Gambling- causes, diagnosis, criteria, spreading

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Abstract

The aim of the thesis was an explanation of the term "pathological gambling", description of its history, causes and spreading in Poland and worldwide as well as presentation and comparison of criteria concerning the diagnosis of pathological gambling in various international classifications of mental disorders i.e. DSM-III, DSM-IV and ICD-10.

Method: With the use of Medline and EBSCO databases, we screened for different pieces of medical literature that contained the following keywords: *gambling, addictions* and *criteria.* The literature was published in years 2005- 2010 in English as well as in Polish language and was entirely devoted to the subject of gambling and the classification of psychiatric illnesses. From the theses that included the keywords, we chose those that concerned the analysis of diagnostic criteria regarding the diagnosis of pathological gambling in the international classifications of mental illnesses. On the grounds that there are only a few theses dedicated to this kind of subject, we widened the time range for the researched publications (from 2000 to 2010).

The results have shown that the history of gambling is far-reaching and that currently pathological gambling is an increasingly serious problem not only in Poland, but also worldwide. The causes of gambling addictions are inconclusive, however, on the basis of the research we can presume that there is a number of factors that influence people to be predisposed to this particular disorder.

Keywords: gambling, criteria, causes

Introduction

The term **gambling** is used to describe monetary gaming, in which the factor determining winning is a pure quirk of fate, an accident. The word "gambling" derives from Arabic language [*az-zahr*], which is translated as either dice or a dice game. According to the Polish language dictionary, gambling is a risky endeavour, the result of which is dependent on a random set of events and generally concerns games in which money is at stake. However, this term can also mean the risk that the game includes. Gambling games are types of activity which are based exclusively on an accidental set of events and the result of which can cause either a loss or a gain. In English language the word 'gambling' initially referred to an unfair/dishonest game or using deception during a game [1]. Currently, gambling means gaining either money or any other prizes in games in which the result is unknown, and which are based on a random chance. In the light of Polish law, games based on randomness are the ones in which the reward is either monetary or non-monetary, their result is dependent on a chance and the rules are lied down by a book of rules. Under the umbrella of the term 'gambling games' therefore, we can include a game in which there is a possibility of gaining the prize which is independent of the player's skill but is only dependent on a chance.

The most important attribute of gambling is the risk. One of its other features is the fact that the chance influences the score [2]. A chance is the inner feature of life and gambling is a part of human society since the remotest times.

Aim

The aim of the thesis was an explanation of the term "pathological gambling", description of its history, causes and spreading in Poland and worldwide as well as presentation and comparison of criteria concerning the diagnosis of pathological gambling in various international classifications of mental illnesses/disruptions i.e. DSM-III, DSM-IV and ICD-10.

Method

With the use of Medline and EBSCO databases, we screened for different pieces of medical literature that contained the following key words: *gambling, addictions* and *criteria.* The literature was published in years 2005- 2010 in English as well as in Polish language and was entirely devoted to the subject of gambling and the classification of psychiatric illnesses. From the theses that included the key words, we chose those that concerned the analysis of diagnostic criteria regarding the diagnosis of pathological gambling in the international classifications of psychiatric illnesses. On the grounds that, there are only a few theses dedicated

to this kind of subject, we extended the time range for the researched publications (from 2000 to 2010).

Results

Gambling games have a long history. Gods and heroes of Egyptian, Greek or Rome's mythology used to indulge repeatedly in various gambling games; in one of the scenes of the New Testament soldiers play dice game in which the stake are Jesus' robes. Dice were also found in an ancient Egyptian tomb dated to 3000 B.C., a board game has been found in Acropolis of Athens and it is known that during the Rome's prime time there was a heyday of gambling. In different cultures, such as Bushmen from South Africa, Australian aboriginal peoples, American Indians or ancient Chinese people, lotteries, games and charades were a time-honoured tradition. Even the Jewish people shared the Promised Land by the means of a counting-out game.

Often gambling was put into a spiritual context: it was believed that the will of Gods decided who the winner was to be. Bets of different nature that were placed during card games, dice games or horse racings can be found in the majority of written stories and the literature of European countries. The Virginia Colony was financed by lotteries; some historical descriptions indicate that George Washington was the one to buy the first ticket. Such early Universities as Harvard were built on percentages from lotteries [2].

Gambling is a part of all the existing cultures, though its popularity and availability changed over time. Casinos and houses of card games were present in Italy since 12th- 15th century and the trials of abolition towards them were noted since early years of 16th century up until the end of 19th century [2].

Although the present types of gambling such as arcade games, casinos and internet gambling, have become quite technical, the attractiveness of gambling overcomes cultures and generations. The desire to win, dreams of easily accessible wealth gained without effort as well as the risk are the deciding factors for the gambling being so attractive and desirable to people. The popularity of gambling could be compared to the fundamental aspect of life which is its unpredictability [2].

The first wave of gambling in the USA begun together with the first settlers and lasted over the 18th century, it receded, however, during an early period of 19th century.

The second wave took place after the civil war. Migrations towards the western regions encouraged the adventure and fortune seekers. During this period lotteries came back to the East and became corrupt and unfair. Over the next few years, they were becoming progressively banned in all of the states, with Nevada being the one to introduce the anti- gambling bill in 1910.

The third wave of gambling in the USA is currently taking place. Gambling has become commonplace and a sanctioned aspect of everyday life. New lotteries which are closely monitored and ruled by the states were initially introduced in New Hampshire 1968, and other 38 states followed this route subsequently. In the late 80's there was an increasing number of states that allowed gambling in the American Indian Reserves as well as on the ships. Currently 32 states have acknowledged and introduced this type of gambling and all the American states, with the exception of Utah and Hawaii, allow access to legal gambling [2].

Gambling is pervasive and is perceived by many people as an innocuous hobby. A game approached this way is nothing but an activity which does not lead to any particular goals; it is a game for the game's sake. Some people, however, seem to make wrong decisions and when a random chance influences the score, it leads to an increasing amount of problems (financial, familial) which inevitably influence the player's everyday functioning. For the majority of people gambling is a form of an occasional behaviour with a social and entertainment benefit. Also, the majority of the population gets engaged in this kind of behaviour without any negative consequences. The epidemiological research concerning the spreading of this disorder state that approximately 1% to 3% of the population does meet the criteria of pathological gambling according to The South Oaks Gambling Screen (SOGS) [3]. The range of gambling of a particular person differs in different dimensions; different terms for gamblers' classification have also been used accordingly to patterns of their behaviour.

American National Research Council as well as Shaffer, Hall and Vander Bilt [4,5] have formulated one conceptualisation. They have described gambling as happening continuously, with a number of levels indicating the extent of engagement in gambling and various problems arising from it.

Level 0 refers to people who have never had anything to do with gambling, therefore they have never bought a lottery ticket or they never have wagered money on a sports event or in an arcade game.

Level 1 refers to social or recreational gambling and it does not result in any serious consequences. Some of the gamblers of this level tend to wager money once a year, some of them do that on a daily basis. As long as it does not result in any substantial problems, those people fall in the category of level 1 gamblers.

Level 2 refers to people in whom problems connected with gambling can be observed. This type is often described as a risky gambling. There are many controversies concerning the proper nomenclature for people who gamble regularly and who suffer from some,

but not serious problems arising from it. The problems experienced by people falling in the category of level 2 gamblers may involve being criticised by others for the reason of their alleged addiction, the feeling of guilt about the means of gambling they use and spending more time for it than they think is reasonable as well as the financial problems being the direct effect of gambling. Gamblers of level 2 may tend to pile up debts because of gambling, and may gamble even for few years until an innocuous recreational gambling becomes a problematic one. The knowledge about level 2 gamblers is limited because these people hardly ever seek help.

Level 3 describes gambling which only gives rise to problems. This classification refers to people who meet the criteria of pathological gambling according to currently existing classifications of psychiatric illnesses. Level 3 gamblers show significant problems that vitally distort their everyday functioning. The question arises here: can the control over the activity leading towards engaging into such games be lost [2]?

There are few theories existing that attempt to explain this phenomenon [1]:

1. **Behaviourism**: the engagement in gambling is the result of instrumental conditioning. If there is an action undertaken that is subsequently rewarded, then there is also a stimulus that increases the probability of repeating the action. The amplifying stimuli may occur regularly or non- regularly. It has been noticed that non- regular amplifying is more efficient than the regular one. According to this theory it is a game, in which the gains are non- regular, which induces non- regular positive amplifications which stimulate positive emotions. This results in repetition of gambling behaviours, learning of them by a person, which in effect leads to addiction.
2. **Psychoanalysis**: Freud claimed that a person starts playing because of some previous trauma, feeling of guilt or for narcissistic reasons. Game as an auto-destructive behaviour might be a form of self- punishment for feelings of hatred harboured by the person. Freud was convinced that excessive gambling is an addiction [3].
3. **Cognitive psychology**: analyses gambling in the light of the research concerning information-processing of people as well as their decision-making in risky conditions [1].

From the available theses we learn that in people who abuse different psychoactive substances there is a greater incidence of gambling problems than in the general population. Among adults who abuse those substances the incidence of level 2 gambling was equal to 15% and of level 3- 14.23%. In the group of patients abusing alcohol the incidence of occurrence of gambling in a lifetime was 15% (for both level 2 and 3). According to the research, the incidence of alcohol abuse is four (or more) times greater in the group of people with gambling problems than in the group for which gambling is not a problem [6,7,8].

The research concerning cocaine, opiates, marijuana and methadone also confirms a high interdependence between an abuse of those substances and pathological gambling.

The coincidence of smoking or nicotine dependence with problematic gambling was also researched. It was noticed that the incidence of nicotine dependence was considerably higher in level 2 and 3 gamblers in comparison to level 0 and simply indirect in level 1. Smart and Ferris [8] proved that the per cent of smokers in heavy gamblerswas41.6%;in recreational gamblers - 30.15%, and in non-gamblers - 21.3%.

People who seek specialist help show high incidence of abuse or addiction in terms of various psychoactive substances. People who seek help are most often the ones in whom the abuse of psychoactive substances is currently not a problem, although it used to be in the past. Patients having no other addictions but gambling, however, are definitely less keen on turning for a professional help. Even cigarette smoking seems to have a crucial influence on the gamblers' enhance of psycho-social problems. In the analysis [9] it was shown that smokers had more serious problems with gambling, more familial and psychiatric problems, if compared to the non-smoking gamblers. Smokers were more often subjected to psychiatric medication treatment and they experienced psychiatric symptoms, especially fear.

Very little is known about the mutual relationship between the beginning of the gambling problems and the abuse of psychoactive substances. Cho et al. [10] proved that alcohol-related problems superseded gambling problems in the majority of males addicted to both alcohol and gambling in Korea. Moreover, Hall [11] showed that gambling superseded cocaine addiction in 72% of a researched group of people addicted to this substance. Cunningham-Williams et al. [12] showed that the majority of pathological gamblers had begun smoking cigarettes, marijuana and drinking alcohol before the problems with gambling occurred in them, however, pathological gambling often superseded addiction from other substances, especially stimulants.

Regardless of what occurs first, pathological gambling and abuse of psychoactive substances show a high incidence of co-occurrence. The research on healthy volunteers proved that alcohol due to its synergistic effects makes it easier for people to begin, and hence, continue a game. It also lengthens the gambling accidents and increases the amount of finances being destined for playing. Therefore, the usage of psychoactive substances during gambling may hinder the ability of sober

assessment of the situation and thus subsequently lead to an increase in problems in one or both of the spheres.

The analytical concept stresses the role of personality being a factor that favours the development of addiction. Personality plays a crucial role here but only when coupled with other factors such as the neurophysiologic and socio-cultural ones. The features of personality that favour the development of an addiction are: experiencing negative affection (characteristic for neuroticism), timidity and difficulty in establishing interpersonal relationships (characteristic for introversion) as well as susceptibility to stress and difficulties managing it. Currently the personality of D type has been put in a spotlight. It comprises two dimensions: negative emotionality as well as social inhibition [13]. It seems that this personality type predisposes people to the development of addictions, however no research has yet been proposed towards examining the relationship between this personality type and addiction to the activity.

American research also points out different demographical correlation factors:

Age seems to be inversely proportional to problematical gambling. Research conducted in North America as well as in other parts of the world shows that the incidence of pathological gambling is higher among adolescent people and young adults than in older adults. Shaffer, Hall and Vander Bilt [5] proved that the incidence of level 2 and 3 was among adolescent people 9.5% and 3.9%, among college and university students - 9.3% and 4.7%. For the general population of adult people the incidence was respectively 3.8% and 1.6%. In conclusion, young people suffer from gambling problems from two to three times more often than adults.

Ethnical minorities. Another demographic feature that is attributed to an increased risk of problematical gambling is the race that differs from the white one. In the Greinstein's [14] review, 71.5% of the respondents were Caucasian, 11.1% - were Afro-Americans, 10.2% were Latinos and 7.3% of other nationalities. It was reported that 4.2% of Afro- Americans had gambling-related problems of level 2 and 3 during their lifetime, when in other ethnic groups it was only 1.7%. Welte [15] gained similar results to these. The research shows that all the other ethnic groups had greater incidence of gambling occurrence than the Caucasian race.

In other research [16] the incidence of pathological gambling in American natives was examined in an addiction treatment centre. Among 85 successive patients admitted to that centre in South Dakota 38% were native Americans. Among people of Caucasian race 14% were diagnosed as level 2 and 7.3% level 3 gamblers.

Lower socio-economic status. Lower socio-economic status is the third demographic feature connected with an increased risk of pathological gambling. It is a variable that is difficult to isolate due to its connection with the state of psychiatric health. This variable is also influenced by other variables that can be either totally independent of or interactively linked to psychiatric health. For instance, the members of ethnical minorities are overrepresented in groups with lower socio-economic status, therefore it is hard to account for whether the increased risk being linked to race or low socio-economic status. Lower educational level is also connected with lower socio-economic status. Taking into account all these precautions, there was a close connection proved between lower socio-economic status and pathological gambling in all the theses considered.

Marital status. One piece of research suggests that level 2 and 3 gamblers were often either divorced or in separation with their spouse. Gamblers of level 3 remain in marriages much more rarely than those of lower levels (for level 1 - 61% of people remained in their marriage, for level 2- 43% and for level 3- 25%).

Male sex. Male sex is indisputably linked with the risk of pathological gambling. However, while considering this type of linkage we must remember about the influence of age. Shaffer [4] proved that adolescent people and college and university students of male sex had threefold higher risk of pathological gambling occurrence than their fellow females, while in adults the risk is twice as high. The age differences, however, are less evident in females.

Similar correlations can be investigated as it is for gamblers who seek professional help. Less than 10% of level 3 gamblers had ever sought this kind of help in their lives. People who do seek help have serious problems related to gambling: familial, financial, legal ones as well as they are more often subject to psychiatric disorders, usually in the form of suicidal thoughts, they often attempt suicide as well, as a result of which they are placed in addiction treatment centres. The most often cases of help-seeking are people who also abuse various substances (such as alcohol, drugs, medicines) while the most common reason for turning for help is the withdrawal of the substance. Therefore, gambling problems are not the main causes of professional help-seeking. Young-aged gamblers are less likely to turn for help. Although the gamblers of Caucasian race are the rarest, they constitute the greatest percent of professional help- seekers. The similar is true with socio-economic status; people with higher socio-economic status seek help much more often. In the case of marital status the correlations are not conclusive; however, the group that is more likely to turn for help is the group of people who remain in their marriages. Also, the male gamblers are more keen on seeking help.

The clinical picture of pathological gambling has been presented with the use of four phases according to Custer [17]:

The winning phase- the most characteristic feature for this phase is occasional gambling, with no elements of regular repetitiveness. The disturbing symptom here is more and more frequently occurring fantasising about big and effective wins that happen from time to time in a natural way which leads to a strong excitement. The successes as well as their accompanying adrenaline motivate the gambler to intensifying his activity, which shows as more frequent involvement in gambling games as well as increasing the stakes. The player begins to resist to a massive, primal illusion, being absolutely convinced that he is going to be winning forever. And often it is so. The achievement of the 'goal' (the prize) does not lead to even a remotest attempt to drop the activity. Quite conversely, it enhances the eagerness to repeat it, double it, etc. The gambler risks progressively greater and greater sums doing so. At this moment, it can be noticed for the first time that the addictive factor here is the tension linked with gambling as well as some peculiar 'control' and 'power' attributed to defeating the machine, the system, the rules or the probability.

The losing phase- while risking increasingly greater sums, the gambler endangers himself with the risk of increasingly greater loses. The great win of which the player is so convinced requires greater resources to be invested in. The dreamer's optimism, in the view for an ultimate success and victory, allows the gambler to gamble money, the purpose of which was completely different (e.g. life, holiday, the money of the gambler's employer) or to make debts. An eventual loss- even a massive one- does not play a role of an inhibitor anymore. Instead, it intensifies the desperate need of revenge. If the wining takes place- it is usually destined for the repayment of debts or (which is not rare) further playing. The gambler is now taking an advantage of his job, house; he lies and tries to conceal his gaming. He runs from piling consequences, being absolutely convinced that soon the 'great victory will come'.

The desperation phase- the consequences are becoming increasingly severe. Gambling is consuming more and more time and energy and the lies that the gambler is telling are separating him/her from his/her family, friends and people on the whole. The world of virtues has been breached. In this world the pursuit of victory is outweighing everything else. The loss of job often occurs in this phase. The piling-up debts and the awareness of the situation one is in, causes fear and panic. The pressure of creditors (often inevitably connected with a real danger which transcends an ordinary civil court complaint) usually pushes the gambler towards committing crimes (such as thefts, embezzlements) or, it can lead him/her to take loans and credits, which pose, from a healthy person's point of view, a financial suicide. This hefty load creates an atmosphere of cornering pressure which cannot be overcome by any other means but... a great win. A mental exhaustion comes together with helplessness, depression, remorse and eventually with the feeling of guilt.

The loss of hope phase- the accumulation of destruction, equally physical, financial and social. All the hope for the 'great win' is gone; the awareness of the hopelessness of the gambler's situation increases and clarifies. The gambler lacks a concept and physical fitness to solve the piled-up problems. During this phase the gambler experiences the loss of family, loneliness, growing dangers, the sense of disintegration and bleakness, suicidal thoughts and/or attempts. At this phase of the disorder there are basically only four solutions left: the escape in alcohol or drug addiction in the attempt to gain relief, imprisonment, death (either suicidal or due to the creditors' pursuit) or turning for professional help.

The conceptual background and diagnostic classification of gambling problems were problematic since the diagnosis of pathological gambling was included in DSM- III [18]. Pathological gambling was formally diagnosed as a mental disorder in 1980 by the American Psychiatric Society in the III edition of DSM, where it was put in the category of the "disorder of impulses unclassified anywhere else" with such diagnoses as kleptomania and pyromania. The APA committee noticed that the research suggests many similarities between pathological gambling and various disorders regarding the use of different substances. What they were mainly concerned about were the features of over engagement, loss of control, tolerance and craving after withdrawal [19].

The initial diagnostic criteria of pathological gambling and their review, both in DSM- III- TR and DSM- IV were adopted from the criteria concerning the addiction to substances. The term of addiction was introduced by the WHO due to confusion and disagreement concerning the term 'addiction'. Both DSM- III and DSM- IV used to use the term of addiction, however the term is no longer used or currently defined in DSM. Addiction as a diagnostic term is not used regarding the behaviour, it is only referred to when connected with a specific substance. According to DSM, addiction contains such components as physiological dependence (withdrawal and tolerance) and psychological dependence (desire, being overly interested in everything that concerns a particular substance) [18]. In DSM- IV- TR all the criteria, with one exception, were similar to the ones regarding a substance addiction. The APA committee

recommended the necessity of existence of 6 of 9 of the substance-addiction criteria. The diagnostic criteria were revised again in DSM-IV, where the recognition of 5 of 10 of the criteria is vital [18]:

1. The preoccupation with gambling, for instance, the flashbacks of earlier gambling experiences, actions of taking revenge or planning the next games, figuring out how to get money for gambling;
2. The need to raise the money stakes which are essential for obtaining an adequate level of excitement;
3. The repeating ineffectual efforts to control as well as quit gambling;
4. The anxiety or irritation with the restriction or complete discontinuation of gambling;
5. The perception of gambling as the escape from one's problems or as a way of improving one's mood (e.g. the feeling of helplessness, guilt, fear or depression);
6. The repeating returns on the next day after losing, in order to get revenge (trying to get the lost money back);
7. Lying towards the family or the therapist in order to conceal the level of engagement in gambling;
8. The committing of such crimes as: forgery, fraud, theft or embezzlement in order to obtain money;
9. The loss or venture of meaningful relationships, jobs, carriers and the opportunity to study;
10. The dependence on the financial help-providers when being in a desperate economic situation caused by gambling.

Pathological gambling- was acknowledged as a disorder in an International Statistic Classification of Health Problems and Disorders (ICD- 10) by the Tenth Revision in Chapter Five: "The disorders of habits and drives". By the disorders of habits and drives the professionals mean the repeating actions that do not have a logical motivation, that cannot be controlled by the subject of those actions (the gambler himself) and they harm the patient's and other people's business in an obvious way. Still, it has not yet been identified, what constitutes the basic deciding cause of the way some people can control gambling and that in some of them it develops in a disorderly behaviour. The research suggests that the basis or the factors that predestines a person to fall into a pathological gambling addiction might be specific features of personality as well as different psychological activity disorders such as fear or depression disorders. According to ICD-10, pathological gambling is a disorder which constitutes a frequently occurring engagement in gambling that prevails in a person's life with a damage to values and social, occupational, material and familial commitments'. Placing pathological gambling in disorders statistics, there were also particular criteria stated on the basis of which an auto-diagnosis as well was a professional diagnosis can be conducted, each of which are presented below.

- A strong need or the feeling of being obliged to gamble- experienced in an obvious way in periods when the game is impossible/unavailable or when the gambler tries to restrain him or herself from playing.
- A subjective conviction of the existence of difficulties in controlling the gambling behaviours, a disruption of the control over gambling in general as well as the amount of time spent on gambling, or finally, of the means destined for gambling.
- The occurrence of anxiety together with the attempts to stop or limit the time spent on gambling. Interestingly, the anxiety was purely physical and it tends to be compromised the moment the gambler starts playing again.
- Spending more time on an increasingly risky gambling, devoting greater sums of money for gambling in order to achieve a better state of being which was previously obtained by a lower intensity of gambling.
- A progressive negligence of current interests and sources of pleasure other than gambling to gamble exactly; a progressive involvement of a subject's life in gambling- which is particularly visible in the fact that obtaining financial means for gambling, etc. becomes the basic activity of a pathological gambler. We can dare to say that everything that is connected with gambling and avoiding its destructive consequences becomes as it were the main point of reference and a value in life of the addicted person
- The continuation of gambling in spite of the fact that it has adverse impacts (physical, psychological and social), in other words, repeating the irrational behaviour that virtually brings us very precise and perceivable changes in many different aspects.

Pathological gambling as a disorder can be diagnosed when, in the last year's period, at least three from the above symptoms have been recognised.

Conclusions

Gambling, having a long history, was usually put in a spiritual or cultural context. It could take in different forms by then. Its popularity and availability changed over time and was usually regulated by law conditioning. Currently it is available in the majority of states in the USA. Its present popularity is closely related to the change of its forms: arcade games, casinos and internet gambling which are commonly accessible. Many people treat gambling as an innocuous hobby; however the problematic part is the boundary between an entertaining game and pathological gambling. Still, there is no clarity as it is for the causes of pathological gambling, however, there is an evident connection

between the use of psychoactive substances and gambling as well as the demographic correlations, such as: age, ethnical minorities, socio- economic status, marital status and the male sex as well as some specific personality features that predispose a person towards the disorder. There are different psychological theories that try to explain this phenomenon. The theses concerning the criteria of pathological gambling diagnosis confirm that since it has been included in the mental disorders classification DSM-III, always the problematic case was not only its foundation, but also classification of the disorder. The theses also confirm that there are similarities between pathological gambling and substance-abuse criteria, the effect of which was the application of gambling criteria to the substance-abuse criteria in DSM-III-TR as well as DSM- IV.

Discussion

In spite of the fact that the diagnostic criteria were based on the term of addiction, pathological gambling was not included together with different disorders due to the diagnostic criteria of substance abuse. Hence, it was classified with the group of impulse control disorders that were not classified anywhere else, just like pyromania or kleptomania. The axial feature of impulse control disorders is the lack of opposition to an impulse, lust and desire to perform the activity that is harmful to the person and others. Gambling does not optimally fall into the category of impulse control. The DSM-IV-TR definition becomes problematic when the behaviour has an instrumental value, just like shopping, playing or the Internet. The behaviours have adverse effects only in a situation when they are unduly practiced or they interfere with functioning or suffering. An example of conceptual confusion regarding these disorders is the number of terms which were used to describing them (including the compulsive- obsessive disorders [20], habitual disorders [21], compulsive behaviours [22], compulsive addictions and behavioural addictions [23]. A different, more modern model of impulse control disorders is based on an obsessive-compulsive spectrum. Beginning with 1990s, American researchers gathered a specific group of mental disorders in the obsessive-compulsive disorders spectrum on the basis of clinical disorders, familial transmissions and the reaction to the pharmacological and psycho-social treatment. The disorders included: pyromanias, kleptomanias and Anorexia nervosa. Depersonalisation disorders, pathological gambling, congenital disorders, OCD, Borderline and anti-social personalities, kleptomanias and excessive sexual behaviours [18]. Because the conceptual frames of impulse control disorders were evolving together with the obsessive- compulsive spectrum, the addiction model was changing as well. Currently, the working groups that are working out the DSM- V are considering an extension to the term of addiction and inclusion of the disorders not connected to a substance abuse into a broader category, which might be even called “addiction disorders” [18].

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