In this paper, we showed the experience, application and effect of various treatment models, including telepsychiatry use for psychometric instruments, tests and scales. Clients' examinees have given their consent to participate in the research and treatment of mobbing phenomena.

Participants, Materials/Methods: Total sample data is 220 examinees, in the age of 18–65 years, of both sexes, all working people, of different social status and cultural habits. They have been treated in Center for telepsychiatry in virtual psychiatry Ambulance for various psychiatric syndromes all having the same denominator-mobbing, as ethiopathogenetic factor. In the research, the following instruments were used: Questionnaire of socio-demographical, Telepsychiatric interview (with teleconsultation), Beck's scale for self-esteem of depression, Hamilton's scale for depression (HAM-D) and Hamilton's scale for anxiety (HAM-A).

Results: Upon evaluation, it was identified that major proportion of examinees shows:

- 1) Mental health and psychiatric diagnosis 142 (64, 55%)
- 2) And other Different somatic diagnosis 74 (33, 64%)
- 3) And only 4 (1, 81%) without any diagnosis.
- 4) From 142 (64, 55%) Mental health and psychiatric diagnosis major 110 (77, 46%) include symptoms of depression; that is statistically important P < 0.01.

Conclusions: With treatment by telepsychiatry with teleconsultation result is significantly reduces consequences to mental health. These facts are best confirmed by measurement instruments used during this research: HAM-D, Beck's scale and ICD 10. Phenomena of abuse on workplace should be continuously researched, and all gained results could have significant clinical, public health and research implications.

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Untreated schizophrenics in hard felony commitment

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Introduction/Objectives: Analysis of diagnostic categories in respect to character of felony committed, among the patients on forensic ward of Specialized Psychiatric Hospital Kotor, Montenegro, reveals that 5 of 21 hospitalized patients who committed homicide where tempore criminis in a state of unaccountability due to mental illness – paranoid schizophrenia psychosis.

Participants, Materials/Methods: In 4 of 5 cases mentioned, illness was diagnosed for the first time during forensic – psychiatric expertise and so, based on assessment of clinical status of subject and their occupational and social disfunctionality, it is ascertained that the beginning of illness dates from the period much prior to the crime committed, but the patients didn't have psychiatric treatment and have never taken antipsychotic therapy.

Results: Regular application of psychopharmacological protocol led to a reduction of psychotic phenomenology and, according to indicators on scale of aggression, to a significant decrease in estimated risk from auto and hetero destructive behavior.

Conclusions: Regarding that further larger number of chronically ill patients who suffer from paranoid schizophrenia and are regularly treated never committed a crime in their personal history (do not have criminal behavior in their personal history), even though it is a psychiatric disorder permanent in character, mentally ill patients cannot be considered permanently aggressive toward the surroundings or themselves.

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Psychosis and Parkinson's disease

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Introduction/Objectives: Psychosis in Parkinson's disease can be caused by both extrinsic and intrinsic factors.

Participants, Materials/Methods: Case presentation: In the period from 1982 to 1986 the patient S.A. (75-year-old woman) had been hospitalized several times. She was admitted to the psychiatry with the diagnosis psychosis depressive and cured with antipsychotics (clozapine, levomepromazin) and antidepressants (maprotilin). In 2009 she was again admitted, but this time in the semistuporous state, mutistic, with the clinical state of paranoid – halucinatory psychosis. She was diagnosed Parkinson's disease 2 years ago and has been treated with the combination of levodopa and benzerazid as well as entekapon.

Results: The question is whether the trigger for the psychosis is Parkinson's disease, antiparkinsonian medications in itself, or the previous psychiatric diagnosis represents the risk factor which enables the antiparkinsonian medications to activate the psychosis. The treatment involved gradual decrease in the dosage of antiparkinsonian medications and introduction of antipsychotics (clozapine).

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Benzodiazepine derivatives consumption in the Republic of Croatia in 2005, 2006 and 2007

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Introduction/Objectives: Benzodiazepine derivatives are drugs used to relieve anxiety, muscle spasms, and seizures and to control agitation caused by alcohol withdrawal. A review of the cost and consumption for all medicines and benzodiazepine derivatives in Croatia in 2005–2007 periods, as well as the data on medicine usage for these two groups are obtained. The importance of collecting data on benzodiazepine derivatives consumption is in correlation with the improvement on antipsychotic/anxiolytic therapy.

Participants, Materials/Methods: Agency for Medicinal Products and Medical Devices in Croatia is authorized for collecting and processing data on medicines consumption. Data on medicine usage between 2005 and 2007 was gathered from obliged entities, processed by the DDD/1000inh/day and ATC classification, and the analysis of the financial indicators was done as well.

Results: It was established that the total medicines market in Croatia in 2005 was 6520 million and 8.5% DDD/1000inh/day for benzodiazepine derivatives N05BA + N05CD groups, in 2006 it was 6562 million and 8.53% DDD/1000inh/day for N05BA + N05CD groups, and in 2007 it was 6670 million and 9.37% DDD/1000inh/day for N05BA + N05CD groups. By processing consumption data as DDD/1000inh/day, between 2005 and 2007 consumption of N05BA + N05CD groups were 55.15, 59.37 and 76.5 DDD/1000inh/day, respectively. Expenditure of benzodiazepine derivatives individually was as follows: diazepam was at the first place (20.71 in 2005, 23.02 in 2006 and 23.42 DDD/1000inh/day in 2007. Alprazolam was at the second place (13.99 in 2005, 16.14 in 2006 and 16.9 DDD/1000inh/day in 2007.

Conclusions: During the period 2005–2007, all benzodiazepine derivatives, which were in the market in Croatia, showed a continuous increase in prescribed DDD/1000inh/day. For the entire period diazepam and alprazolam were the most prescribed

© 2009 The Authors Journal Compilation © 2009 John Wiley & Sons A/S *Acta Neuropsychiatrica 2009: 21 (Supplement 2):* 73–94 93 drugs. By collecting and analyzing data useful for the improvement of pharmacotherapy, we also obtain information for the many other factors essential for the rational health care.

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Identifying patients with suicidal ideation using transcranial sonography (TCS)

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Aims: Recent TCS studies showed that disruption of echogenic midbrain line corresponding to basal limbic system and raphe nuclei (RN) within might represent functional marker for the development of depression (irrespective of diagnostic category). Also, depression is the most common psychiatric disorder associated with suicidal ideation.

Still there is lack of evidence that, at patients with suicidal ideation, TCS might record same RN alteration. Therefore, we initiated this study to test the possibility of TCS to disclose suicidal risk at patients with major depressive disorder (MDD).

Methods: Altogether 90 subjects: 30 patients with MDD, 30 patients with MDD who also reported suicidal ideation and 30 healthy controls where studied using TCS. Severity of the disease was measured according to Hamilton Depression Rating Scale (HDRS) and clinical global impression scale (CGI).Examination was performed by standardized semi quantitative protocol.

Results: Reduced raphe echogenicity was found in 16 of 30 (53%) of the patients with MDD but only in 6 of 30 (20%) controls. In patients with suicidal ideations that finding was even more pronounced 22 of 30 (73%), with the highest frequency of completely not visible TCS RN finding 20 of 30 (67%).

Conclusion: Our results showed that alteration of RN is frequent TCS finding in depressive states. That finding is rare in healthy subjects; however, in suicidal patients such alteration was even more pronounced. Finding of completely disrupted RN line was frequently associated with suicidal ideation. These data suggest that TCS might be novel method for the detection of patients with suicidal risk.

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Burn-out syndrome and suicide ideation in psychiatry residents

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Residency is a stressful period when residents face extremely high job and educational demands. In order to identify risk factors specific for psychiatric profession, we designed The International Psychiatry Resident / Trainee Burnout Syndrome Study (BoSS). It is the first large-scale international study with 26 countries included and this is report from Croatia and France, the first two to complete it. Study sample consisted of 224 residents - 54 from Croatia (54% response rate) and 136 from France (34.1%). The BoSS questionnaire collects data on demographics, education, work circumstances, The Maslach Burnout Inventory (MBI-GS), The Suicide Ideation and Behaviour Ouestionnaire. The Areas of Worklife Survey and The Patient Health Questionnaire. Mean age of participants was 28.7 years (SD = 3.5), majority were female in the first half of the training. They showed moderate level of burnout. Being single, fewer working hours and vacation days, and higher workload significantly predicted higher emotional exhaustion and higher cynicism. We found that 49 (27%) reported lifetime suicide ideation and these were significantly more the French (48/136 vs. 1/54). Ideators scored higher on exhaustion, lower on cynicism and significantly lower on professional efficacy scales (P = 0.002.). There were 5 (3.7%) persons (all French) who attempted suicide. We showed that psychiatry residents are at high risk for burnout and suicide ideation (higher than in similar studies). This is first comparative study between Croatian and French psychiatry residents and we found very specific differences that should be taken into account when creating national residency programs and interventions.

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Self-help groups in programs for treatment and rehabilitation of addicts – Croatian model of psychiatry in community

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Department of Psychiatry of the University hospital "Sestre milosrdnice" in Zagreb has a long-standing tradition in working with dependencies. Within the segment of social-psychiatric action it is prominent in establishing and expanding the network of selfhelp groups based on the model established 45 years ago, with the founding of the first Club of treated alcoholics (CTA), by Professor Vladimir Hudolin. Many experts developed his model and together with treated alcoholics founded an entire territorial network across Croatia that today numbers 220 CTA. CTA are non-profitable non-government organizations founded with the aim of treatment and rehabilitation of alcoholics and their families. Experts are included into CTA work, doctors, social workers, nurses, psychologists. CTA represent a high quality and most rational view of treatment and rehabilitation in the community, and also have a large preventive effect. The model for clubs of treated alcoholics has also been modified for other dependencies. In 2001 first clubs of treated drug addicts were formed. Today there are 7 active clubs for treated drug addicts, 4 in Zagreb, and in Split, Slavonski Brod and Imotski.

Furthermore, based on the same model, the first club for gambling addicts was founded 2 years ago. Four such clubs are presently active in Zagreb. Self-help groups (citizen organizations) are a showcase model for psychiatry in community. They have a substantial therapeutical and social potential which is amplified with the cooperation between expert and clients themselves. They represent an important factor in improvement of mental health in the community and as such we are recommending them as an unavoidable link in treatment and rehabilitation of addicts.