

Pathological Gambling: The Old Problem of the Modern World

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Abstract: *About the pathological passion for gambling as a disorder science began to speak at the end of the last century. Recently, Ludomania (from the Latin word "ludos", meaning play and "mania", meaning passion, madness and attraction) was listed in the International Classification of Diseases. Scientists believe that the negative effects of gambling have no less pernicious than alcohol or drug addiction, and in many countries the problem has become epidemic. Pathological gambling is presented quite often in Zambia, therefore, this is worth a detailed discussion. This article describes the problems of pathological gambling through the modern prism of the facts and scientific substantiation. Some aspects of treatment are also discussed.*

Keywords: *Ludomania, Pathological gambling, Psychotherapy.*

Introduction

Gambling arose at the dawn of humanity. In many different forms, this phenomenon existed in many societies and cultures. The desire of a person to experience strong feelings and emotional outburst makes gambling relevant and successful always and everywhere. The connection with micro- and macrosocial processes, characteristics of the socio-psychological and economic situation in Zambia attracts special attention to this problem. In the conditions of unprecedented aggressive introduction of gaming technologies into everyday life, including casinos, internet (on-line) casinos (which was exotic for Zambia 5-7 years ago) and saloons of slot machines, especially popular among teenagers, there was a sharp jump in the number of people with uncontrollable attraction to gambling.

It was found that the number of people who see a doctor or psychologist with such complaints is much less than their actual number, which is due to lack of awareness of the population about the existence of this disorder, the actual lack of medical institutions and specialists engaged in studying and management "game addiction" - gambling, or, like it still called -

ludomania (from the Latin "ludus" - the game and "mania" - passion or attraction), or pathological gambling.

Risk Factors and Predisposition to Gambling

The pathological tendency to gambling usually develops in early adolescence in men (later in women) and has a chronic progressive course with alternating periods of abstinence and relapse. Currently, the propensity to gambling is more common among men, but the prevalence among women is on the rise. In a meta-analysis of the results of 119 studies on the prevalence of pathological gambling, it was found that the incidence of this disorder throughout life and during the past years in the adult population was between 1.14 and 1.6% and adolescents between 3.88 and 5.77%¹. According to the British study on the prevalence of gambling addiction, the incidence of this disorder among adults in the UK is 0.8%, and in the future it is likely to be increased². It is important to note that the prevalence of pathological addiction to gambling in patients with mental disorders varies from 6 to 12%².

Adolescents are easier (in comparison with adults) involved in gambling, and they often have problems associated with it. Although the law prohibits gambling for persons under the age of 18, studies have shown that almost three quarters of adolescents violated this law during the previous years and that prevalence rates of pathological gambling among them are almost twice as high as those among adults². Participation in gambling in this group has a strong connection with the abuse of alcohol and other psychoactive substances, as well as with depression. Other populations at risk include ethnic minorities, people with low socioeconomic status, as well as people with mental problems or problems with substance abuse.

The pathological gambling affects the individual, the family and society. It can adversely affect the physical and mental health of the gambler. Among

the gamblers, there is a high incidence of various psychosomatic and mental disorders, such as mood and anxiety disorders, substance abuse and personality disorders. Excessive gambling can significantly affect a person's financial position, often leading to large debts, poverty and even bankruptcy. To support this addiction, some resort to criminal activities, ranging from thefts, prostitution and ending with violent crimes with clear legal consequences. Gambling can also affect the interpersonal relationships of the gambler and leads to problems in relationships, family ignorance, domestic violence and child abuse³. It has been established that in children of parents with a pathological gambling, the risk of violations in behavior, development of depression and substance abuse is increased⁴.

In studies of people with pathological gambling, a very high frequency of Axis I and Axis II DSM-IV disorders were consistently noted^{5, 6}. Patients with gambling were found with serious psychiatric disorders more often than in the rest of the population^{5, 6}. These disorders included major depression, antisocial personality disorder, phobias and alcohol abuse. Depression is the most common mental disorder that accompanies pathological gambling, prevalence rates vary between 50 and 75%⁷. Two theories have been explained the relationship between gambling and depression⁷. According to the first, the gambling losses associated with gambling and other adverse consequences lead to depression and according to the second, gambling relieves depressive symptoms, so it acts as an antidepressant.

Suicidal thoughts, suicidal attempts and cases of completed suicides are more prevalent among pathological gamblers than in the rest of the population⁸⁻¹⁰. The frequency of suicidal thoughts among pathological gamblers varies between 20 and 80%, and suicidal attempts range from 4 to 40%. Pronounced predisposition for gambling has comorbid mental disorders and substance abuse¹¹. Study of 30 pathological gamblers found that 64% during life were diagnosed with substance abuse. In a retrospective analysis of the 113 pathological gamblers, it was noted that 66.4% had been diagnosed with substance abuse or dependence syndrome during their lifetime¹². Among other disorders that usually accompany pathological gambling are personality disorders, impulse control disorders, anxiety disorders and attention deficit hyperactivity disorder¹³.

Classification of Pathological Gambling

Pathological gambling consists of frequent and repeated episodes of participation in gambling, which dominates the life of the person and leads to a

decrease in social, professional, material and family values and commitments¹⁴. Speculation in a trading and foreign exchange markets are also equated with gambling, especially in connection with the availability of such trades via the Internet. All the restrictions are removed, and the casino and all kinds of gaming salons are open. Doctors who treat gamblers have experience of communication with all layers of society, even among celebrities, rich entrepreneurs and scientists. Ludomania (pathological gambling) is an "ordinary" mental disorder, similar to hundreds of others.

In ICD-10, pathological gambling is classified as a disorder of habit and impulse¹⁴. According to this classification, "the essence of the disorder is in often repeated episodes of participation in gambling (dominant in human life), leading to loss of social, professional, material and family values and neglect of their duties in these areas"¹⁴. In order to find means for a game or to avoid paying debts, pathological gamblers may risk work and violate the law. They describe the strong attraction to the game, which is subject to great control, as well as thoughts and ideas about the act of the game and the circumstances that capture them and accompany their emotional experiences during the game.

The main feature is the constantly repeated participation in a gambling that continues despite social consequences such as impoverishment, family relationships and the destruction of personal life. The causes of this disorder are not fully understood. For differential diagnosis, the pathological predisposition to gambling should be differentiated from propensity for gambling and betting (ICD-10: Z72.6)¹⁴, frequent gambling for pleasure or money (such people mostly restrain their attraction when faced with significant losses or other adverse consequences), excessive participation in gambling in manic (bipolar) patients and gambling in personality disorders. These people have more pronounced and persistent violation of social behavior, which manifests itself in aggressive acts, in which they show their poor attitude to the well-being and feelings of others.

There are views on the understanding and classification of pathological gambling. Although, the ICD-10 states that this behavior is not compulsive, the presence of a connection of this disorder with obsessive-compulsive disorder is strong. DSM-IV has classified pathological gambling as an impulse-control disorder. DSM-V considers pathological gambling as gambling disorder under non-substance-related addictive disorders. DSM-V diagnostic criteria for Gambling Disorder are presented in table 1.

Table 1. DSM-V diagnostic criteria for Gambling Disorder

Gambling Disorder 312.31 (F63.0)¹⁵

A. Persistent and recurrent problematic gambling behavior leading to clinically significant impairment or distress, as indicated by the individual exhibiting four (or more) of the following in a 12-month period:

1. Needs to gamble with increasing amounts of money in order to achieve the desired excitement.
2. Is restless or irritable when attempting to cut down or stop gambling.
3. Has made repeated unsuccessful efforts to control, cut back, or stop gambling.
4. Is often preoccupied with gambling (e.g., having persistent thoughts of reliving past gambling experiences, handicapping or planning the next venture, thinking of ways to get money with which to gamble).
5. Often gambles when feeling distressed (e.g., helpless, guilty, anxious, depressed).
6. After losing money gambling, often returns another day to get even ("chasing" one's losses).
7. Lies to conceal the extent of involvement with gambling.
8. Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling.
9. Relies on others to provide money to relieve desperate financial situations caused by gambling.

B. The gambling behavior is not better explained by a manic episode.

Specify if:

Episodic: Meeting diagnostic criteria at more than one-time point, with symptoms subsiding between periods of gambling disorder for at least several months.

Persistent: Experiencing continuous symptoms, to meet diagnostic criteria for multiple years.

Specify if:

In early remission: After full criteria for gambling disorder were previously met, none of the criteria for gambling disorder have been met for at least 3 months but for less than 12 months.

In sustained remission: After full criteria for gambling disorder were previously met, none of the criteria for gambling disorder have been met during a period of 12 months or longer.

Specify current severity:

Mild: 4–5 criteria met.
Moderate: 6–7 criteria met.
Severe: 8–9 criteria met.

(Desk Reference to the Diagnostic Criteria from DSM-5™, American Psychiatric Association, Washington, DC. pp. 282-283.).

Diagnostic criteria for pathological gambling is similar to the criteria for psychoactive substances dependence in view of the presence of the following symptoms: increased tolerance, loss of control and abandonment of daily activity.

Modern neurobiological theories consider the phenomenon of pathological gambling in the category of impulse-control disorders or addiction¹⁶⁻¹⁸. Pathological gambling was considered as a variant of the obsessive-compulsive disorder with the predominance of pulse-control loss¹⁶⁻¹⁸. It also was described as the spectrum of obsessive-compulsive disorders and takes pathological gambling along with kleptomania, auto-aggressive behavior, and trichotillomania to impulse-control disorders close to the symptoms of borderline personality disorder.

Treatment of Pathological Gambling

In the treatment of pathological gambling, an important place is given to psychological approach. There is a scientific justification, which has a long history. The theoretical foundations of the neurophysiological approach to the study of pathophysiological changes occurring in the formation of pathological dependence are closely intertwined with psychoanalytic theory. According to Freud, craving and attraction are psychological concepts, the phenomena that are not somatic processes and are not determined by the state of deficiency or imbalance, homeostatic or hormonal, or by central nervous system, but is a model of behavior¹⁹. The behavior of pathological gamblers has its own repetitive stereotype and is due to the dominant attraction to constant involvement in gaming. The attraction includes the concepts of "stimulation of attraction" and "needs", which should be understood as forces originating in bodily sources and very insistently showing themselves mentally, primarily in the field of affects and behavioral acts¹⁹⁻²⁰. These forces are aimed at satisfying one single goal, to eliminate the source of excitement¹⁹⁻²⁰. It is the insurmountability of their attraction to the game that determines the behavior and affective tension observed in gambling-dependent people. On the way to their goal, these forces need an object that directly or indirectly allows them to reach the goal, e. g. satisfaction. Some people limit their experience to comforting, but unnatural and depleting relationships

with something external to themselves. All that people use to reduce consciousness can be the object of addictive abuse. The risk of addiction increases in a frustrated person, which aims to weaken frustration by forming an individual-hedonistic orientation. There is a vicious circle of gradual destruction of mechanisms of self-regulation and social adaptation with the subsequent destruction of personality. Observations showed that in addictive patients the affect is undifferentiated and in most cases only the physiological component of the emotional reaction to traumatic circumstances or memories is observed. In this respect, they resemble alexithymic patients with psychosomatic pathology. In this context, the idea of the first analysts who considered addictive patients as hedonistic natures, prone to seeking pleasure, becomes understandable. Gamblers initially find their satisfaction in a peculiar sense of victory from winning in any of its manifestations, from the sense of their success in a certain kind of activity, from a kind of "drive". Human by nature has the ability to consciously experience instinctive bodily needs as certain psychological phenomena that can be designated as drives, needs and desires. The concept of attraction, although it is psychoanalytic, is very similar in its structural characteristics to the neurophysiological concept of the level of motivation.

Psychotherapeutic correction in addictology is mandatory from the stage of active therapy, it must continue at the supporting stage, and, perhaps, is most needed for the long-term and successful rehabilitation of dependent patients, particularly with pathological gambling. When carrying out psychotherapy, it is necessary to use the principles of existentialism, which give the individual responsibility for their own lives and their actions, without transferring their own responsibility to higher powers, such as religion, society or parents. According to these views, each person is free in creation and shaping his or her life, making fundamental choices. The life is an unfolded process of self-realization, connected with the changing circumstances of his or her environment. The treatment of gambling, as well as of a number of other addictions, can be reduced to translating it into a socially acceptable form (work, religious, sports, etc.). The basis of rehabilitation should be an individual search, and then the consolidation of another form of substitutional dependence.

For effective correction of addiction, the attitude of the patient to the illness, to the environment and to himself/herself is of great importance. Earlier it was considered as a function of the unconscious, but from the standpoint of the psychology of relationships it is necessary to recognize that this relationship is more often recognized by patients, and what is not realized

can become conscious. The attitude to the disorder, to everything that is associated with it and what it affects, is determined by three important factors: the nature of the disease itself, type of personality and attitude towards this disorder in circumstances that are important to the individual. Under their influence, the attitude to illness, treatment, doctors, their future is built in connection with illness, work, relatives and friends. There are groups of self-help and mutual help called anonymous gamblers, which is a popular and accessible form of gambling treatment, in which the goal of treatment is total abstinence from gambling.

The methods of psychotherapeutic treatment can be different, but the most important is the work with personal values, the "pyramid" of which is turned upside down in a peculiar way, because the dominant values are not real life values, but their substitutes, supposedly achieved by people through their involvement in the game. The problem of addiction begins when the desire to escape from reality, associated with a change in the mental state, begins to dominate the mind, becoming a central idea, invading life and leading to a separation from reality. There is a process during which a person not only does not solve important problems, but also stops in his/her spiritual development.

Analyzing the revealed main predictors of the formation of dependence in adolescents, it should be noted that a significant factor is a pathogenic family, in which there is alcoholism of parents and their constant conflicts. Poor factor is the immorality of everyday life and the lack of moral education, even in reach families. A significant contribution to pathological gambling is made by constant advertising in the media, as well as the desire for imitation that is characteristic of adolescents. It is proposed to identify in adolescents not those features that contribute to the emergence of dependent behavior, but those that keep them from it and contribute to the development of a positive motivation for a healthy lifestyle. Speaking about the factors hindering teenage gambling, it is necessary to note the importance of training of such qualities as the ability to save one's savings, compile and maintain the budget. Attention should be directed to the development of the resources of the personality of adolescents, the formation of adaptive mechanisms for avoiding involvement in games. The situation that has been formed to date cannot be solved in isolation, without taking into consideration the social and economic trends in society, without a fundamental change in interpersonal relations. It is necessary to withdraw the patient from the destructive environment, expand the range of interests, find a decent level of culture, meet the necessary needs, ensure the formation of a strong

stress resistance and mobilize physical and mental resources.

Some researchers have conceptualized the pathological tendency to gambling as a disorder related to the bipolar spectrum disorders, due to a general characteristic of impulsiveness. Since the manifestation of impulsive behavior is effectively eliminated with the help of mood stabilizers, it has been suggested that they can also be effective in a treatment of gambling disorder²¹. It was noted that the gambling revealed various abnormalities in EEG, and during repeated control studies it was noted that after the termination of gambling activity, in the period of "withdrawal" or "game abstinence", pathological changes in the EEG were enhanced.

The use of mood stabilizers (including anticonvulsants) are appropriate in the treatment. In addition to the positive effect of paroxysmal brain activity on the dynamics of the disorder, the stabilization of cell membranes, the reduction of neuronal excitability, the increased activity of the GABAergic system, the improvement of sleep quality due to some sedative effect, sodium valproate has greater safety than many other anticonvulsants, and moreover, it is convenient for use in children and adolescents in the form of syrup. In one study evaluating the effectiveness of valproate use in gambling-dependent patients, a clinically significant improvement was seen among all participants who completed the 14-week treatment period²¹. Long-acting sodium valproate (Divalproex Sodium) allows it to be taken less often than many other anticonvulsants (once per day), and taking into account also its good tolerability it is possible to achieve high compliance with patients, and long-term use of the drug becomes the key to successful treatment and prevention of relapses.

Treatment with all pharmacological agents require an individual approach, and the dosages and duration of therapy is determined by the attending physician depending on the dynamics of the patient's condition.

Conclusions

Gambling addiction is recognized as a serious mental disorder along with alcohol and drug addictions. Very often, gambling exists in parallel with one of these dependencies. Pathological gambling has a complex psychopathological structure, which includes violations in mood and cognitive spheres. Diagnosis based on diagnostic criteria (DSM-V or ICD-10) alone cannot be significant for the therapeutic prognosis. Differential diagnosis should be based on the clinical and psychodynamic approaches. The only way to treat gambling is psychotherapy, which is carried out both individually

and in a group. Psychologists and psychiatrists can help the patient change his attitude to gambling and bring him out of "gaming hypnosis". Mood stabilizers (including Sodium Valproate) can be useful in the treatment of this disorder.

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