Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Medicine

Pathological Gambling and Psychiatric Comorbidities: About Two Cases

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DOI: https://doi.org/10.36347/sjmcr.2024.v12i08.028 | **Received:** 06.07.2024 | **Accepted:** 10.08.2024 | **Published:** 27.08.2024

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Abstract **Case Report**

Lotteries, sports betting, slot machines, card games, dice games, horse betting, and many others refer to leisure activities where participants wager money or other valuable assets on uncertain outcomes in the hope of winning additional rewards. These games typically rely on chance and involve risk, where participants make decisions based on probabilities and predictions without certainty about the final result. Gambling ranges from recreational gambling, where participants engage occasionally, lightly, and in a controlled manner, generally for fun and entertainment without harmful consequences to themselves or others, to pathological gambling, where the participant feels an uncontrollable urge to gamble despite negative consequences. This falls under impulse control disorders and can lead to psychological, financial, familial, and social problems. We propose a semiological analysis of two patients hospitalized for complications of pathological gambling, the first for a suicidal equivalent in a depressive context and the second for a conversion disorder, both following significant financial losses. This analysis highlights predisposing factors, psychiatric comorbidities, and the various dimensions of pathological gambling, emphasizing the inadequacy of therapeutic approaches (medication/psychotherapy) that need to be supplemented with other social and legal measures.

Keywords: Gambling, wager money, semiological analysis, psychotherapy.

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INTRODUCTION

Pathological gambling, often referred to as compulsive gambling or gambling disorder, is a complex behavioral addiction characterized by a persistent and uncontrollable desire to participate in gambling activities despite harmful consequences to mental health, and social, and professional life. Unlike recreational gambling, where individuals engage in gambling for fun, pathological gambling goes beyond mere entertainment, resulting in detrimental effects on various aspects of a person's life. This phenomenon has garnered significant attention from researchers, clinicians, and policymakers due to its profound impact on mental health, financial stability, relationships, and overall well-being [1]. The objective of our work is to profile pathological gambler and their types through two clinical cases hospitalized and managed in our institution.

METHOD

In this article, which focuses on pathological gambling, we will first define gambling and games of chance by starting with a literature review of the different dimensions: historical, nosographic, semiological, epidemiological, and legislative. Next, we will study the cases of two of our patients recently hospitalized in the psychiatry department of the Mohamed V Military Instruction Hospital for a gambling-related disorder. We will analyze the semiological elements of each, highlighting the similarities that contribute to the homogeneity of this pathology and the differences that illustrate the heterogeneity of the previously described types of gamblers. We will then explain the stages of their management and their evolution under treatment. Finally, we will detail preventive strategies, both primary legislative measures and secondary individualized approaches for each patient.

STUDY CASES

The first case is about Mr. Y.E., a 40-year-old married man with two daughters and a history of problematic tobacco use, who was admitted to the emergency department after an agitation crisis. He had violated the hierarchical protocol of his job, appeared disheveled, and demanded his immediate resignation. He was referred to our department for evaluation.

Mr. Y.E. had been involved in various forms of gambling for years, initially to win money and later to recover his losses. He borrowed money from his acquaintances and, after unsuccessful attempts to repay them, turned to banks, hoping to settle his debts.

However, he could not resist gambling away the borrowed money and soon became financially ruined. He resorted to fraud to survive and continue gambling until he exhausted all his resources. Desperate, he went to the central office without authorization to request his resignation, claiming he was damaging the reputation of his position.

Upon admission, the initial interview revealed a depressive syndrome characterized by psychomotor retardation, neglected appearance, immobile facial expressions, slow and whispered speech, sad mood, affective anesthesia, thoughts of worthlessness and death, significant impairment of instinctual activities, and intellectual inhibition.

During his hospitalization, we identified some pathological personality traits (impulsivity, risk-taking without considering consequences for his safety or others, a tendency to fraud for personal gain, and lack of remorse) along with all the criteria for pathological gambling according to the DSM-5: excessive preoccupation with gambling, persistent and increasing need to gamble, irritability at any attempt to stop, gambling mainly to relieve a dysphoric mood, multiple attempts to regain losses, lying and concealing addictive behavior, endangering marital and professional life, with many cognitive distortions like the illusion of control and fixation on absolute frequencies, remembering only his past winning games.

The diagnosis was characterized as a major depressive episode and an antisocial personality comorbid with a gambling disorder. Given his premorbid personality and high suicidal potential, he was hospitalized in our facility, where he received antidepressant and anxiolytic treatment to overcome the critical phase. After a month of treatment and repeated interviews, we noted an improvement in mood, a better understanding of possible solutions, a significant improvement in his marital life, and the establishment of realistic plans to recover his debts and rebuild financially. Ideally, cognitive-behavioral therapy with cognitive restructuring was necessary for his premorbid personality disorder, which is a vulnerable factor for relapse.

The second case is about_Mr. J.M., a 43-year-old married man with three sons and a history of problematic tobacco use, who was brought to the emergency department due to agitation at home, verbalizing incoherent statements. Upon admission to the psychiatric department, we learned that his agitation crisis followed the loss of his entire salary on betting. Once reassured, his agitation resolved spontaneously.

Mr. J.M. started gambling years ago, initially for recreational purposes with friends and very occasionally, until he won a large sum that relieved him of several domestic burdens. Since then, he began gambling almost daily and increasingly informed himself about horse racing.

Mr. M.'s bets grew larger without any winnings. First, he mortgaged his house and neglected to pay bills, rent, and mortgage installments, eventually moving in with his in-laws because he could no longer support his household. Despite his wife's efforts to dissuade him, Mr. M. continued gambling, concealing his losses with lies such as thefts or bank errors.

On the day of his admission, he was supposed to purchase an appliance, but upon passing a café known for horse betting, he lost control, gambled all his money, sold his phone, and lost everything.

The admission interview revealed a conversion disorder with mutism. Once resolved, we noted a depressive syndrome characterized by sad mood, psychomotor retardation, irritability, and loss of interest and pleasure in any activity except gambling. This was comorbid with a pathological gambling disorder according to the DSM-5 criteria mentioned earlier, with numerous cognitive biases like the illusion of control and personality traits marked by impulsivity and irresponsibility towards his financial and family obligations.

The diagnosis was a depressive decompensation on a histrionic personality comorbid with a gambling disorder. The primary purpose of hospitalization was to extract him from the conflictual environment. The conversion disorder resolved spontaneously after a few days, after which he received psychotherapy aimed at encouraging verbal communication and motivational therapy with minimal counseling for the potential cessation of his addictive behavior.

DISCUSSION

In these two clinical cases, both patients had previously compensated and relatively tolerated personality disorders by their surroundings. The onset of gambling-related disorders progressively impaired their respective functions to the point of decompensation in different ways.

Regardless of the circumstances of appearance, maintenance factors, or causal links between their respective comorbidities, the pathological gambling disorder, being a fully-fledged behavioral addiction is the primary clinical entity that dominates both clinical pictures.

The two cases examined revealed similar behavioral patterns, characterized by a compulsive quest for sensation and excitement through gambling, accompanied by an inability to control these impulses despite the resulting negative consequences. Semiological elements such as impulsivity, increasing

tolerance, withdrawal, and emotional distress were consistently observed in both cases, highlighting the general homogeneity of patients suffering from this disorder.

The first reference to pathological gambling was in 1561 by Pascasius in a treatise where he described gambling addiction in a very contemporary way [1]. Its scientific recognition dates back to 1980 with its introduction in the DSM-III, where it was classified under the section "Personality Disorders and Certain Other Non-Psychotic Mental Disorders." It was later moved to the "Impulse-Control Disorders Not Elsewhere Classified" section in the DSM-IV [2], and finally recognized as a distinct pathology in the DSM-5 under the name "Gambling Disorder" [3].

These evolutions in the DSM reflect a better understanding of pathological gambling as an impulse-control disorder and a behavioral addiction.

Regarding our two patients, aside from their psychiatric comorbidities and initial clinical presentations, they suffer from a gambling disorder, meeting all the DSM-5 diagnostic criteria. However, when comparing the two cases, we note (table 1):

Table 1: Comparison showing similarities and differences between the two cases of our study

		Case study 1	Case study 2
Differences	Underlying personality	Antisocial personnality traits	Histrionic personnality traits
	Mode of decompensation	Depressive mode	Conversive mode
	Gambling choice	Games of chance	Horse race bets
	Cognitive distortions	Representativeness, Availability, Belief in Luck	Illusion of Control and Personalization of Gambling
	Motivational stage	Contemplation	Pre-contemplation
Similarities	▪ Both had their initial contact with gambling in a recreational context. ▪ Experienced a significant early win (BIG WIN). ▪ Suffered multiple losses, initially compensated by depriving some personal non-essential needs, then by borrowing money, and finally by diverting funds earmarked for family obligations. ▪ Made multiple attempts to quit gambling despite adverse consequences. ▪ Demonstrated a strong preference for games with short waiting times. ▪ Gamble to recover lost sums. ▪ Displayed impulsivity with a loss of control, gambling significant amounts not initially intended for this purpose. ▪ Showed irresponsibility regarding financial obligations. ▪ Both had problematic tobacco use.		

DISCUSSION

In these two clinical cases, both patients had previously compensated and relatively tolerated personality disorders by their surroundings. The onset of gambling-related disorders progressively impaired their respective functions to the point of decompensation in different ways.

Regardless of the circumstances of appearance, maintenance factors, or causal links between their respective comorbidities, pathological gambling disorder, as a full-fledged behavioral addiction, is the primary clinical entity dominating both clinical pictures. The two cases examined revealed similar behavioral patterns, characterized by a compulsive quest for sensation and excitement through gambling, accompanied by an inability to control these impulses despite the resulting negative consequences. Semiological elements such as impulsivity, increasing tolerance, withdrawal, and emotional distress were consistently observed in both cases, highlighting the general homogeneity of patients suffering from this disorder.

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One of the most accepted and used models for understanding the heterogeneity of adult gamblers is the one proposed by Blaszczynski and Nower and validated by Milosevic and Ledgerwood (2010). This model

includes developmental, neurobiological, and cognitive variables, making it a comprehensive explanatory model:

- **Conditioned Gambling (CC):**

Characterized by the absence of pre-existing pathologies, transient gambling problems, and less substance abuse and impulsivity. The development of the issue is associated with repeated exposure to gambling and its maintenance by behavioral contingencies [4].

- **Impulsive Antisocial Gambling (AI):**

Defined by biological and emotional vulnerability leading to higher impulsivity, antisocial personality disorder, attention disorders, and severely maladaptive behaviors (emotional dysregulation). These elements create a unique etiological combination that explains the onset and maintenance of gambling [4].

- **Emotionally Vulnerable Gambling (EV):**

Presents with pre-existing comorbidities such as anxiety and depression, low adaptive capacities, a history of adverse family background, and has experienced distressing life events. However, they use gambling as a means to modulate painful effects [4].

Through the study of these cases, it is evident that pathological gambling is not merely a matter of free will but the result of a complex combination of biological, psychological, social, and environmental factors. It is a fully-fledged brain pathology.

Each subgroup presents unique characteristics and may require different treatment approaches. Considering that EV and AI types have more severe psychosocial difficulties and that substance use disorder is a commonly associated comorbidity with these types of gamblers, understanding the interaction of these two disorders and their underlying mechanisms is crucial for refining the treatments intended for them [5, 6].

CC gamblers fluctuate between risky gambling and problem gambling but, due to good pre-morbid functioning, they are more likely to achieve treatment success. Unlike the other two types, treatment includes not only gambling but also a range of treatments for other dysfunctions such as personality disorders and impulsivity [6].

Regarding our two patients, given the differences in their clinical presentations, they were hospitalized and treated in our facility. The hospitalization lasted about a month, during which they received antidepressant and anxiolytic treatments to overcome the critical phase, followed by psychoeducation on the specificities and vulnerabilities of their respective pathological personalities to better approach their detoxification treatment. It is important to emphasize that follow-up and therapeutic approaches should be individualized and adaptable for each patient, addressing their bio-psycho-social entirety.

The treatment is based on cognitive-behavioral therapy, and includes three phases:

- **First Phase:**

In addition to routine medical and psychiatric diagnosis, a detailed and differentiated behavioral analysis of gambling habits and the underlying issues, followed by an assessment of motivation. Concrete, individual, and specific therapeutic goals are to be defined, focusing on restoring lost self-control [7].

- **Second Phase:**

Addressing underlying problems with the definition of a future perspective and restructuring or correcting cognitive distortions related to gambling. Consolidating self-control is another element of the second phase, with preparation to face potentially excessive indebtedness [7].

- **Third Phase**: Stabilizing the problem-solving strategies acquired. Emphasis is placed on preparing for the post-hospital period [7].

Relapse:

In therapy, relapses are considered an indication to reassess motivation for treatment and reflect on the insufficiency of management strategies and potentially the inadequacy of therapeutic measures. Descriptions of therapeutic methods, including elements of CBT, are found primarily in the hospital setting, among others by Meyer and Bachmann, Petry, and Schwickerath [7-9].

However, no pharmacological treatment has proven effective and validated by health authorities in the field of pathological gambling in adults and adolescents [10]. Some studies on small patient samples report inconclusive results regarding the use of antidepressants, naltrexone, nalmefene, and mood stabilizers. These studies did not show significant differences compared to placebo. The role of pharmacological treatment in managing pathological gambling remains limited to treating comorbidities, mainly anxiety and depression [11].

Regarding the social aspect of care, despite the existence of a national addiction strategy for the 2018-2022 period developed by the Ministry of Health in Morocco, addictive behaviors are not sufficiently recognized and addressed by social protection agencies, nor treated as diseases, even though they are defined as such by the WHO. Public policies in this area remain insufficient, dominated by a repressive approach, and based on outdated and non-protective legal frameworks [12].

CONCLUSION

The semiological analysis of two cases of pathological gambling highlights not only the complexity of etiological combinations and their uniqueness in explaining the onset and maintenance of gambling but also the profound impacts of this condition on social life, professional life, mental health, and the well-being of the individual and their surroundings.

However, it is important to note that despite these similarities, each individual has their history and motivations. Triggering factors, personal history, psychological impact, and psychiatric comorbidities vary considerably, necessitating an individualized approach for diagnosis and management; hence the importance of early and tailored intervention to help individuals overcome this illness.

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