieska- Kotevska		
	Group 1	Group 2	Group 3		

15.00 - 15.15 Break



15.15 – 15.45 Panel discussion: How to prepare a clinical research project and how to publish it

Chair: Joseph Zohar, Israel Panel members: Francesc Colom, Spain

Wim van den Brink, The Netherlands

Gil Zalsman, Israel

16:00 – 21.00 Excursion and dinner



#### **SUNDAY 6 APRIL 2014**

Presentations participants in 3 groups in 3 parallel workshops						
Round 2 08.30 – 10.00	Joseph Zohar and Kadri Hadzihamza	Wim van den Brink and Mirjana Savevska	Francesc Colom and Pavlina Ilieska- Kotevska			
	Group 1	Group 2	Group 3			
10.00 – 10.30 Coffee break						
Round 3 10.30 – 12.00	Joseph Zohar and Kadri Hadzihamza	Wim van den Brink and Mirjana Savevska	Francesc Colom and Pavlina Ilieska- Kotevska			
	Group 1	Group 2	Group 3			
12.00 – 14.00 Lunch and preparation for plenary session						
Plenary 14.00 – 15.00	14.00 – 14.20	Group 1 Presentation				
	14.20 – 14.40	Group 2 Presentation				
	14.40 – 15.00	Group 3 Presentation				

15.00 – 15.15 Preparation of awards ceremony

15.15 - 15.30 Short break

15.30 – 15.45 Awards ceremony

15.45 – 16.00 Concluding remark and thanks Joseph Zohar, Israel





Dr. Zohar is a professor of Psychiatry at the Sackler Faculty of Medicine, Tel Aviv Universality. Dr. Zohar is the immediate past-President of the European College of Neuropsychopharmacology (ECNP), Chair of the Israeli consortium on PTSD, and Chair of the Israeli Brain Council. Dr. Zohar is a board member for the International Master in Affective Neuroscience, a visiting Proffesor at the University of Maastrich (Nederland's), and an immediate past-Chair of the International College of Obsessive-Compulsive Spectrum

Disorders (ICOCS).

Dr. Zohar has been honored with several awards, including the Fogarty International Research Fellowship Award (1984), the A.E. Bennet Award for Clinical Research (1986 and 2002), ECNP – Lilly Neuroscience Award for Clinical Research (1998), and the WFSBP Award for Excellence in Education (2001).

Dr. Zohar has authored 300 papers, has written or edited 15 books focusing on refractory depression, OCD and post-traumatic stress disorder, and was the founding associate editor of CNS Spectrums and of the World Journal of Biological Psychiatry.

Dr. Zohar is considered a world expert on posttraumatic stress disorder, and has recently received funding from the American National Institute of Mental Health (NIMH) to explore the potential of hydrocortisone in the immediate aftermath of trauma, as a preventive measure against the development of PTSD.

Dr. Zohar was advisor to DSM – IV and 5 in OCD and co-chair with Dr. Hollander at the Sub-Workgroup of preparing the research agenda on OCD for DSM-5.

Currently Dr. Zohar Chair an international collaboration (joint venture of ECNP, ACNP, CINP and AsCINP) on developing new nomenclature for CNS drugs along with being a Director at the Division of Psychiatry at Chaim Sheba Medical Center, Israel,



Wim van den Brink, MD., PhD (1952) received his medical degree in 1981 from the Free University in Amsterdam. After his psychiatric residency in Groningen (1981-1986), he was a fellow at the Psychiatric Epidemiology Training program at Columbia University in New York. In 1989 he received his PhD degree form the State University of Groningen, the Netherlands. Since 1992 he is full professor of Psychiatry and Addiction at the Academic Medical Center of the University of Amsterdam. He is also the director of the Amsterdam Institute



for Addiction Research (AIAR). He is a (co)author of more than 400 peer reviewed scientific papers and has been a thesis advisor of more than 50 PhD students. He is currently one of the chief-editors of European Addiction Research. He is the chair of the Workgroups that developed Dutch Interdisciplinary Treatment Guideline on Alcohol Use Disorders and the Dutch Interdisciplinary Guideline on Opiate Addiction. He is one of the founders and the president of the International Collaboration of ADHD and Substance Abuse (ICASA). He is currently the chair of the Scientific Program Committe of the European College of Neuropsychopharmacology (ECNP). His main scientific interest are related to the neurobiology of substance use disorders and behavioral addictions, the pharmacological treatment of addiction and related comorbidities, and the reduction of stigma regarding patients with an addiction.





Francesc Colom, PsyD, MSc, PhD is currently the Head of the Psychoeducation and Psychological Treatments Area at the Barcelona Bipolar Disorders Program (IDIBAPS- Hospital Clinic University of Barcelona) and a researcher at the CIBERSAM (Spanish Network of Research in Mental Health). The Barcelona Psychoeducation Program, designed by Dr. Colom and co-workers is nowadays the strongest evidence-based psychoeducational program for bipolar patients. His book "Psychoeducation Manual for Bipolar

Disorder" has been published in several languages including English, Spanish, Italian, French, Japanese, Chinese, Turkish and Polish.

He has lectured all over the world and published over 130 scientific articles, with an H index of 42 and more than 5500 quotations. Dr. Colom has also written 12 books and a number of book chapters. He has been a member of the Board of Councilors of the International Society for Bipolar Disorders, a member of the Nomenclature Committee and Chair of the Website Education Committee of the same society, and is currently a member of the Scientific Advisory Pannel of the ECNP and Chair of the Psychological Interventions Taskforce of the ISBD. He sits rather comfortably in the editorial board of several international scientific journals and enjoys reviewing articles for them in his free time.

In June 2007, Francesc Colom was awarded with the prestigious "Mogens Schou Award" for the excellence of his research.



Prof. Gil Zalsman M.D., M.H.A., B.Sc. graduated from the Hebrew University and Hadassah Medical School in Jerusalem, Israel. He completed his psychiatry residency at the Geha Mental Health Center and Tel Aviv University and the Child Psychiatry residency at Geha and Yale Child Study Center in Yale University, Connecticut, USA with the late Prof. Donald J Cohen. He completed a two years Post-Doctoral Fellowship with Prof. J John Mann, in the Neuroscience Department, Columbia University, New York State Psychiatric Institute, where he holds



an ongoing position as an Associate Research Scientist. He also holds a Master degree in health administration (MHA. summa cum laude) from Ben Gurion University, Israel. His academic research focuses on gene-environment interactions in childhood depression and suicidal behavior and other psychiatric disorders.

Prof. Zalsman has published more than a 200 papers, of them more than 90 original papers, dozens of reviews, book chapters, two edited books and actively participated in more than a 170 scientific meetings. Currently he is the Deputy Director and Chief of Child Psychiatry Division at Geha Mental Health Center in addition to being the director of the Adolescent Day Unit. He is an Associate Professor in Psychiatry at Sackler School of Medicine and former director of psychiatry continuing education program.

Prof. Zalsman is the past board member and president of the child psychiatry section at the Association of European Psychiatry (EPA). Currently he a counselor and chair pf education at the executive committee of the European College Neuropsychopharmacology (ECNP) and the president of the Israeli Society of Biological Psychiatry (ISBP). He served as the deputy editor of the Israel Journal of Psychiatry and recently chaired the 14th European Symposium for Suicide and Suicidal Behavior (ESSSB), held in Tel Aviv.Prof. Zalsman owns a private psychiatric outpatient clinic for children and adolescent in Tel Aviv, the Zalsman Institute.

He is married with two children and resides in Tel Aviv suburb, Israel.



# TUKA SE VMETNIVAAT PO SLEDNIOT REDOSLED I OVAA STRANA SE BRISE CELOSNO!!!!!!!!!!!

140318 How to present a presentation\_Zohar

140321 Presentation slides\_Zalsman

140321 Presentation slides\_van den Brink

140326 Presentation slides\_Colom



### **Summary of presentations**

**Addiction: Diagnosis, Neurobiology and Treatment** 

Wim van den Brink, MD PhD Academic Medical Center University of Amsterdam

In this presentation, I will provide a practical definition of an addictive substance and briefly discuss the criteria for the classification and diagnosis of substance use disorders according to DSM-IV and DSM-5. In the second part of my presentation I will summarize the changes in our thinking about addiction and addicts in the last two centuries showing a gradual shift from addiction as a form of immoral behavior to addiction as a relapsing brain disorder. The core of my presentation will be an introduction to the neurobiology of addiction and related treatment options, including a summary of available pharmacotherapy's for tobacco, alcohol and drug addiction and the potential use of new neuromodulation techniques, including attentional bias retraining, transcranial magnetic stimulation and deep brain stimulation. I will end my presentation with some ideas about patient-treatment matching and personalized medicine.

#### **BIPOLAR DISORDERS**

#### Francesc Colom, PsyD, MSc, PhD

Bipolar disorder (BD) is a chronic condition affecting approximately a 4% of the general population. Several studies report BD as one of the five most disabling illnesses and it is associated to a high morbility, mortality and functioning problems. Despite proper treatment, bipolar patients spend almost half of their life presenting acute symptomatology. Moreover, less than 40% of bipolar patients reach functional recovery in areas such as family life, autonomy, and occupational functioning two years after admission. These functioning problems —usually linked to cognitive impairment- may appear early in the illness course but worsen with each relapse, accounting for important socioeconomic costs. Suicide is 15 times more likely to occur amongst people suffering from BD compared to the general population. Bipolar disorder has a biological aetiology and its treatment is primarily pharmacological. Lithium salts are still the gold-standard in the maintenance treatment of BD, but in the last 20 years several atypical antipsychotics and anticonvulsants have also shown its efficacy. However, external factors may also play a crucial role by triggering newer episodes and by causing chronification of subthreshold symptomatology. Monitoring and managing



these factors has been shown to play a major role in both the syndromal and functional recovery. This could be reached by means of several psychological interventions being psychoeducation and family-focused treatments the two techniques showing more evidence-based efficacy.

The lecture will give a general overview of the current clinical and therapeutic knowledge regarding bipolar disorder.

#### Prof. Gil Zalsman M.D., M.H.A., B.Sc.

According to the WHO approximately 1.5 million people will die from suicide in 2020. The estimated global suicide rate is 14 suicides per 100,000 inhabitants. Last year, approximately 150,000 people completed suicide in Europe of them 63,000 in the European Union. The highest suicide rates are in Lithuania, Russian Federation, Belarus, Finland, Hungary and Latvia. There is approximately 4:1 male to female ratio in suicides. Suicide continues to be the first or second cause of premature death among 15-24 year olds and rates can be 6-8 times higher in the elderly

Extensive research during the past three decades has elucidated various biological, psychological and social risk factors to suicidal behavior, such as gender, age, previous suicide attempt, substance abuse, presence of psychiatric disorders and a family history of suicide. The most studied candidate polymorphism in suicide in the context of gene X environment interaction is the 5HTTLPR.

A clinical approach focusing in risk assessment in the single patient and some national prevention strategies will be discussed. Optional prevention and treatment options will be discussed.



#### **ABSTRACTS**

#### Snezana Andreeva

Institute of creative development, education and psychotherapy, Skopje

Group psychological support to suicidal patients

Group support stands as one of the significant psychological approaches in suicidal patients. There is no regular practice in our institutions where patients in a group under the supervision of a skilled professional - psychotherapist will work on themselves, share and exchange thoughts, feelings and behaviour in order to increase awareness in terms of meaning of life and another point of view to their problem. Apart from the essential medical treatment, psychological support and treatment of the soul (psyche) represents an inevitable aspect in the integration of the whole.

Direction: Collaboration with the Department of Toxicology Skopje aspects Institute for creative development, education and psychotherapy

# Magdalena Cakar Markuleska General Hospital, Struga

Eathing disorders in athlets

Introduction: Eating disorders in athlets is contemporary phenomenon. In the last few decades increasing number of cases of anorexia and bulimia neurosa have been noticed, particularly among those athletes who are into sport that requires slim figure. In order to prove their performance, athletes usually tend to maintain strict control and constant monitoring of the shape of their body. Such behavior is identified as a risk factor for anorexia and bulimia. Athletes at top level of competition and female athletes are riskier groups then the athletes at the low level and male athletes.

Aim: The purpose of this research paper is to determine relations between eating disorders and involvement in proffesional sport.

Methods: We formed 2 groups of female athlets: 10 proffesional handball players and 10 proffesional sport dancers. All participants were asked to fill in eating disorder questionaire Beck depression inventory 2 and Zung anxiety scale.

Results: Athletes in R. Macedonia who are involved in judicial sports are exposed to less risk for developing eating disorders compared to proffesional sport dancers.



Conclusion: Results show the necessity of educational training for coaches and athlets about negative effects of eating disorders. It is very important to provide professional care and support by nutritionists, psychologists and if necessary by psychiatrists. Health care proffesionals need to raise awareness about this disorders.

# Sofija Crcevska General City Hospital, Skopje

Case study:

30 year-old patient with a history of heroin use from his 16 years. Past 4 years receiving methadone therapy. Stable without relapse and continuously exemplary. 6 months ago the patient expressed a desire and firm determination to reduce the daily dose of methadone that was a particular challenge. Reduction was implemented gradually with careful monitoring of psychophysical parameters and it has been quite successful since 50% reduction of the initial dose is achieved.

#### Damjanovik Ljubinka

#### JZU ZD Polyclinic Bukuresht -Skopje

The importance of some life events to depresion of patients with cardio- surgery intervention(aorto-coronary bypass)

Introdaction: The cardiovascular desease is the great reason for mortality of the patiens. The comorbidity with the depression have a great influence of the incidence, morbidity and mortality. Some live events make the depression efects worse for the patient who take cardio-surgery treatment.

Aims: is to find the importance of some life events to depression of the patients with cardio-surgery intervention.

Methods: In this study there was 30 patients, hospitalised at Cardiosugery Hospital Filip II, Skopje for cardio-surgery intervention (aorto-coronary by pass), 38-79 age, both male and female. These psychiatric instuments were used:Hamilton depression scale(HAMD), (17 items scale with max score 52 and minimal score 0) and Scale for living stres factors of Holms and Rahe.

Results: The average score of depression preoperation on HAMD scale is  $16.77\pm8.05$ , and the postoperation score were incresed to 21,25 and is high statistical significance (p< 0.01). The some events like death of member of the family, the illness, a big finansical changes significantly increace the depression(p< 0.01), but a newborn in the family, the holidays significantly decrese the depression on the participants (p< 0.05).



Conclutions: Multidisciplinary approach with the team of psyciatrists, psychologist of patient with cardiovascular desease make the despression efects small and the patients have good recovery.

#### Marina Danilova

#### University Goce Delcev, Stip, Faculty of medical sciences

Available treatments focus on reducing the symptoms of ADHD

Attention deficit hyperactivity disorder (ADHD) is one of the most common childhood disorders and can continue through adolescence and adulthood. Symptoms include difficulty staying focused and paying attention, difficulty controlling behavior, and hyperactivity (over-activity). It is important to identify effective interventions for children with ADHD. Physical activity as an intervention in the classroom has been found to impact some of the difficulties students with ADHD may present. Treatments include medication, various types of psychotherapy, education or training, or a combination of treatments. Treatments can relieve many of the disorder's symptoms, but there is no cure. With this research we would like to study the impact of different methods of treatments, with special emphasis on the impact of physical activity.

#### **Naser Durmishi**

#### University Clinic of Psychiatry, Skopje

Addictions in under aged individuals

It's well known that the problem of addictions, especially addictions on psychoactive substances represents a serious concerns with every day increasing tendencies which has evident influence on the general morbidity and mortality of the population. This phenomenon is well known mostly and it is relatively well covered by the institutions in the system.

But what is the situation with the minors, actually with individuals aged 12-16 years and 18.

While some countries in the world have completely clear picture of this phenomenon, organized approach and treatment to such individuals, the national program for coping and a number of necessary measures, what is the situation within our society?

Do we have addicted minors in our country, how many are they, do we may apply the same rules and epidemiological data for this group, is the same given aetiology, what is the effect on their health and which is their quality of life, is there any treatment for them, the legal framework, what is the effect of this phenomenon to the whole social life, what are the possibilities and responsibilities of the health professionals in the treatment of addiction of minors... are only a few questions on everyday life to answer..!

Are there any answers and what they are...?



#### **Ana Filipce**

#### University Clinic of Psychiatry, Skopje

Comparing effect of olanzapine between patients treated with standard oral tablet and oral disintegrating tablet

The aim of this study is to compare effects of Olanzapine in patients treated with Olanzapine standard oral tablet (SOT) and patients treated with Olanzapine oral desintergrating tablets.

Study was conducted on two groups of patients devided based on the daily dose of Olanzapine. First group consisted of 5 patient who were treated with Olanzapine SOT of 20 mg as a daily dose, and second group consisted of 3 patients who were treated with daily dose of 15 mg. In the second group of patients, therapy was switched from SOT to ODT. There were significantly lowered side efecs in the patients that were switched from SOT to ODT, especially in weight loss (10 - 15 kg)

The study showed that in clinical practice switching patients from SOT to ODT resulted in less side effects especially in weight loss.

## Desanka Gjorgjevikj Psychiatric Hospital-Skopje

#### Depression in adults with diabetes

Introduction: Diabetes is the most common endocrine disorder comprising 1-2% of the general population. A lot of research has been worldwide considering co-morbidity of these two disorders, but is important that no systematic research was done in our country.

Aim: Aim of the research is to determine the structure and severity of the depressive syndrome that appears in patients with DM compared with healthy control subjects.

Methods: We formed two groups of 30 people, who were matched by age ( average 60 years), gender (M/F =11/19).In the experimental group DM lasts from 1-15 years (average 7,2 years) .All participants were asked to fill in Beck depression inventory 2 and Zung anxiety scale. Student t – test for independent samples was used in order to estimate the differences of depresive level among the groups.

Results: The results show that there is significantly higher depressive symptomatology in patients with DM, compared to healthy control subjects.

Conclusion: The presence of diabetes increases comorbidiliti with depression, but few of these chronic patients seeking psychiatric help.



#### Biljana Iliev, Stip

#### Suicidality at depressive patients

Introduction:Mental health is with crucial meaning for quality of live,because with developing of mental health the quality of life is growing and mental whelness to all population ,including the people with mental problems,members of their families,friends and other people out from the official institutions who cares,and that make inf luence to decrease suicidal steps,taking obviously that biggest percent with mental retardation is arrownd 90% from all suicidal acts.

Aim: This study research the problems with making diagnosiss and cure depressive intruder, suicidality at depressive patients, maintained the number of depressive persons and risk factors at suicidal behaviour and the path for prevention suicidality at the depressive patients.

Methods: In a clinical trial of a psychiatric clinic in Skopje period from 25 November 2013 to 25 January 2014 are examined 42 hospitalized patients, 29 women and 13 men, aged 25 to 65 years tested with Hamilton scale for depression.

Results: Of the 42 hospitalized 42 (10%) tried to suicide. From them 17 (4.05%) who tried to suicide are hospitalized under primary diagnosis: Dg. Tentamen suicidii. Attempt suicide in patients who were hospitalized under the primary diagnosis Dg. Depressio are 25 (5.95%) patients. In the group with an attempted suicide with a primary diagnosis Dg. Tentamen suicide (out of 17 hospitalized) in 6 left over depression more than three times before the suicidal act.

Conclusion:Our research at risk factors for suicidal behaviour with 42 patients didn't gave statistically meaningful difference at the factors of risc. The question for the future is still open-how much we can prevent all suicids. The paradox in all we develop upper is that the possibility for sure prediction and prevention for suicids is still limited. Suicidality act is peculiar only for the human race, existing at all cultures and is still unintelligible until today.

#### Kacarska Milijana, Skopje

#### Caffeine-Related Psychiatric Disorders

Caffeine is the world's favorite psychoactive substance. Caffeine is rapidly absorbed. Peak plasma levels are achieved in about 1 hour. The universal appeal of caffeine is related to its psychostimulant properties. Susceptibility to this symptomatic distress is broadly determined by 3 factors-the dose consumed, individual vulnerability to caffeine, and preexisting medical or psychiatric conditions (mood disorders in particular) that are aggravated by mild psychostimulant use. Caffeine symptoms appear to be dose-related. Most people experience no behavioral effects with less than 300 mg caffeine. Sleep is more



sensitive and can be disrupted by 200 mg caffeine. At doses exceeding 1 g per day, susceptible individuals experience toxic effects. Symptoms may begin 6-12 hours after stopping or decreasing consumption, peak in 1-2 days, and persist for a week. The research criteria include listed in DSM-IV. The 4 caffeine-induced psychiatric disorders include caffeine intoxication, caffeine-induced anxiety disorder, caffeine-induced sleep disorder, and caffeine-related disorder not otherwise specified (NOS). Apart from the caffeine-induced psychiatric disorders, we consider the influence of psychostimulants on other mental disorders. People with schizophrenia typically consume large amounts of caffeine. Caffeine can markedly elevate blood levels of antipsychotic medications, increasing the probability of adverse effects. Patients with bipolar disorder are at risk for an exacerbation of manic symptoms when they consume large amounts of caffeine. Severe depression is correlated with high blood-caffeine levels. People with panic disorders may consciously decrease caffeine use.

# Aleksandar Kandikjan Health center Skopje, Polyclinic "Bucarest" Skopje Case Report

A.I. 34 years old ambulatory patient came to our Hospital with diagnosed bipolar disorder. He was treated with neuroleptic, psychostabilizator and lithium therapy. A.I. felt health problems.

He came to us for a second opinion. After taking anamnesis, it become obvious that A.I. never had combined maniac or depressive phases in his life. The previous diagnosis was wrong.

MMPI and PIE tests illustrated that the dominant were Hy and Pd scales. A.I. was presented like impulsive, egocentric, possessive and emotionally instable personality.

After conversation, psychotherapy, tranquilizing and vitamin therapy he filled better.

The patient will be followed.

The goal of this presentation is to confirm that sometimes it is difficult for the psychiatrist to correctly diagnose a bipolar disorder.

#### Svetlana Karbevska, Skopje

Case of patients with obsessive-compulsive disorder

Patient 42 years old, male, single

Second hospitalization on Psychiatry Clinic in Skopje: obsessive – compulsive thoughts, everyday rituals, fear from glass, anxiety.

First changes to the mental plan on patient were registered in the early childhood, when the patient recalls that his mother used to keep everything in the house neat and clean. The patient learned this type



of functioning and applied it to himself. He started to wash his hands three times before meal and every time when he touches an object that he considers it to be dirty. During the years, he developed pathological fear from broken glass and fear that he could swallow his tongue and strangle himself. Because of increased simptomatology and reduced social functioning, the patient is hospitalized on the department for biological psychiatry.

Mental status – basic mood is variable, the thought process is full with obsessive thoughts and compulsive behaviors. Volition - instinctively dynamisms were reduced with severe work dysfunction.

The patient was treated at the department with:

Tbl. Asentra a 100mg 150+0+50

Depakine chrono a 500mg 2x1

Tbl. Sizap 10mg 1x1

Tbl. Loram 3x1

Following improved condition the patient was sent home

#### Emilija Kostadinova, Stip

The relationship between sleep and depression is complex, as insomnia has been observed to be both a risk factor for and a consequence of depression. Epidemiologic studies indicate that as many as 70% of patients with a psychiatric disorder also complain of insomnia. As discussed here, the relationship between insomnia and depression can be considered according to the timing of the appearance of each disorder's symptoms. Any information that can be gained about which disorder supersedes or coincides with the other will play a role in developing optimal treatment strategies.

#### Maya Kostadinova

Mental Health Center "Prof. N. Shipkovenski"

Verbal rituals in ASD children - a possible compulsion?

There is some symptom overlap and high rates of comorbidity between OCD\Obsessive-compulsive Disorder\ and ASD\Autism Spectrum Disorder\. One of the core autistic symptoms is the restricted and repetitive behaviour. This stereotyped behaviour show similarities to the compulsions that are characteristic of OCD. In our practice we see ASD children with different types of restricted and repetitive behaviour. One type is so called verbal ritual seen in some children with ASD. Could these observed verbal rituals in autistic children be a possible type of compulsion, outlining a possible link between compulsions in OCD and repetitive behaviour in ASD on a symptom level? This needs a future research.



#### Marija Kostadinovska

#### PHI Psychiatric hospital Skopje

Subacute bacterial endocarditis caused by injection of psychoactive substances in a patient with dual diagnosis

A patient at the age of 36 years diagnosed by Schizoaffective psychosis, opiate dependence - maintaining with Methadone therapy is hospitalized on department for urgent psychiatry, because of suicidal, homicidal tendencies, anxiety, abuse of methadone and antipsychotic therapy, paranoid thoughts. Two-month hospital treatment, which included high dose of medication, psycho-social therapy treatment resulted in remission. Therefore were allowed several therapeutic visits in the home environment. Stable mental condition was maintained for a period of one year, after which the patient made a leftover, injecting heroin. Situation exacerbated by the occurrence of somatic comorbidity presented by fever, shortness of breath, cough, accelerate heart beat. The diagnosis was set by positive blood culture findings of Staphilococcus aureus and vegetations growths on heart valves shown on ultra sound study of the heart.

Patients with dual diagnosis requires particular care and comprehensive treatment of mental condition as well as the state of dependence, otherwise there is a high risk of serious and life-threatening comorbid somatic conditions.

#### Rumena Krastovska

#### Clinic for Infectious diseases and Febrile Conditions- Skopje

HIV/AIDS in Macedonia

To examine the effects of the introduction of Antiretroviral Therapy (ART) for PLHIV in Macedonia. A descriptive analysis of progress in responding to HIV/AIDS had been conducted. Till the end of 2004, there had been no available ART and only 68 people in total had been diagnosed with HIV/AIDS. Out of these, 85% of the cases had lethal outcome. By launching the HIV program and the introduction of ART, many people were encouraged for early diagnose and timely initiation of treatment. From 2004-2010 there had been 64 new cases of HIV/AIDS, of which only 16 had lethal outcome.

#### Krsteska Roza

#### Psychiatric hospital "Skopje"

Introduction: Schizoaffective disorder is not simply a subgroup of either bipolar disorder or schizophrenia but may be genetically linked to both, with schizoaffective disorder being a subtype of each or a genetic



intermediate form. Rapid cycling in bipolar disorder is an illness pattern defined as the occurrence of at least four mood episodes per year. We couldn't find any literature about "rapid cycling schizoaffective disorder". May we speak about this subject?

Results: A case series of 4 patients meeting criteria for schizoaffective disorder, older than 65 years, who had four or more of four relapses per year. The mean age of onset of the illness was 32 years. The mean duration of the illness was 38 years. The schizomanic episodes with a prominent mood symptoms re present in these patients in the last 3 years. The patients didn't have a remission. After the schizomanic episode they entered into a schizodepressive episode, but these episodes were with mild symptoms, and after that again a severe (schizo) manic episode.

There was an ineffectiveness of the different pharmacological agents used during the illness (also mood stabilizers and typical or atypical drugs enough time). They were and still are the real problem for their family and our department and one of the most treatment resistant conditions in our practice, particularly in the long-term treatment.

Conclusion: It is possible that the aging is the risk factor for the bad course in our patients with schizoaffective disorder, because cognitive impairment, sensory impairment, coexisting chronic diseases, limited used of psychotropic... Or maybe the other more deep and unclarifyed link between bipolar and schizoaffective disorder. We think that maybe our observation in these patients may be incidental and needs to be supported other reports.

# Emilija Manojlovska Atanasovska Center for family health "Heliomedika 2"Skopje

Treatment with MTD Therapy during the pregnancy

Introduction: According with WHO, dependence is a special spiritual condition and sometimes physical condition that leads to the interaction between a human organism and the means that make addiction.

Case report: Patient 25 years old included to mtd program for many years whith heroin abuse. Somatic examination was make and determined traces of old and fresh I.V. stings, and quick tests that revealed: opi+; bzo+; mtd+ i thc+.

3 months after treatment revealed a pregnancy at 22 weeks. She was extend with mtd during pregnancy, childbirth, lactation and monitoring of the child and the mother in early childhood.

Conclusion: indication was displayed in which you can proceed mtd treatment, in order to preserve pregnancy.



#### Petra Marinova

University Multiprofile Hospital for Active Treatment in Neurology and Psychiatry "Sveti Naum" Second Psychiatric Clinic, Sofia, Bulgaria

My PhD thesis research "Early Diagnosis of Bipolar Depression" aims at finding "bipolar stigmata" extractable by careful examination at the presentation of the first major depressive episode (potential historical, clinical, and/or temperamental markers of bipolarity). Three groups of patients have been recruited: first major depressive episode; recurrent major depressive episode; bipolar patients in a current depressive episode. Diagnosis determined MINI DSM-IV-TR. major was using and Only patients having at least moderately severe depression (CGI-S≥4) were included. Detailed information demographic and historical was collected. Symptomatology was assessed by the clinician-rated BISS; level of anxiety was measured by STAI, and temperamental type was assessed by TEMPS-A. Results will be presented.

#### Irena Najdoska, Skopje

Case of patients with tentamen suicidi

Patients 41 years old, female, mother of three children.

Second hospitalization of Clinic for Psychiatry Skopje – realized because low mood , fatigue , insomnia , anxiety, work and social dysfunction and TS.

First changes to the mental plan on patient were registered before twenty years ago, with depressive symptomatology after her first delivery. Because she was treated ambulatory, but with variable success, and onece she was hospitalised. We obtained data for manic symptomatology. The patient was in good remission, but due to exogenous stressful event comes to the emphasis of depressive anxious symptomatology, and in a weak moment comes to TS.

From mental status noted: Dominating psychomotor tension, low rate of primary mood in depressed stained item. Volition - instinctively dynamisms were reduced by actualization off low rate will to live and attempt to Tentamen suicidi.

The patient was treated at the department with:

Th: Tbl. Deprozel a 20 mg. 1x1

Tbl.Depakine Chrono a 500 mg.2x1

Followed by improving the condition of the patient she was sent home.



#### Florijan Naumov

#### University Clinic of Psychiatry, Skopje

Influence of Qigong exercises and meditation on reduction of depression symptoms

Qigong exercises are an ancient, 5000 year old eastern, specifically Chinese method, whose application today is widespread throughout the world. Qigong exercises and meditation offer increased energy, vitality and promotion of general health. Numerous scientific studies have proven that the practice of Qigong significantly helps in healing and treatment of many somatic diseases and psychological difficulties.

The purpose of this study was to demonstrate the influence of and eight week practice of Qigong exercises on reduction of depression symptoms in patients treated in a Psychiatry Day Hospital.

#### Katerina Ristovska-Naumovska

University Clinic for Infectious Diseases and febrile Conditions, Skopje, R. Macedonia

Goal: Showing the most common unwanted psychological effects in patients treated for hepatitis C with six months of Pegylated interferon therapy.

Method: This study included 38 patients who completed the six-month interferon treatment . For determine the psychological reactions psychological interview and observation was used, along with ZUNG SDS and ZUNG SAS , After the second month of Pegylated interferon treatment , the psychological reactions were noted.

Results: The biggest procentage of patients (71%) showed higher level of anxiety, 40 % depression and in 8% of the group developed a psychotic symptoms. Then in 63% of patients showed higher irritability, in 58% had sleep disorders ,53% mood swings, 37% weakened appetite, 37% feeling they are "about to burst in tears ", 24 % withdrawals, avoidance of noise and crowds,13% weakened libido, 19% agresive behaviour, 11% forgetfulness, lower ability to concentrate

Conclusion: Given the whole analysis one can conclude that during the treatment of hepatitis C ill patients, using Pegylated interferon, from most of the unwanted effects, there is the highest percentage for anxiety and depression. This shows the importance of timely diagnosing, treating and controling, thus prevent interruption of Pegylated interferon treatment for them, that will allow completion of treatment.



## Kosara Oropan Atanasoska PZU DR CHEDO, Tetovo

R LJ 35 years old male

The patient is without a pozitive family anamnesis and without a traumatic event.

The patient is having changes in the mood accompanied with spending a lot of money. The condition has started 6 years ago with depression and has been treated with antidepressant and anxiolitic. After a year, enters a manic condition and is trated with psihostabiliser, antipsihotic

The phasses change quicly in cycles with remissions which fast few months. A remission is geting acomplished with li carbonat and lamal.

The whole family is includet and psichotherapy is conductes.

At the moment he is in a good remission and function normally

#### Milena Pandova

UMPHATNP "Sveti Naum", Second Psychiatric Clinic Sofia, Bulgaria

The earliest symptoms of BAD are subtle cognitive changes which predate the onset of the full-blown disorder, persist during the periods of euthymia and often deteriorate further during the illness progression.

Our study aims at teasing out the pattern of cognitive impairment during acute manic episode, euthymia and in first-degree relatives of BAD patients.

## Snezana Pejkovska-Dimovska PHO Psychiatric Hospital Skopje

Adherence to antipsychotic medication

DS, a 40-year-old man who has had a diagnosis of schizophrenia for over 10 years, had again stopped taking both his depot and his oral antipsychotics.DS has had five previous admissions to hospital and on fourth of these occasions he had stopped his medication within the previous six months.DS believes that taking medications make him problems.DS has religious delusions which are only marginally attenuated by antipsychotics and at present he shows no signs of serious relapse.

Strategies which improve adherence to antipsychotics can be discussed.



## Elizabeta Petrusevska-Mihajlovska Military Medical Center Skopje

My survey was conducted in March 2013 to the 40 respondents in age from 29 to 49 years old who are in active working relationship in the Ministry of Defense. Among these respondents who were subjected to stress in the past PTSD is represented by 33.3 per cent of respondents. Therefore, my intention is to do research for it how much the representation suicide at soldiers, personally by those who were subjected to stress.

#### Svetlana Popovska

#### University Goce Delcev, Faculty of medical sciences, Stip

Treatments focusing on improving the social behavior in children with Autism

Background: Physical activity is a complex biosocial characteristics of man, because it is a reflection of both physical and mental abilities and capabilities of the students, it is one of the most important features that give information about health, work capability and standard of living for everyone.

Aim: To ascertain whether, how, where and why extracurricular activities influence the development of psychomotor skills of students at the age of 9.

Materials and methods: A group of 40 students was subjected to four tests to assess explosive strength, repetitive strength of the arms and shoulder girdle, repetitive force of the body and coordination.

Results: Difference in results is beneficial to students, involved in extracurricular activities, which is to be expected. The difference is not considered a major, but is with a different intensity in different tests.

Conclusion: We affirmed that there is a significant difference between the results obtained by students who do not attend additional activities outside of school and those who attend these activities. Although we refer to a small contingent, we can conclude that extracurricular sports activity positively affect psychomotor abilities surveyed students at the age of 9.

# Aleksandar Risteski University Clinic of Psychiatry, Skopje

The purpose of the study is to determine the ratio of the total number of Tentamen suicidi with the number of patients with Tentamen suicidi of alcohol and drugs and prevalence by sex, age and season between 1999 - 2008 year. Method: For the implementation of the study were used documentation of total 2643



respondents with Tentamen suicidi. Results: The results of the survey show that out of 2643 cases of Tentamen suicidi 64 or 2.4% were performed by a combination of alcohol and drugs.

#### Gordana Ristevska-Dimitrovska

#### University St. Kliment Ohridski, Higher Medical School, Bitola

Different serum BDNF levels in depression: results from BDNF studies in FYR Macedonia and Bulgaria

Background: Growing body of evidence shows that brain-derived neurotrophic factor (BDNF) plays a role in depressive disorder. Serum BDNF levels are lower in depressed patients and they increase after longer course of antidepressant treatment. Our study aims to test the effect of antidepressant treatment on serum BDNF levels in patients with depressive episode, after achieved remission in two studies in Macedonia and Bulgaria.

Subjects and methods: In Macedonian study 23 patients were included (11 female, 12 male) diagnosed with first depressive episode according ICD-10, and 23 control subjects' age- and sex-matched without history of psychiatric disorder. In Bulgarian study were included 10 female patients with depression and 10 control subjects. We have applied Hamilton Depression Rating Scale (HDRS) to access depression severity. Blood samples were collected before antidepressive treatment and after achieved remission (decrease to 7 points or less on HDRS).

Results: In the Macedonian study, mean serum BDNF level on baseline was 13.15 ± 6.75 ng/ml and the mean HDRS score was 28.52±4.02. Untreated depressed patients showed significantly lower serum BDNF levels compared to control group (25.95±9.17 ng/ml). After achieved remission, the mean serum BDNF level was 24.73±11.80 ng/ml whereas the mean HDRS score was 7.04±3.15. After 8 weeks of treatment there was no statistically significant difference in the serum BDNF levels between both groups. In the Bulgarian study, baseline mean serum BDNF levels were 26.84±8.66 ng/ml, after 3 weeks treatment and achieved remission were 30.33±9.25 ng/ml and control group mean serum BDNF levels were 25.04±2.88 ng/ml. Integrated results showed baseline mean serum BDNF levels of 17.30±9.66 ng/ml, after achieved remission 26.43±11.25 ng/ml and control group mean serum BDNF levels of 25.68±7.76 ng/ml.

Conclusion: Bulgarian results show no statistical difference between the depressed group and controls. Integrated results and Macedonian study supports previous findings of low BDNF levels in untreated depressive patients compared to healthy controls, and that those levels increase after antidepressant treatment. These results may suggest that low serum levels of BDNF are a state abnormality that is evident during depression and normalizes during remission.



# Dalibor Smilevski Clinical Hospital-Tetovo

My presentation is about the negative impact of health problems to the mental health of the patients, leading to depression and tentamen suicid. It is a case report about 47 year old man, who has several health problems that hamper the daily functioning and suggest certain lifestyle that causes depression and finally leads to tentamen suicid. The patient was treated with antidepressants and anxiolytics, and his menthal health was improved.

#### Elena Sotiroska, Ohrid

Case report of patient with recurrent depressive disorder

Patient 57 years of age, 7 years suffers from depressive symptoms manifested by dominant suicidal thoughts, decreased mood, anxiety, tearful... In the first 3 years of symptoms persisting, she refuses to have psychiatristic review. Over time condition worsened and was necessary consultation with psychiatrist where he was diagnosed Major depressive disorder and she was treated with the appropriate therapy. An ambulatory treatment was regulary performed by the patient but always at different psychiatrist and thus treatend with different antidepressant which led to further worsening of the patient's health condition. Because of severe health disruption the patient was hospitalized severel times on the Psychiatric Clinic with periodic remission success.

#### Maja Spirova

#### JZO Gerontoloski Zavod "13-ti Noemvri", Skopje

Introduction: Organic anxiety disorder is characterized by mood swings , mostly in the direction of euphoria, irritability , insomnia , agitation , verbal conflicts . The change of the effect is directly caused by brain or other somatic distress . The patient is anxious , impatient , in the room with other patients often enter into a verbal conflict with them . Visit the nearby used to complain of the attitude of staff. The therapeutic goals are applied tbl. Haloperidol and tbl. Risperidon as neuroleptic. The goal is to see the effect of treatment on withdrawal symptoms. A case - examined 120 patients of whom 82 women and 38 men aged 65-88 years . These patients over three years are continuous on neuroleptic therapy - tbl. Haloperidol tbl. Risperidon . Because of the age of the population is made and other investigations : blood count, liver enzymes ASAT , ALT , CPK , protein status, direct and indirect bilirubin Conclusion : The results show that comes to bracedown of withdrawal symptoms and that no deviations in enzyme status



ie choosing the dose of drug it accordance with age . After several months of treatment gradually decreases and off neuroleptic . In case it is not possible, it is leave the minimum dose, with continuous monitoring of blood count and enzymes .

#### Kire Stojanoski, Prilep

Comparison of total Tentamen suicidi with Tentamen suicidi with benzodiazepines (1999 the 1999)

Objectives: To determine the number of TS with a number of TS with benzodiazepines (including combinations of benzodiazepines + other drugs) and prevalence by sex, age and method of TS.Method: epidemiological treatment of the ratio of the total number of TS with the number of TS with benzodiazepines (including combinations of benzodiazepines + other drugs) in the period 1999-2008 for patients hospitalized in the Department of Emergency Medicine and Toxicology, treated in the Department of Psychiatry. Results: From total 2643 TS 1084 or 41.01 % were performed with benzodiazepines (of which 317 or 29.24 % of benzodiazepines in combination with other drugs). The ratio of women: men's 2, 84:1. A significant percentage of juveniles of 14-18 years in which females is 20.94 %, and 15.96 % in males.Conclusion: Despite the "regulation" of the dispense of benzodiazepines in the pharmacies they are present in a large percentage of TS. General as in all TS, dominate women. We need to increase control access to these drugs and reduce their general use.

#### Marya Stoyanova

# University Multiprofile Hospital for Active Treatment in Neurology and Psychiatry "Sveti Naum", Sofia

My study aims at finding out if bipolar patients and their first-degree relatives differ from healthy controls in executive functions, character traits, level of impulsivity, and rates of particular mild neurological signs. Study groups: manic/ mixed episode; bipolar depressive episode; first-degree relatives of bipolar patients; matched healthy controls. Assessment instruments: Kirby's delay discounting task, Purdue pegboard, Digit ordering test, TMT-B, Stroop, Cloninger's inventory, Barratt scale, Heidelberg scale. Patients are reassessed in remission. Our ultimate goal is to tease out whether the differences (if any) are trait- or state-dependent and thus contribute in building up a complex bipolar endophenotype.

#### Lilja Taneva

#### **General Hospital, Strumica**

Drug abuse in patients put Methadone Maintenance Treatment in the first year of the program.



Aim: The aim of this study is to estimate the number of patients put on methadone maintenance treatment who make relapse in the first year and which are the most common substances of abuse in those goals.

Material and methods: The survey included 30 patients placed on methodone substitution program over a year in the Methodone Daily Centre-Strumica. The evaluation used the following parameters: number of examinations, urine immunoassay screening of opiates and benzodiazepines.

Results: From 30 patients placed on methadone maintenance program in the first year only 6 patients of them are marked with no relapse, while the remaining 24 patients in the early months have rare heroin relapses and to later recurrences which are more numerous and with benzodiazepines. 7 of 24 patients with relapse have been doing IV harassment.

Discussion: Patients put on methadone maintenance treatment after achieving stabilization is better to address program more attention in resocialization, employability, back to the environment, improving the quality of life and getting more behavioral engagement.

#### Emilija Trencovska, Delcevo

Because I still haven't opened the possibilities to be part of an experiment and ideas that I would like to figure out and do, I would like to take from your time and to give me some way towards further. I know quite little when it comes to How to give a talk and How to prepare a scientific paper. My field of interest is emotional intelligence in the whole story, how it takes place on the client and how he/she acts and what other influences are here of course.

In the future, I would like to make a difference and connection between emotional intelligence between drug addicts and the people with suicidal thoughts, how to give the talk that should lead them and how can I document that and seem like some scientific paper.

#### Vilma Videnova

Psychiatric hospital "Skopje" Skopje, R.Macedonia

Benzodiazepines in schizophrenia-efficiency and risks

Benzodiazepines are often used in rapid tranquilisation in schizophrenia, in the acute phase.

The aim of the work is to analyze the use of benzodiazepines in hospitalized patients with schizophrenia.



Method: randomized retrospective analysis ( for 6 months period) of medication with benzodiazepines in 20 hospitalized patients (13 women and 7 men) with diagnosis of schizophrenia.

Results: From 20 patients in 18 (90 percent) pharmacological treatment includes benzodiazepines.

Discussion: Benzodiazepines as an adjuvant therapy have positive effects, as well as risks.

#### Vaska Zdravkova

#### University of Goce Delcev, Faculty of medical sciences, Stip

The impact of the drugs and various types of psychotherapy games on reducing the symptoms of ADHD in children at age 10 in public schools in Stip, R. Macedonia- research project

Background: Attention deficit hyperactivity disorder (ADHD) is one of the most common childhood disorders and can continue through adolescence and adulthood. Symptoms include difficulty staying focused and paying attention, difficulty controlling behavior, and hyperactivity (over-activity).

Aim: To reveal the impact of medical and various types of psychotherapy games on children as a biological, psychological and social person. This research is experimental, applied program - evaluative, empirical, longitudinal, and comparative and which will apply qualitative-quantitative approach.

Materials and methods: This research represents quasieksperiment or experiment with a group. So it comes to empirical methodological approach thus used research techniques of testing and scaling.

Results: Survey results will be shown in the table, and for better visibility and clearer insight will provide graphical displays. They will be displayed in numerical quantity and percentage terms.

Conclusion: With this research we would like to study the impact of different methods of treatments, with special emphasis on the impact of drugs and physical activity.

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# Pavlina Ilieska Kotevska Psychiatry hospital - Demir Hisar

Case study - Bipolar disorder

#### Patient M.A 37 years old

The study is about the patient (mentioned before), who, hers first sings of psychiatry disorder has 10 years ago. That was manifested with: headache, stomachache and others, which at that time were taken as a somatoforn disorder. She had try for a suicide act 3 years ago, and she was hospitalized at the Clinic of toxicology and Psychiatry hospital in Demir Hisar. She has not been threated enough and there were not been sights of going better. After that, she was hospitalized again, threated as a depressive episode of her treatment. At her last hospitalization, has been shown manic state manifested wit impulsively,



making poor decisions due to unrealistic ideas about the future, difficulty with sleep, elevated mood, substance abuse...All of this, was enough for her to be taken as a person with bipolar disorder.

#### Lidija Sushevska Panevska

Pension and Disability Insurance Fund of Macedonia-Ministry of labor and social policy, Department for work ability and capacity expertise, Skopje

Brain changes in depression and reduction of depressive symptoms after using agomelatine: a PET scan study

Introduction:Depressive disorder has significant potential morbidity and mortality, contributing to suicide, incidence and adverse outcomes of medical illness, disruption in interpersonal relationships, substance abuse, and lost work time. With appropriate treatment, 70-80% of individuals with major depressive disorder can achieve a significant reduction in symptoms. Agomelatine is a new antidepressant with an innovative pharmacological profile. It is a potent melatonergic agonist (MT1 and MT2) and also has 5-HT2c antagonist properties with less side effects. A lot of studies of r depression performed using PET imaging have shown abnormalities of regional cerebral blood flow (CBF) and glucose metabolism.

Methodes:This will be interventional study type. The will be two groups of participants: first group will consist of 25 patients with depressive disorder(all types) according to DSM-IV-TR and the second, 25 healthy controls which will be paired by age and gender. Patients will have a Hamilton Depression Rating Scale (HDRS) score obtained at baseline, after 6 weeks, 6 months and after 12months, also PET scans( at rest brain activity) will follow in the same time i, Following the baseline PET scans, patient participants will begin medication treatment with agomelatine(25-50mg at bed time)and the regional metabolism will be compared between unmedicated depressives and controls.

Expected Results and Conclusion: Improvement after using agomelatine and decreased scores of HAM-D rating scale, To find out the regions which are involved in depression disorder and brain changes in patients before and after intervention Agomelatine may fill the gap in the current therapeutic armamentarium by combining efficacy with a favorable tolerability profile and additional clinical benefits.