

# »Alea Iacta Est« (A Case Series Report of Problem and Pathological Gambling)

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## ABSTRACT

*Gambling or gaming is a common term for a group of various games, activities and behavior that involve wagering money on an event with an uncertain outcome with the primary intent of winning additional money, i.e., a player risks and hopes to get back what he/she had gambled, or to win more. When the player is unable to resist impulses to gamble, and gambling behavior harmfully affects him or the others, then he/she is suffering from the so called »pathological gambling«, which is one of six categories of the »Impulse control disorders« in the International Classification of Diseases. Since, at present, there is no standardized program and approach to the problem of gambling in Croatia, and having in mind the arising accessibility and popularity of the »games of chance«, the authors are presenting seven cases of problem and pathological gambling and call for broad public discussion on the problem from medical-psychiatric and forensic-point of view. The first patient was treated on an outpatient basis with cognitive-behavioral and family therapy for problem gambling; for the second patient was treated for impulse control disorders; for the third patient gambling was a symptom of psychotic form of depressive disorder; the fourth had primary diagnosis of personality disorder; and the fifth patient was prosecuted for armed robbery and evaluated by a psychiatric expert. The sixth and the seventh patients were women suffering from primary bipolar affective and major depressive disorder, respectively. The authors conclude that, due to the size of the problem and its consequences, the prevention of pathological gambling is very important. The prevention can be carried out primarily through screening at the school level and primary health care services, whereas secondary screening may be conducted through the system of psychiatric care. It is recommended to invest into research, education of a wider population, and development of preventive programs.*

**Key words:** *pathological gambling, impulse control disorders, obsessive compulsive disorder, bipolar affective disorder, depression, mental health, forensic psychiatry, expertise, psychopharmacotherapy, psychotherapy, social pathology, personality.*

## Introduction

Gambling or gamble is a common term for all hazardous games that include playing for stakes in the hope of winning (i.e., taking a risk in the hope of gaining an advantage or a benefit)<sup>1</sup>. There are records on gambling from before 5000 years B.C., and we can read about it in the Bible (»They divided my clothes among themselves and for my clothing they cast lots«)<sup>2</sup>. Kraepelin and Bleuler (1924) described the term »gambling mania«, the disorder that includes panic disorder, ADHD (attention-deficit hyperactivity disorder), and various impulse control disorders<sup>3</sup>. Nowadays, the increasing accessibility and

availability of gambling opportunities, including internet, increased the incidence of pathological gambling which was included into the International Classification of Diseases in 1980<sup>4</sup>. We have all heard about Alexei Ivanovich and other characters from »The Gambler« by Fyodor Dostoevsky<sup>5</sup>, John Henry »Doc« Holliday<sup>6</sup>, and many other characters from adventure movies about gamblers, their glamorous life, beautiful women and passion for risky games. International classifications of diseases ICD-10 and DSM-IV classify pathological gambling as one of six Impulse control disorders (321.3 vs. F63.0 or

Z72.6-)<sup>7</sup>. Like other disorders from this grouping, pathological gambling is also characterized by the failure to resist an impulse, drive or temptation to perform some act that is dangerous or harmful to the patient or others. Other impulse control disorders are: F63.8 Intermittent explosive disorder, F63.2 Kleptomania, F63.1 Pyromania, F63.3 Trichotillomania, and F63.9 Impulse-control disorder NOS. Another characteristic shared by the disorders from this grouping is that the person senses an increasing tension or arousal prior to the act. During the act the person experiences pleasure, gratification, or relief, what may be followed by remorse, self-reproach, or guilt<sup>8</sup>. Epidemiology and the sociodemographic profile of pathological gamblers. According to the available data, the prevalence of pathological gambling may be as high as 1%-4% of the adult population; 3.9% of them are pathological and 9.5% are problem gamblers<sup>9</sup>. According to Pasternak et al. (1999), in males, the onset of pathological gambling begins in adolescence; in females the onset occurs later in life.

The adolescents are at risk because of the very nature of their development and growing up followed by curiosity and testing the limits. In the age of 17–35, there are 28% male gamblers and 10% female gamblers. Most gamblers are found in the age group of 35–45 (54%–58%) whereas in the age of 55–65 there are 16% male gamblers and 18% female gamblers. There are 2%–4% of gamblers in the age group of elderly persons (65 years and older). They usually gamble in the morning, mainly for recreation or to increase their, usually fixed, incomes. Their cognitive evaluation is sometimes critical, and due to small income, gambling can have a devastating effect on their finances in a very short time. The mean age of the subjects is 44±14 (range 21–72 years). Half of the subjects are married, 27% are single and the others are divorced (20%) or widowed (3%). Most of them have secondary education or a college degree, and they are mostly workers, clerks, or technical personnel with an average salary<sup>10</sup>. Male population is specifically at risk; the men outnumber the women 2 to 1. However, some forms of gambling, like »Bingo« – which is legalized as a relatively safe form of engaging in leisure activities – have lately increased gambling-related problems, especially in women. There is also the growing influence of popular computer games, video terminals (video poker, slots machines) and online casinos. The most vulnerable are those already involved in gambling, especially the prisoners, the Casino employees (about 2% of them have serious gambling problems), soldiers, and retired veterans<sup>11</sup>.

There are cultural variations in the prevalence and the type of gambling, and therefore some games are specific to a particular social milieu (for instance, cockfights, horse-racing, Paj Gow Poker, Russian roulette...). The influence of cultural factors is substantial among immigrants, especially if they do not speak the language of the country. In such circumstances, they organize and participate in their traditional games they had brought from their homelands<sup>12</sup>.

There are still no epidemiological data for Croatia. Participation in games of chance like lotto, bingo, instant lot-

tery, and sports betting is more popular than participation in »classical« games of chance (card games), horse or greyhound racing. Games that are most often played in casinos are card games (poker, blackjack, etc.), dice games (roulette, craps, etc.) and gaming machines. It is also popular to bet on results in the so called »games of skill«, like bowling, golf, or stock speculation and day trading.

#### *Etiology – biopsychosocial/spiritual disorders*

Considering that gambling can destroy families and has medical consequences, health professionals should be aware of the effects of gambling<sup>4</sup>. Studies carried out in some countries showed that increased access to gambling raised the number of problem gamblers. Although this relation may not be proportional, it certainly is a healthcare concern, and the rapid expansion of gambling becomes a significant public health risk, and should be recognized as such<sup>9</sup>.

Pathological gambling is a complex biopsychosocial disorder, the etiology of which is still being studied; multiple factors are associated with pathological gambling, such as: sociocultural background, personality, associated symptoms of other mental disorders. It is often considered a dependence, although there is no intake of a substance that cause dependence (like in alcoholism) nor visible physical difficulties (like slurred speech or stumbling). Similarities with dependences are: loss of control over gambling, preoccupation with gambling, adverse social consequences that disrupt most areas of the person's life, tolerance, withdrawal, participation in self-help groups during treatment, stigmatization. Differences include fantasies of success and influence, cognitive distortions, irrational behavior. There are no biological tests for detecting gambling problems, the gambler has no self-limits and financial problems occur more quickly<sup>13</sup>.

Psychological changes are related to physiological changes in the brain, and probable neurobiological cause is related to hypo- or hypersensitivity of noradrenergic and serotonergic systems related to compulsive disorder. While enjoying the game, the epinephrine secretion is increased, plasma concentration of beta-endorphin is rising. Catecholamine secretion is elevated, but not significantly. Heart-rate is significantly higher, and this increase is related to mood changes, and euphoria. Casual smoking may also lead to nicotine dependence. Nicotine induces dopamine secretion and beta endorphins modify the affective and cognitive status.

Immune system and heart rate also respond, since the increase of beta-endorphin works as immunosuppressor and activates the immune system, and norepinephrine secreted is correlated with heart rate. Significant, increase in dopamine secretion suggests dopamine neuron activity and may reflect the physiological process that motivates people to play games repeatedly<sup>14</sup>. Eisenk et al. conducted a genetic study and analyzed 3359 twin pairs; they concluded that familial factors (both genetic and environmental) occur in 56% to 62% in pathological gamblers, with significant evidence of familial aggregation. Mono (MZ) and dizygotic (DZ) twins of pathological gamblers had a

lifetime prevalence of 22.6% and 9.8%, respectively, which are significantly higher than the prevalence in the general population. Unfortunately, all studies had only male subjects, and therefore the findings may not apply to female gamblers, i.e., the differences between the genders were not studied, except those with small female samples<sup>15</sup>.

Psychodynamically, the realization of an impulse to gamble is related to the need to express sexual and aggressive drives. Underlying depression is often associated with gambling and represents an unconscious »need to lose«, or to be punished for unconscious feelings of guilt. Narcissistic grandiose and omnipotent fantasies lead to the illusions and false notions of having control over events and of ability to predict outcomes. Behavioral theories view gambling as maladaptive behavior, while cognitive hypotheses are directed toward numerous erroneous perceptions regarding locus of control and lead to cognitive changes<sup>16</sup>.

While determining etiology, it is necessary to exclude organic disorders like head injuries, brain tumor, degenerative illnesses and endocrine disorders, based on characteristic findings for each of them. CT-scan of brain, EEG and RTG images should be made in order to exclude injuries and possible existence of brain abnormality, temporal lobe epilepsy or mixed cerebral dominance. Endocrine disorders, antisocial personality disorder, psychoactive substance use disorders, i.e., drug or alcohol abuse should be excluded. There are 19%–50% of gamblers with history of alcohol or drug dependences in a clinical sample. In patients with impulse control disorders alcohol causes disinhibition, and it has been determined that family inclination for gambling and alcohol dependence occur more often among the parents of pathological gamblers than among general population. Loss of judgment and excessive gambling may occur during manic episode in bipolar affective disorder. Delusional ideas and hallucinations associated with a schizophrenic illness may sometimes explain the realization of the urge to gamble<sup>17</sup>.

### *Differential diagnosis*

To gamble means to »take a risk in the hope of a favorable outcome, to take a chance«. In professional gambling, discipline is central, and the risks are limited.

Social gambling lasts for a limited period of time with predetermined and acceptable losses (85% of population). The pattern of gambling may be infrequent, episodic (less than once a month) or frequent, regular gambling (at least once a month). We can differentiate persons at risk for developing problem gambling (they have gambled frequently and repeatedly during last 18 months) and persons at high risk for developing problem gambling; they gamble repeatedly and frequently and have one or two problems associated with their gambling (e.g., short-term »chasing behavior« or loss of control) that do not meet the full criteria for pathological gambling. Problem gambling is the gambling that has already caused disruptions in the person's major areas of life, including relationships, marital status, employment, finance, or legal problems (5%–6% or 5%–22% of population, depend-

ing on the study). Problem gamblers gamble frequently and have three or four problems associated with gambling. Pathological or compulsive gambling, »gambling dependence« is a disabling disorder that has been found to affect 1% of population, or even 7%–26%, depending on the study. Pathological gamblers are defined as persons who have gambled frequently for last 18 months and have five or more problems related to gambling<sup>18</sup>.

### **Case Report No. 1. – Problem gambling**

B. A. is a 46-year old married male nurse, father of two, employed. He first sought help for gambling problems in 2002. He had been gambling for five years in a slot machines club, where he had spent large sums of money. His mental functioning is above average, moderately extroverted, average emotional stability. Maladjusted, stereotyped, curious person, prone to adventures, likes risks and changes. Sometimes he seems unfocused and aimless. He sought help initially at his wife's request and was treated in the outpatient clinic with behavior and family psychotherapy carried out by a psychologist.

Therapy focused on gaining better self-control and finding the goal attractive and exciting for him, with an unknown outcome, and at the same time desirable for other family members. Neurolinguistic programming (NLP) techniques were used to create well formed outcomes. Cognitive-behavioral therapy (CBT) was used to find new routes and to change his behavior at home. His wife was included into sessions, and they were both trained in communication, together and individually. At that point, he was content and felt free, and was looking for ways to legally earn extra income.

In 2003, communication within the family deteriorated. His urge to get back to old habits was increasing. He sought approval from his psychotherapist to gamble. Then, finally, he recidivated and went into considerable debt. He re-entered the treatment, reluctantly, in 2004. He is still certain that he is able to control his gambling impulses, though in reality he is not. He still continues to gamble, and is in debts. His communication with the family members is minimal, and he avoids going home. Occasionally, he makes an appointment with his psychotherapist, but he never goes to the meeting. Meanwhile, his wife initiated the divorce to protect her and their children's property.

### *Diagnostics*

Diagnosis for pathological gambling is based on the patient's anamnesis, mostly according to the International Classification of Diseases (ICD-10) or Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria<sup>7,8</sup>. Both criteria describe pathological gambling as the »impulse control disorder« and they both use polythetic list of 10 criteria, five of which are required for making diagnosis, and the existence of »two or more episodes of gambling in the period of at least a year«. Research Diagnostic Criteria (RDC) may be used in studies conducted to determine the prevalence of pathological gambling in general

population<sup>19</sup>. The »Lie/Bet Questionnaire« is also useful. It consists of two questions that specifically point out to the existence of problem gambling: 1. »Have you ever felt the need to bet more and more money?«; 2. »Have you ever had to lie to people important to you about how much you gambled?«. Further assessment of the quality of life may be advisable based on clinical interview. For instance: »How much of your time do you spend gambling?; How important is gambling to you?; Do you plan your trips only to locations where you can gamble?; Do you gamble alone?; What are the problems your gambling is causing in your life?«<sup>20</sup>. A structured interview, Diagnostic Interview for gambling Severity (DIGS), consisting of 20 questions is also used for clinical evaluation to determine if the DSM-IV criteria for pathological gambling are met<sup>21</sup>. The most widely used instrument in assessing the prevalence of pathological gambling among general population and in helping identify patients with pathological gambling problems is the »South Oaks Gambling Screen« (SOGS). It is a 20 item, self-report measure that should be completed within 5–10 minutes, with a cut-off score of five or higher indicating pathological gambling<sup>22</sup>. NORC DSM Screen for Gambling Problems (NODS; National Opinion Research Center) is a structured interview also used to determine the prevalence of problem gambling among population. It consists of 17 questions designed to reflect the DSM-IV criteria. The NODS classifies respondents as non-gamblers; low-risk (gamblers with no adverse effects); at risk (gamblers meeting one or two of the DSM criteria); problem (gamblers meeting three or four criteria) and pathological (gamblers meeting five or more criteria)<sup>23</sup>. Several other popular instruments have been developed: Gambling Severity Index (GSI) (range=0 to 1, with 1= maximum severity), Cumulative Clinical Signs Method (CCSM), Brief Symptom Inventory (BSI), California Personality Inventory (CPI), Massachusetts Gambling Screen (MAGS), and a popular list of »20 Questions« devised by »The Gamblers Anonymous« (GA-20)<sup>24</sup>.

### *The course of the disorder*

In most persons the course of the disorder is chronic, with progression in the frequency of gambling, the amount of money wagered, and the preoccupation with gambling and obtaining money with which to gamble. The social and health costs of problem gambling are large at both individual and societal levels<sup>25</sup>. Pathological gamblers are at high risk for suicide; 48%–70% of pathological gamblers have contemplated suicide, and 13%–20% of persons treated for pathological gambling had made an attempt on their lives<sup>26</sup>.

### **Case Report No. II. Pathological Gambling – Impulse Control Disorder**

D.C. is a 33-year old economist, a banker, father of two. His first visit was in 2003. He had been pathologically dependent on sports betting for 12 years. He entered the treatment after being away from home for seven days during which he contemplated suicide, wandered through forest and land minds. He sought help at his wife's and

his father's request in order to avoid dismissal from work, and he was hospitalized. His father managed to pay his debts. But he recidivated and his misbehavior escalated to criminal behavior. After a serious suicide attempt he was rehospitallized. He was treated with olanzapine, escitalopram, lamotrigine and alprazolam, and if necessary with zolpidem. He is in remission. He was fired from his job. He has been trying to find a job that fits his qualification in other companies, but is not very successful because of his bad reputation, and is forced to take lower-skilled jobs.

### *The course of gambling is insidious, and conversion to pathological gambling*

Probably is precipitated by increased exposure to gambling, or by the occurrence of a psychological stressor or significant loss. The history of the illness has usually been divided into four phases. In the first (winning) phase, winning a large sum of money stimulates feelings of omnipotence. In the second (losing) phase, the person either has a feeling of having bad luck or begins to find losing intolerable (Criteria A7-A10, ICD-10)<sup>8</sup>. In the third (desperation) phase gamblers engage in uncharacteristic, often illegal behaviors. They write bad checks, embezzle the funds, and desperately seek ways to obtain money to continue gambling, both to recoup loses and to regain feeling of arousal characteristic of the initial phase. Relationships deteriorate further. Symptoms of depression appear, including neurovegetative signs, suicidal ideation and suicide attempts. The fourth phase (hopelessness), involves an acceptance of loses and the fact that the money will never be recouped.

Nevertheless, gambling continues, and arousal or excitement is now the main motivator. Although some gamblers seek help while still in the initial (winning) phase, most of them seek help much later, mostly because their relationships are disturbed, or because they have committed illegal acts<sup>27</sup>.

### **Case Report No. III. – Pathological Gambling – a Symptom of Major Depressive Disorder**

F.E. is a 46-year old married plumber, father of two. His first visit was in 2002, and for 12 years he had been a pathological gambler addicted to slot machines and poker machines. He sought help initially at his wife's request, and was treated in the outpatient clinic with paroxetine and behavioral psychotherapy. After two months he was hospitalized for depression with psychotic features and in delusional state. Antipsychotic olanzapine was included into therapy at the daily dose of 20 mg. Remission occurred after three months and the follow up continued in the outpatient clinic with 10 mg of olanzapine and 40 mg of paroxetine daily. Three months after his discharge, he visited one of places where he used to gamble and he managed to control his gambling impulse. Then he gradually stopped taking his medications. Three weeks later he relapsed to gambling, made an attempt to his life, and was rehospitallized. His treatment continued with olanzapine (20 mg) and paroxetine (40 mg), and he was treated

with behavioral psychotherapy and joined a support group at the hospital ward. Six months after the inpatient treatment, he reported to have the desire to gamble, but it was under control. He was in a good mood and had plans for the future. His condition has not changed. He has been receiving the same therapy<sup>28</sup>.

### *Treatment and family inclinations*

Although there has been no standard treatment program for pathological gamblers, various individual outpatient and inpatient treatment programs have been developed. In general, the best treatment that affects the retention and abstinence is a combination of medication, psychotherapy, self-help groups (Gamblers Anonymous), family therapy, and prevention<sup>29</sup>. The efficacy of gambling treatment may be seen after six to 12 months of follow-up. Some data suggest that reductions in gambling may be more viable goal for pathological gamblers than abstinence, which may not be a realistic goal for some gamblers. Statistics show that only eight percent of GA members achieve a year of abstinence<sup>26</sup>. The need to gamble generally increases during periods of depression or stress, and it is necessary to treat the comorbid depression, mania, psychoactive substance abuse, or sexual disturbances, and general medical conditions associated with stress (e.g., hypertension, peptic ulcer disease, migraine...). When applying pharmacotherapy, it is necessary to show consideration for some general principles applied to a specific problem. First of all, it is necessary to aim the need and the urge for gambling, and it is also necessary to treat comorbid depression, OCD, sleeping disorder and concentration problems. One should know that there are no »magic bullets« and that medication is the basis of psychosocial therapy<sup>30</sup>. Studies of the effects of pharmacological interventions in the period from 1950 to 2005 include placebo controlled and pre-post design studies of selective serotonin reuptake inhibitors, opioid antagonists and mood stabilizers. Antidepressants are used to reduce comorbid depression and OCD and to decrease the urge to gamble; mood stabilizers are used in cyclic mood disorders, antipsychotics and opioid antagonists for reduction of the urge, and antiepileptics are useful in reducing impulsivity<sup>31</sup>.

The majority of treatment studies are currently based on cognitive-behavioral therapy (CBT), the goal of which is to restructure specific cognitive distortions, and on understanding of erroneous perceptions and delusions (»illusions of control«, »the gambler's fallacy«, »gambling will fix everything«). It is necessary to develop consciousness about erroneous perceptions and expectations and make cognitive correction of erroneous perceptions and mistaken belief about gambling (»I am a winner«). There are also the problem solving technique, social skills training, relapse prevention training, individual stimulus control therapy, and the efforts are made to find the ways to avoid high-risk situations, aversive treatment, exposure and preventive response. Imaginal systematic desensitization is particularly useful, during which, after the patient is relaxed, the therapist guides the patient through

the gambling situations, moving from the situation with minimal anxiety to situations with greater anxiety. It is recommended to develop manuals for therapists and self-help manuals<sup>32</sup>. Motivation enhancement techniques (ME) are designed to provide feedback on likely consequences of the gambler's behavior in an effort to increase the gambler's motivation to reduce or eliminate his/her pathological gambling behavior<sup>33</sup>. Various relaxation and visualization techniques and hypnosis therapy are also useful<sup>34</sup> and, there is also financial counseling (Money Management) which includes legal information, debt management, budgeting, and involvement of family members, who are advised to open separate accounts<sup>35</sup>. Psychodynamic approach enables the client to understand his/her conscious and unconscious motivation for gambling, to interpret (his/her) attitude about gambling behavior, the need for competition, spectacular success, freedom, independence, the need to avoid or escape from responsibility, reality and intolerable affects and problems, and rebellion against authority, breaking through the denial. The person's maladaptive defenses (acting out, suppression, rationalization) are confronted. The attempts are made to interrupt the chasing cycle, to increase the motivation to reduce pathological gambling behavior, to diminish shame, guilt and stigma. In 1957, Bergler reported on psychodynamic treatment of 60 gamblers. He claimed a success of 75%, but the result is based on 30% of the original sample – those who remained in treatment, and Rosenthal (1992) describes similar treatment for gamblers focused on low ego strength and narcissism as well as on grief associated with giving up gambling<sup>36</sup>. Gambler's Anonymous recovery program began in Los Angeles in 1957 and is based on a twelve-step model. The program also includes a self-help program for the family members (Gam-Anon)<sup>37</sup>.

### *Psychiatric comorbidity is the rule, not the exception*

Many persons with pathological gambling are often highly competitive, energetic, restless, and easily bored. They may be overly concerned with the approval of the others and may be generous to the point of extravagance. When they do not gamble they may be »workaholics« or »binge« workers who wait until they are up against deadlines before really working hard. They may be prone to developing general medical conditions that are associated with stress. Let us not forget that, in general population, depressive and anxiety disorders are more prevalent in women than in men, as well as comorbidity. Some studies that were using Eysenck's model reported higher neuroticism, psychoticism and high impulsivity in gamblers<sup>38</sup>.

Pathological gamblers have been found to suffer from substance abuse/dependence (25%–65%) four to ten times more often than general population; dependence on tobacco has been found in 25%–63%, dependence on alcohol in 45%–55%, and dependence on other substances in 60%–85% of pathological gamblers. Affective disorders, primarily depression, have been found in 70%–80% of in-

patients and 50%–60% of outpatients treated for pathological gambling and even one third of problem gamblers have first-degree relatives who suffer from mood disorders. Attention-deficit hyperactivity disorder (ADHD) is found in 30% of gamblers, what is two to three times more often than in general population. Anxiety disorders are present in 10%–35%, and obsessive compulsive disorder (OCD) and social phobias in comorbidity are present in 21%–60% of cases. It is important to know that types of cognitions and behaviors in pathological gamblers differ from those reported in patients with OCD. With pathological gambling, repetitive gambling behaviors or gambling preoccupations are usually described as pleasurable and ego-syntonic. Subjects may report that they suffer the consequences of gambling later on, but gambling urges are rarely resisted. With OCD, obsessions and compulsions are regarded as intrusive, senseless and ego-dystonic<sup>30</sup>. Personality disorders are generally present in 20%–90% of pathological gamblers, with 14% of antisocial disorder alone, followed by avoidant, narcissistic, borderline, schizotypal, and paranoid personality disorders. Impulse control disorders are also highly comorbid with pathological gambling, especially compulsive buying disorder and compulsive sexual behavior. Impulsivity, irresponsibility, carelessness and recklessness characteristic of gambling may seem attractive to persons with antisocial personality disorder<sup>39</sup>.

Preoccupation with details is characteristic, and some forms of gambling, such as slot-machines, require little interpersonal contact (which fits avoidant or schizoid personality disorder). Raine (2000) proved that poor prefrontal functioning is characteristic of violent antisocial persons, which is observed as prefrontal structure deficit, i.e., there is reduction in gray matter volume in the absence of brain lesions. Reduced autonomic activity during a social stressor was also observed, and depends on psychosocial risk factors. This all forms the base of poor fear conditioning, lack of conscience, and decision-making deficits that have been found to characterize antisocial psychopathic behavior. Beside gamblers who lose emotional stability, some gamblers, especially professional gamblers, may have high self-control of emotions, especially hostility (which is more self-directed than directed toward others). They have a tendency to engage in hazardous risk behavior (smoking, night driving, extreme sports), they seek excitements, i.e., high level of emotional excitation. Material possessions are not really important. It is obvious from risky financial transactions which they tend to make. The gamblers gamble »with money« and not »for the money«. Gambling makes them relaxed. The excitement itself, the passion they feel, is their key driver<sup>40</sup>.

#### **Case Report No. IV. Pathological Gambling – Part of Clinical Picture of Personality Disorder**

H.G. is a 33-year old railroad worker, with secondary school education, without children, who has been living

for six years with his unmarried wife and her son from a previous marriage. She was diagnosed with terminal breast cancer, and her son was an excellent, second grade Gymnasium student. The patient came to the Center for prevention of dependences at his wife's request, seeking help for smoking problems, in the autumn of 2004. He has been pathologically dependent on sports betting for 10 years. His gambling and heavy losses became financially devastating to them because his family had very limited income sources. He did not consider himself ill, nor did he seek treatment. He was coming to therapy only because his wife insisted he should seek help for his nicotine dependence. His gambling problems were not discussed within the family. Not only did he contribute financially to the family budget but he also »borrowed« from his wife's social security benefits. Financial problems forced her son to try to earn some money for himself and his education; after his mother had died he was placed into a foster home because his step-father had abandoned him.

#### *Forensic aspects*

Majority of pathological gamblers are essentially non-violent population that turns to criminal activities in the desperation phase caused by their debts and the consequences; nevertheless, 70%–80% of pathological gamblers have committed illegal acts during their illness, which were directly related to gambling. Since gambling is expensive they have to find ways to finance their dependence and so form a vicious circle – they borrow, gamble, lose, and borrow again. A pathological gambler lives in a world of dreams which gives him strength to make up unbelievable, but persuasive stories. Even when he repays a debt he may well borrow more from the same person a few days later when his winnings are gone. Sometimes he finds himself in crisis with no one to lend him money, chased by creditors. When he feels that there is no way out he becomes capable of committing an illegal act<sup>41</sup>. In case that forensic assessment is needed, forensic psychiatrist performs evaluation of the influence of the disorder on the patient's accountability, i.e., on intellectual functioning and volition of the offender at the time he committed the act. »The purpose of the expertise is to determine the offender's accountability at the time the offence was committed, with regard to his mental state, and especially to his tendency to engage in games of chance (dependence)<sup>42</sup>.

The gambler's accountability may vary in degrees from legally accountable to legally unaccountable; accountability may be more or less reduced, depending on a situation and taking into consideration the gambler's personality, presence of a psychological disorder, presence of substances that produce dependence, and including situation factors under which the act was committed. Acceptance of pathological gambling as illness, i.e., psychiatric disorder, brought the legal system to encounter the problem of reduced legal accountability more often, in cases when the penal or misdemeanor acts are committed by gamblers. In the USA, the prevailing position is that it is

not in the public interest to consider impulse control disorders sufficient for establishing a defense on the ground of reduced accountability. Therefore, pathological gambling is not considered a sufficient reason for the absence of legal accountability. Blaszczyński and Silove (1996) conclude that the diagnosis of pathological gambling does not diminish legal responsibility, but is a factor that has to be taken into consideration when passing a sentence<sup>43</sup>.

### Case Report No. V – Expertise

J.P. is a 20-year old student. He has been under investigation for five handbag thefts and six shop robberies committed during two months. He committed robberies using a knife and threatening the saleswomen to kill them. He was ambushed by the police and arrested while committing his last robbery. J.P. confessed and described all crimes he was charged for, and he stated that the money he had stolen was spent on betting. He had gambled the money his parents gave him for accommodation and other expenses at the university, and since he was afraid to admit to his parents what he had done, he started to steal. He continued to gamble, lose and steal again to cover his debts. While committing the acts he was not under the influence of alcohol nor drugs. J.P. is a freshman at the Faculty of Economics and is temporarily living at the city. He denies presence of mental disorders in the family. The course of his birth and his early psychomotor development were normal. He started elementary school at the age of six, and was an excellent student. He graduated with very well from commercial and business school. Except for occasional colds, he has never been never physically ill. He does not drink alcohol, does not smoke, and has no drug experiences. He had normal sexual relationships with several girlfriends. He enlisted in the army. He initially started to gamble in high school, in the second grade, when he started to bet on sports, and he started to gamble in casino in the fourth grade when he visited the casino for the first time with his cousin who was visiting from USA. At first, he gambled rarely, but after awhile he started to gamble more frequently. He had gambled the money received to pay his accommodations the same evening. When he ran out of money, he borrowed, and when his borrowing recourses ran out, he decided to steal. He first stole several handbags, and he spent money on roulette and slot-machines in casino. He gambled almost every day. Only on weekends he went to his parents' and could hardly wait to get back to the city and to gamble; the very next day he would gamble all the money he got from his parents. He was obsessed with gambling. He would go to gamble even in two or three in the morning, when he could not sleep. He would win occasionally, but within the next few days he would have lost it all. He was aware that such a behavior leads nowhere and he was desperate because of it, but he was not able to stop, although he had tried. Sometimes, he was thinking about committing suicide because he knew that he had committed criminal acts to finance gambling. He describes gambling as a passion he can not resist. He felt no pleasure while commit-

ting criminal acts, in fact, he was very afraid, but he saw no other way to get money needed for gambling. Since there was not enough money in women's handbags, he decided to commit a shop robbery, and was arrested while committing his sixth robbery. At university he did well; he was taking examinations and fulfilling his obligations regularly. He has friends, but since he has always gambled alone, very few of them knew about his obsession with gambling. His parents did not know about his gambling problem. After everything, he believes that he will never go to a casino again.

Since there is a significant comorbidity or the existence of several psychiatric disorders in pathological gamblers, they should all be stated in diagnostic assessment (for instance, pathological gambling and antisocial personality disorder; pathological gambling and alcoholism) in order to facilitate forensic evaluation. This way it is easier for a forensic psychiatrist to evaluate the offender's personality and to pay attention to additional factors that affected the offender's ability to control his behavior *tempore criminis*, and it also facilitates the treatment. Kröber (1985) believes that, in some cases, the process of limitation or deprivation of the capacity to exercise rights should be applied to pathological gamblers, analogous to drug and alcohol addicts, prohibiting or restricting their access to the property, both movable and immovable, in order to prevent them to engage in potentially harmful business ventures<sup>44</sup>. Sociotherapeutic and psychotherapeutic treatment of gamblers who were evaluated with reduced capacity to exercise rights may be carried out in penal institutions under the conditions these institutions are able to produce; gamblers who are evaluated as unaccountable and with significant personality changes and/or with other serious mental disturbances may be treated in specialized forensic facilities. After the discharge, the treatment may be carried out in outpatient clinics up to three years according to the Croatian law on protection of persons with mental disorder. In some situations the state attorney may apply the article 175 of the Law on Criminal Proceedings of the Republic of Croatia, according to the principles of expediency, where it is possible to suspend the sentence and to refer the person to treatment or community service, or to order the person to pay restitution for the damage<sup>45</sup>.

### Women and gambling

In the last few years, the number of women who developed pathological gambling is increasing, as well as in alcohol and drug dependences. One third of problem gamblers are women, but in treatment programs they are represented with only 2%–4%, in relation to male population. According to various studies the ratio of male to female gamblers is 2:1, 4:1 or 7:1. For instance, there are only a few women members in the Gamblers Anonymous, what may lead to a conclusion that a number of women who suffer from compulsive gambling is rather small, whereas in fact, it is related to social stigmatization which affects women more than men. Men gamble for money and competition, and women begin gambling

later in life, but they spend maximum time on gambling. They earn less than men, and they suffer more damage gambling. The anamnesis of most women who developed pathological gambling showed the experience of trauma, depression and anxiety. Women are more prone to depression, and they use gambling as hypomanic defense, the way to escape from reality, which may occur during a manic episode in bipolar affective disorder. Consequently, the studies on women gamblers are conducted less frequently and often yield discrepant results. Potenza (2001) shows in his study that women represent only 2%–8% of New England G.A., members in gambling treatment programs and they participated with 30% in the gambling helpline (46).

### Case Report No. VI. – Lady M.K.

M.K. is a 40-year old professor of Croatian literature, employed, not married, a woman with urbane beliefs and modern style, with heavy make-up, dressed in vivid colors, with dark glasses to hide shadows under her eyes. She speaks hastily, laughs loudly, is not able to be still for a moment, and is significantly tense.

She sought treatment saying that it was against her will, but she needed justification for her frequent absences from work last few months. She was not feeling sick, only a »bit exhausted«. For the last few months she had difficulties to fall asleep, and consequently, she had difficulties waking up on time for work. She was irritable and often in conflicts with her colleagues and students. She told her colleagues that she was writing a book, whereas in fact, she was gambling in a casino in the neighboring country. She started to gamble few years ago because of boredom, with some friends. On one occasion, she won a significant amount of money and she became certain she was going to win a jackpot. She never did; she had lost her savings and her gambling debt grew to a two-year salary. She had borrowed money from her family members, but half a year ago, her mother cut off her borrowing recourses and, after a quarrel, ceased communication with her. Then everything started to go downhill. Poor sleep, exhaustion, irregular meals, debts and problems at work piled up. Oddly enough, she noticed that in spite of her problems she felt unusual strength, liveliness, a sort of power... and as if deep inside herself »she knows that she is meant to win the jackpot«, and then everything will be all right. She was no longer able to resist the impulse to gamble. She preferred to play roulette: »I have been spellbound by the ball. I dare not and cannot stop. Who cares for debts? When I win, it will fix everything. I'm only losing time when I go to work...«. She was treated for bipolar, i.e., manic-depressive disorder.

### Case Report No. VII – Lady N.O.

N.O. is a 33-year old housewife, unobtrusive, mother of two, unemployed; she never graduated from the Faculty of Economics. Her husband owns ten cafés with video

poker and slot machines. His constant absences from home made her feel lonely and miserable, imprisoned at her house, and depressive. A year ago she started to invest more money into lotto and bingo. It seemed as if she was going to win a large sum. She had imagined leaving her husband right away and running somewhere far from her present life. She said: »The title would have been: 'No one saw her ever again'«, and she would occasionally send a postcard from somewhere exotic, just to let know she was alive and having a good time. On one occasion, while waiting for her husband at one of his cafés, she started to play video poker, and she got excited like never before. The result was immediate; she did not have to wait for it. Since then, she did not stop playing for almost half a year. She had lost control. Employees in her husband's cafés were betting on which café she will come first, and lose. Her husband was angry, and reproached her, and it only made her to secretly go to the next town to gamble. She began to smoke. She was taking money from the household budget and stealing from her husband, until she was disclosed by a waiter to have stolen money in one of the cafés and spent it on gambling in another town. After that, she tried to commit suicide by poisoning. She was treated for depressive disorder.

Women prefer to play lotto, bingo, slot-machines, and betting, whereas men prefer cards and roulette. Women start gambling later than men, but they reach treatment at the same age as men, usually between 30 and 40 years of age. Married women with children or single women, and women with high or university education are equally represented. The feelings of disapproval, rejection, or loneliness are found in families of women gamblers quite often, especially in those whose mothers were either particularly dominant, cold, cruel, demanding, perfectionists, materialistic, or with particularly weak personality, inefficient, unwilling to protect their children from their fathers. A number of women gamblers were abused by their fathers, including sexual abuse. Women gamblers tend to blame themselves for gambling more often than men, and they may have a very negative picture of themselves. In fact, because of their behavior, they will again become lonely and rejected. Men reaffirm themselves through gambling as well (intelligence, knowledge, skills, and personal values). The typical woman gambler is identified as Caucasian, 30–49 years old, married, with children, with high school education, and a video poker player<sup>47</sup>. Women gamblers are often prone to distortions in thinking, such as denial, superstitions, horoscopes, prophecies, having mystical powers. It is quite frequent among general gambling population, mostly in the form of unreal optimism, overconfidence, or a sense of power and control. The gambler's fallacy, which is quite frequent, is the false belief or misconception about probability. It can be illustrated by considering the repeated toss of a coin. The chances of getting heads are 50:50. The chances of it coming up heads twice in a row are one in four, and so on. The probability of four heads in a row is considered very unlikely (one in sixteen). Reasoning that it is more likely that the next toss will be a tail than a



head due to the past tosses is the fallacy. The fallacy is the idea that a run of luck in the past somehow influences the odds of a bet in the future<sup>48</sup>.

### *Impact on families*

Gambling destroys every part of the gambler's life; the gambler loses self-respect, his/her family relationships are disrupted, he loses his friends, has no consideration for others. Crises follow one another, he has financial problems, and he may lose his job. He is despised and rejected and quite alone. His requests for money are urgent and come without warning; it is a kind of blackmail: »If I do not have money until tomorrow I will go to prison«. It is no concern of his that they put themselves in debt to get him out of trouble. Family members feel responsible and try to help him out of his financial difficulties, although, taught by experience, they do not believe his promises and do not have much hope for their fulfillment. He, of course, will promise never to gamble again, and even believes that he will not, but at the end he continues gambling believing that it is his only hope of getting out of trouble and so justifying himself and all he has done<sup>49</sup>. The gambler suffers remorse for the harm he does his wife and children. He then hates not only gambling but also himself for he became financially dependent, bitter, cynical, and irritable. If a gambler wants to succeed in quitting a gambling habit, his family members have to help him with rehabilitation. Those who are single, divorced or separated, lack family support and find the way much harder. Gam-Anon helps the family members learn how to make the gambler accept responsibility and to encourage him in his new efforts, rather than blame him for their difficulties<sup>50</sup>.

The gamblers' wives rarely leave their husbands, even if their family dynamics and existence are significantly threatened, especially if the family is financially dependent on their husbands. It is a psychological phenomenon of »memory optimism«, i.e., occasional positive support when »we keep only happy days in our memory«. For instance, when husband wins, he takes his wife into expensive restaurants, buys her presents, jewelry, showing her that it is possible to win, and he promises never to gamble again. Another reason why families mostly do not break up is the gambler's personality. Most gamblers are intelligent, compulsive, energetic, hyperactive, workaholics, able to tolerate uncertainty, but they are also insecure, temperamental, impatient, explosive, fluent liars, with difficulties to express emotions. This may cause domestic violence in some families.

The study of 286 women admitted to the emergency department at a University hospital in Nebraska revealed that women whose partners were problem gamblers were 10.5 times more likely to be victims of domestic violence than women whose partners were not problem gamblers. Another study reported a 42% increase in child abuse and an 80% rise in domestic assaults with the opening of casinos<sup>51</sup>. It is recommended to invest into research, education of a wider population and development of preventive programs, such as »responsible gambling«<sup>52</sup>.

### **Conclusion**

General practitioners routinely ask patients about smoking and drinking, but gambling is something that is not generally discussed. Problem gambling may be perceived as a gray area in the field of health, and it is therefore very easy to deny that it is a medical problem.

Size and consequences of the problem suggest that prevention of pathological gambling is extremely significant, primarily through screening at the school level and primary medical care. Secondary screening may be conducted in psychiatric settings.

Whether the gambling is pathological or not depends more on the person's perception toward gambling than on values of the middle class who consider it a bad habit. Legalized forms of gambling bring useful profits to the society, whereas illegal forms are incriminated and prosecuted. However, pathological gambling often results in serious personal and social problems; financial, legal, professional, psychological and other health problems, and family practitioners become involved whether they want it or not. The patients complain of insomnia, gastrointestinal problems, high blood pressure, headaches, psychological disorders, and in case of depression, suicide may be the final result. Psychiatrists have been for years oriented toward dealing with deviant behavior, and because of the nature of their profession they have started with treatment of many gamblers who sought their help, whereas forensic psychiatrists evaluated some gamblers because they committed murders in order to clear their debts and continue with gambling. The gambler is often a ruined person, who has lost his home, job, friends and family. Nevertheless, he still has a chance for new life in the society providing he has received a proper help. The goal of treatment is not only to stop gambling, but also to be accepted and socially rehabilitated.

The basic question is how to prevent the occurrence of this phenomenon and to raise next generation in a healthy environment where there will be no place for developing pathological tendency to gambling. Maybe it would be appropriate to act upon the saying that »better be safe than sorry«, because it is always better to prevent injury than fight its consequences, since recoveries still occur sporadically.

In an effort to suppress such consequences, the national lottery organizations, united in the World Lottery Association and the European State Lotteries, devoted their full attention to determine the standards and establish the program of responsible gambling in order to reduce the risk in all parts of the society, and especially among vulnerable groups. This program is based upon principles of prevalence and education. Program may be implemented by cooperation of Croatian lottery, Casino, Government of the Republic of Croatia, Ministry of finance, nongovernmental organizations, scientific and research agencies, health care services, and the general public. In this sense, these activities should be supported, popularized, and enabled to use communication channels to educate and inform the players about their

activities, in order to achieve better awareness about what to play and how to play it, and to prevent or reduce, as much as possible, the occurrence of pathological gambling in our society<sup>52</sup>.

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## KOCKA JE BAČENA (SERIJA SLUČAJEVA PROBLEMATIČNOG I PATOLOŠKOG KOCKANJA)

### SAŽETAK

Kockanje ili kocka je zajednički naziv za skup raznovrsnih igara, ponašanja i aktivnosti, koje uključuju ulaganje novca, uz rizik i nadu u očekivanje pozitivnog ishoda tj. igrač riskira i nada se da će povratiti uloženo ili dobiti više od toga. Kada igrač nije u mogućnosti kontrolirati poriv za kockanjem, a izvođenjem tog čina šteti sebi ili drugima, govorimo o tzv. »patološkom kockanju«, koje je prema međunarodnoj klasifikaciji bolesti jedna od šest kategorija tzv. »poremećaja kontrole poriva«. Kako trenutno u Hrvatskoj nema standardiziranih programa i razvijenog pristupa problemu kockanja, a s obzirom na sve veće razmjere koje ono dobiva u proporcionalnom odnosu sa dostupnošću i masovnošću »igara na sreću«, autori prikazuju seriju sedam slučajeva kao uvod u širu javno-zdravstvenu diskusiju o kompleksnom problemu patološkog kockanja, s medicinskog – psihijatrijskog i forenzičkog aspekta. Prvi prikazani bolesnik je liječen izvanbolnički kognitivno-bihevioralnom i obiteljskom terapijom zbog problematičnog kockanja, u drugog je kockanje bilo simptom psihotičnog oblika depresivnog poremećaja, treći je liječen zbog poremećaja kontrole poriva, četvrti bolesnik je primarno poremećene osobnosti, a peti je sudski procesuiran i psihijatrijski vještačen, jer je počinio kazneno djelo pljačke i razbojništva. Šesti i sedmi prikazani slučaj su žene oboljele od primarnog bipolarnog afektivnog i velikog depresivnog poremećaja. Autori zaključuju kako je zbog veličine problema i posljedica koje donosi, izuzetno važna prevencija patološkog kockanja. Ona se može provesti prije svega primarnim screeningom u školama i u primarnoj liječničkoj skrbi, a sekundarnim u sustavu psihijatrijskih ustanova. Predlaže se ulaganje u istraživanja, edukacija šire populacije i izrada preventivnih programa.