FORENSIC ASSESSMENT OF PATHOLOGICAL GAMBLING

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Both main diagnostic and classification systems (DSM-IV, ICD-10) define pathological gambling as a disorder of impulse control.

BUT

Diagnostic criteria, characteristics of course and outcome, and methods of treatment are more similar to psychoactive substance dependencies.
**GAMBLING**

1. Preoccupation with gambling
2. Increasing amounts of money
3. Unsuccessful efforts to control
4. Restless or irritable when stop
5. Way of escaping from problem
6. Often returns to get even
7. Lies to conceal gambling
8. Illegal acts
9. Loss of significant relationship
10. Reliance on others to relieve problems

**SUBSTANCE DEPENDENCE**

1. Tolerance
2. Withdrawal
3. Loss of control
4. Unsuccessful efforts to stop
5. Preoccupation with use
6. Reduction of important activities
7. Continuation in use despite of physical or psychological problems

Fig. 1 Diagnostic criteria of pathological gambling and substance dependence
NEUROBIOLOGY OF PATHOLOGICAL GAMBLING

Neurobiological studies also confirm the close similarity of pathological gambling (and other so-called non-substance addiction) to substance dependencies with all theoretical and therapeutical consequences.
DEFICIT IN DOPAMINERGIC NEUROTRANSMISSION (REWARD SYSTEM)

Lack of ability to experience positive feelings from everyday life situations leads towards an intuitive search of substitute sources of pleasure.

The brain itself “does not care” whether the source if its reward is an exogenous substance (alcohol, opiate) or various non-substance stimuli (gambling, internet, shopping) – the advancement of the addictive behaviour takes place through the same changes of neurochemical functioning by sensitizing brain structures.
DEFICIT IN DOPAMINERGIC NEUROTRANSMISSION (REWARD SYSTEM)

The neural pathways which take part in the control of motivated and learned behaviour are represented mainly by the dopaminergic structures located in the ventral tegmental area joined with the limbic system through nucleus accumbens (Koob, Bloom, 1998).

Molecular-genetic association studies emphasise the role of mesolimbic dopaminergic system in the pathogenesis of addictions. The higher frequency of allele A1 for the polymorphism of dopamine D2 receptors (Comings, 1998) as well as the polymorphism of the dopamine receptors D1, D3, and D4 are being studied.
Pathological gambling carries an increased risk of suicide. Kausch (2003) reports 29% of patients - pathological gamblers, who underwent treatment after a suicide attempt. Gougler et al. (2007) observed different forms of suicidal behaviour among 4 to 40% of pathological gamblers.

Besides the situation-dependent depression reaction, a probable cause is the connection between a dysfunction of serotonergic neurotransmission and the autoaggressive behaviour analogical to type II alcoholism according to Cloninger (1981).
DEFICIT IN SEROTONERGIC NEUROTRANSMISSION (DEPRESSION AND SUICIDALITY)

Examined are the genetic determinants of serotonergic system which modify the tendency to hetero- and autoaggressive behaviour - such as the polymorphism of genes responsible for serotonin transporter or tryptophan 2,3-dioxygenase (Hosák, 2007).

A theoretical outcome of the effect of the group SSRI in the treatment of pathological gambling is the concept of “male depression” in which the deficit of the serotonergic function manifests through a broad spectre of “non-depressive” psychopathological syndromes (Nábělek, 2001).
THERAPY OF PATHOLOGICAL GAMBLING

The most important practical consequence of the close relation between pathological gambling and psychoactive substance dependencies are the strategy and methods of treatment.
THERAPY OF PATHOLOGICAL GAMBLING

Treatment is aimed at the raising of patients’ affective and frustration tolerance, improvement of their social and professional integration, building (or rebuilding) of adequate family and personal ties and restoration or restructuring of patients’ personality, including their hierarchy of values.
1. Contact stage

The potential patient gets in contact with a professional, who is able to determine the diagnosis, inform him about the aims and methods of treatment as well as about the risks and outcomes of avoiding it.

The successfully completion of this phase should be when the patient accepts his addiction as an illness which requires treatment and accepts the treatment methods recommended by a professional.
THERAPY OF PATHOLOGICAL GAMBLING

2. Treatment stage

It consists of several items joined together in a complete system. The whole program is structured, patient is subjected to a set of complex limitations and duties.

The most important strategies used in this stage are didactotherapy, community sessions with therapists, individual and group psychotherapy, communication through diaries, elaborates from lectures, composition and presentation of the patient’s CV, physical activities (yoga, sports etc.), ergotherapy, passive or active artetherapy, psychodrama and family therapy.
2. Treatment stage

In some cases drugs are used - to soften the intrapsychical tension and depressive experiencing as well as to decrease the desire for playing.

Clinical experience has shown that better therapeutic results can be obtained through the combination of drugs and psychotherapeutic methods - while drugs can influence the strength of subcortical impulses, application of psychosocial methods can strengthen the cortical inhibition mechanisms and thus lead to more successful control of behavior.
3. After-treatment stage

The last phase of the treatment lasts basically for the rest of the patients’ lives.

Patients visit psychiatric ambulance or ambulance for the treatment of addictions, they are invited for repeated treatment aimed for strengthening or renewing of the habits and resistances gained from the previous treatment.

The role of sociotherapeutic clubs of abstaining patients is also important, whether attended by therapists or led by self-help voluntary organizations.
The gambling behavior can be viewed as an addictive disorder - without the confounding variables usually involved in addictions to exogenous substances.

The question is how this fact reflects in the forensic assessment of perpetrators with diagnosis of pathological gambling.
With task of the forensic assessment of pathological gamblers as perpetrators of criminal activity willy-nilly comes in touch everyone who deals with the practical and theoretical aspects of mental disorders.

Formulation of simple and clear criteria of forensic assessment of pathological gambling is necessary from the viewpoint of prevention of unreasonable expectations on side of the perpetrators of criminal acts, as well as other persons and institutions involved in criminal proceedings.
A forensic psychiatrist is looking for the answers of some key questions:

- he diagnoses or does not diagnose the presence of mental disorder (pathological gambling)
and he assesses

- whether and to what extent did this disorder participate on the perpetrated criminal activity,
- whether and to what extent it influenced the distinguishing and controlling abilities of the offender,
- whether and in what form it is necessary to propose a treatment.
Compared with the assessment of addictions to psychoactive substances

- neither the brain nor other organs of pathological gambler (if not present another mental or physical disorder) are devastated by the effect of external toxic substances

- whole process of the development of the gambling addiction takes place through the internal and to-the-body own structures and mediators.
Compared with the assessment of addictions to psychoactive substances

• with the development of pathological gambling does not occur any organic damage of the central nervous system in the sense of diminished intellect or memory functions

• neither occurs an acute deliberation of instinctive motives of acting under the influence of exogenous psychoactive substances
There can therefore be no talk about reduction or even disappearance of cognitive skills of the offenders, if not due to another disorder.

Decision-making capacity is fully perserved also in relation to the decision to treatment as an alternative to the continuation of perpetrating criminal activity.
In considering the question of gamblers ability to control his conduct it is necessary to distinguish two different aspects:

• the possibility of a reduction or disappearance control capabilities in the case of so-called indirect criminality leading towards obtaining money to gamble or to pay off debts

• the possibility of influencing the control capabilities of pathological gambler by an immediate situation of gambling at the time of committing an offence (direct criminality)
The answer to the first option is negative. Criminal activity of this character (as in cases of cutting down sales revenues, fraudulent invoicing, frauds, etc.) is generally long-term planned and thought out. The offender acts systematically and purposefully, the own conduct which is not missing a motive, the choice of the means of the target realization, nor the realization itself usually masters perfectly.
His central nervous system is not affected by the toxic effects of exogenous psychoactive substances and the possible withdrawal symptomatology does not reach the intensity of the abstinence symptoms of alcoholics or drug addicts.
The control abilities of an otherwise healthy pathological gambler thus theoretically could be diminished – usually only to a minor extend – only in connection with criminal activity directly related to gambling („under the influence of gambling“, Nabělek et al., 1997).
The cause of a partial diminishing of the control abilities is in this case the state of narrowed consciousness with escalated gambling preoccupation, to which also corresponds the character of criminal activity. It has no characteristics of planning but, rather, the character of a hasty, short-circuit behavior (e.g. thefts, resp. robberies perpetrated directly at the gambling facility or in the vicinity).
Conclusions

Forensic assessment of the perpetrators of criminal activity generally is individual, so that establishing of universally applicable schemes or algorithms is not possible. With the awareness of this imperative as well it can be concluded that the forensic significance of pathological gambling is small.
Conclusions

In assessing of criminal responsibility of pathological gamblers we must take into account the following background:

• the diagnosis of pathological gambling alone can not automatically condition the reduction of cognitive and control abilities

• in pathological gambling does not occur the damage of central nervous system, neither develops any deliberation of impulsive conduct motives by the action of exogenous toxic substances
Conclusions

• possible withdrawal symptoms do not reach the intensity of the withdrawal symptoms in the developed somatic dependence on psychoactive substances

• we are assessing the ability to control ones behavior in relation to criminal activity, not in relation to the gambling itself
Conclusions

• in assessing of criminal activities of pathological gamblers it is necessary to distinguish between so-called direct criminality („under the influence of gambling“) and indirect criminality leading toward obtaining money to gamble or to pay off debts

• pathological gamblers have no diminishing in the ability to recognize the danger of their behavior to society
Conclusions

• in case of indirect criminality the ability to control gambler’s conduct is not affected

• in direct criminality, tied directly to the situation of gambling, may at the most occur only insignificant diminishing of self-control abilities
THANKS FOR ATTENTION