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CLINICAL PRACTICE

Clinical Intervention in Gambling Disorder: A Protocolized Therapeutic Program developed in the Behavioral Addictions Unit at the Bellvitge University Hospital in Spain

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Résumé :
Contexte : Le trouble du jeu d'argent (TJA) est reconnu comme une addiction comportementale dans les principales classifications diagnostiques. Il se caractérise par un comportement de jeu problématique persistant et récurrent, entraînant une altération du fonctionnement adaptatif dans différents domaines de la vie de l'individu. À ce jour, les interventions psychologiques, en particulier la thérapie cognitivo-comportementale (TCC), ont démontré la plus grande efficacité dans la prise en charge des personnes présentant un TJA. Dans ce contexte, l'élaboration de protocoles d'intervention peut améliorer les résultats cliniques en guidant les praticiens vers des approches fondées sur les preuves, plus structurées et mieux adaptées. **Objectifs**. Décrire et diffuser le programme thérapeutique protocolisé pour le TJA développé à l'Unité des addictions comportementales de l'Hôpital universitaire de Bellvitge (Barcelone, Espagne).**Méthodes et résultats.** Le protocole standardisé, basé sur la TCC, comprend 16 séances hebdomadaires de groupe en ambulatoire. Il cible des domaines clés tels que la psychoéducation, le contrôle comportemental, les compétences émotionnelles et la prévention des rechutes. Il intègre également des composantes motivationnelles ainsi que l'implication de la famille. L'intervention est précédée d'une évaluation diagnostique formalisée et se prolonge par un suivi de deux ans. Des adaptations ont été développées pour des formats individuels et en hospitalisation, en tenant compte de la diversité des profils cliniques au sein des groupes thérapeutiques. **Discussion et conclusions**. La protocolisation des interventions cliniques est essentielle pour garantir des soins standardisés et fondés sur les preuves, contribuant à améliorer la prise en charge clinique et les résultats en termes de rétablissement dans le TJA. Le programme thérapeutique proposé par l'Hôpital universitaire de Bellvitge constitue un modèle pertinent d'outil protocolisé et complet pour les professionnels de santé mentale à l'échelle internationale. Il a été validé avec succès en pratique clinique, et de nombreuses publications portant sur les résultats thérapeutiques et les trajectoires cliniques ont découlé de son application opérationnelle, avec une large diffusion aux niveaux scientifique, clinique et communautaire.
Mots-clés : addiction comportementale ; trouble du jeu d'argent ; intervention clinique ; traitement ; protocole

Abstract:
Context: Gambling disorder (GD) is recognized as a behavioral addiction in the main diagnostic classification systems and characterized by persistent and recurrent problematic gambling behavior that disrupts adaptive functioning in different areas of the individual's life. So far, psychological interventions, particularly cognitive-behavioral therapy (CBT), have demonstrated the greatest efficacy for treating people with GD. In this regard, establishing interventional protocols could enhance clinical outcomes by guiding practitioners through more tailored and structured evidence-based approaches. **Aims**: To detail and disseminate the protocolized therapeutic program for GD designed at the Behavioral Addictions Unit of the Bellvitge University Hospital (Barcelona, Spain). **Methods and Results:** The standardized CBT-based protocol includes 16 weekly group sessions in an outpatient setting, addressing key areas such as psychoeducation, behavioral control, emotional skills, and relapse prevention. It integrates motivational components and family involvement. The intervention is preceded by a formal diagnostic assessment and extends into a two-year follow-up. Adaptations have been developed for individual and inpatient formats and take into account the diversity of clinical profiles within group settings. **Discussion & Conclusions:** The protocolization of clinical interventions is essential for ensuring standardized, evidence-based care treatments that helps to improve clinical management and recovery outcomes in GD. The therapeutic program proposed by the Bellvitge University Hospital represents a valuable model of a protocolized and comprehensive tool for mental health practitioners worldwide, which has been successfully tested in clinical settings. Numerous publications related to treatment outcomes and clinical trajectories have been derived from its operational application and widely disseminated at the scientific, clinical, and community levels.
Key-words : behavioral addiction, gambling disorder, clinical intervention, treatment, protocol

1. INTRODUCTION

Gambling disorder (GD) is the first single behavioral addiction formally recognized in the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (i.e., DSM-5) (1), where it is classified as a non-substance-related addictive disorder and no longer as an impulse control disorder. This acknowledgment has also been reflected in the latest edition of the International Classification of Diseases (i.e., ICD-11) (2). The disorder implies persistent and recurrent gambling behavior, characterized by a progressive loss of control and leads to significant emotional distress and negative consequences across all areas of an individual's life (e.g., state of health, professional and academic development, family, and social environment) (1). Over the last few years, GD is increasingly considered a public health concern, with European prevalence estimates ranging from 0.1% to 4% (3–5). Understanding the disorder through a biopsychosocial perspective helps to highlight its complex

and multifactorial nature, shaped by neurobiological and psychological traits (e.g., impulsivity, executive functioning, emotion regulation, coping with stress), personality factors (e.g., impulsive and avoidant traits), sociodemographic characteristics (e.g., sex and age), and the type of gambling activity (e.g., strategic or non-strategic gambling, offline or online channel), and the presence of psychiatric comorbidity, among other features (6–8). Precisely, the identification of diverse phenotypes among individuals with GD also points out the heterogeneity of the disorder, both at neurobiological and clinical levels (9–12).

To date, the psychological approach based on cognitive-behavioral therapy (CBT) is the therapeutic strategy with most evidence of efficacy in the management of GD, both in individual and group modalities (13–15). This intervention has obtained good results in the short- and middle-term (15,16), with the professional guided CBT being more effective than the self-guided based intervention (17). While other psychological strategies have not shown clinical superiority over CBT, the combination between CBT and other interventional approaches such as motivational intervention and psychoeducation has yielded positive results (14,15). However, future studies are needed to consolidate this evidence as well as its long-term efficacy. In this sense, a homogenization of CBT-based treatment programs could contribute to a greater number of efficacy studies based on larger comparable samples. Nonetheless, this fact should not be detrimental to the identification of individual factors modulating the response to treatment, leading to a tailored therapeutic approach. In this line, a more comprehensive and integrative characterization of GD profiles could additionally make a valuable contribution to the optimization of therapeutic interventions in GD following a medicine of precision.

That being said, little is known about the structure and implementation of clinical interventions in specialized units worldwide. To address this gap, the current study describes the therapeutic program for GD developed at the Behavioral Addictions Unit of Bellvitge University Hospital in Barcelona (Spain) —a center with extensive clinical and research experience in behavioral addictions. This protocolized, evidence-based intervention is presented as a potential model for replication and adaptation by clinical and scientific communities globally.

2. METHODS

The protocolized therapeutic program used at the Behavioral Addictions Unit of the Bellvitge University Hospital (Barcelona, Spain) was designed with the multidisciplinary collaboration of expert psychologists and psychiatrists with extensive clinical experience in the field of behavioral addictions and first published in 2006 (18). Since then, this protocol has undergone periodic revisions, by the Safety and Quality of Care Department of the same hospital, that have allowed it to adapt its contents to optimize its applicability and effectiveness according to aspects such as the progressive incorporation of the online gambling channel as a reason for consultation and the change in gambling profiles (e.g., type of games, sociodemographic and clinical characteristics, etc.). This fact has led to the definition of various specific protocols aimed to the individualization of the therapeutic plan, which guarantees the coverage of idiosyncratic necessities in groups such as young people, women, and people with mental and neurological comorbidity (e.g., Parkinson's disease). The latest update dates from 2019 to 2023, depending on each protocol.

Globally, the application of the therapeutic program has been planned in an outpatient setting. However, some patients may eventually require inpatient intervention due to their gambling behavior. Accordingly, a protocolized inpatient therapeutic plan has also been developed and will be summarized in further sections.

In the more than 20 years of operational use of the Unit, data have been collected from 5832 people (data up to and including December 2024), of whom 5105 have consulted for gambling motives and received treatment based on this protocolized therapeutic program. This large clinical practice has allowed to deepen the clinical research related to therapeutic aspects in GD, such as treatment outcome (19–21), predictors of treatment response (22–24), the usefulness of complementary strategies such as self-exclusion (25), or the identification of subtypes and response trajectories (26–28), among others.

3. PROTOCOLIZED THERAPEUTIC PROGRAM

3.1. Clinical and psychometric assessment of gambling behavior

The diagnosis of behavioral addictions is mostly based on the clinical criteria defined in the main diagnostic manuals for mental disorders (i.e., DSM and ICD) (1,2). Nonetheless, the broad clinical complexity of these conditions makes it necessary to screen these criteria as part of a clinical interview that guarantees a more comprehensive characterization of the disorder. This protocolized therapeutic program includes an initial three-step diagnostic period that takes place during the first two weeks of the patient's admission to the Unit and is conducted in an outpatient setting.

The first step consists of a detailed anamnesis based on a face-to-face semi-structured interview, conducted in a single session by one of the experienced psychologists of the Unit (18). Gathering information about somatic and psychiatric backgrounds, both personal and family history, as well as previous clinical assistance and treatments related to the motive of consultation might be of interest for delineating the patient’s clinical profile. It is also advisable to conduct a detailed assessment of gambling behavior, exploring aspects such as the age of onset of the behavior and the duration of the problem, preferences about the type of gambling, and the insight of patients, among others. The inclusion of

strategies based on motivational interviewing could be useful to explore their intrinsic motivational state and ambivalence for behavioral change from an empathetic, non-judgmental, and acceptance perspective. This style might be highly recommended for promoting patients' self-efficacy, generating discrepancies, but avoiding discussion, and managing their resistance to change. As well, strengthening the therapeutic bond and engagement of patients are other benefits that have been associated with this type of intervention.

Other key elements to explore during the interview are the presence and type of cognitive distortions and the existence of other addictive behaviors (e.g., related to substance use) due to their relevance for treatment. Precisely, the comorbidity with other psychiatric disorders makes it necessary to evaluate the coordination with other specialists from the patient's health network. Likewise, examining the acute psychopathological state may reveal symptomatic patterns that may lead the therapist to request a second evaluation at the emergency department because of their severity and potential functional repercussion in the short-term. These circumstances would include behavioral and functional impairment secondary to acute decompensation of a severe mental disorder (previously diagnosed or a debut episode) and/or the detection of self-injurious risk. Furthermore, it is also important that the clinician makes a differential diagnosis with other mental disorders. In the case of gambling behavior, the following aspect should be ruled out: whether it is problematic or pathological gambling behavior; the co-occurrence of personality disorders such as the antisocial one, in which gambling may be part of anti-normative behaviors and there is often a history of committing illegal acts; or the presence of an acute affective episode of manic characteristics that exclusively justifies gambling behavior.

Finally, the incurrence of debts and the commission of illegal acts represent some of the most serious consequences derived from gambling behavior that should be systematically collected. In this vein, it is recommended that the clinician knows the principal available resources in their community related to financial control and legal advice that can be provided to the patient, if necessary. To some extent, the negative impact on the patient's social and family environment is usually one of the main consequences of the disorder, with lies and loss of trust often emerging as key issues during the clinical interview. Accordingly, it is essential to evaluate the family's awareness of the patient's problems, as well as the existence of external support. In some cases, the patient's social environment can be a precipitating element for help-seeking and, therefore, the clinician must be aware of the magnitude of this external pressure, which should be worked on together with the patient's intrinsic motivation. In this vein, awareness of gambling-related problems enhanced compliance with therapeutic guidelines and instructions (29).

The use of psychometric instruments in the evaluation of behavioral addictions represents the second step of the diagnostic process and complements the clinical interview (18). As part of the protocol described, the selected psychometric battery covers the evaluation of clinical aspects related to the personality structure, the acute psychopathological state, difficulties in emotional regulation, impulsivity traits, cognitive distortions, and other addictive behaviors. This evaluation takes place at the Unit and patients are supported by psychology staff who supervise the session in order to assist patients in case of doubts or difficulties in understanding. Depending on each case, sometimes these tools must be hetero-administered, for example, in the face of language or educational barriers. In general terms, the inclusion of a standardized battery of questionnaires is strongly recommended because it provides the possibility to examine a variety of psychological processes that influence gambling behavior. These tests must be validated in the native language and have adequate psychometric properties.

Finally, the third step of the diagnostic process involves providing feedback on the results to the patient. The results of the evaluation are explained in a second visit with the therapist that carried out the clinical interview, as well as the details of the therapeutic intervention. Overall, the diagnostic evaluation process is completed over a two-week period.

3.2. Therapeutic intervention

The outlined therapeutic program follows a public outpatient model for adults 18 years and older, in accordance with the characteristics of the health care coverage in the referred hospital. As a suprasectorial specialized treatment unit in the region of Catalonia, it admits the consultation of people from all over the Catalan and national territory. The treatment period lasts 4 months with a 2-year follow-up phase, which will be detailed in subsequent sections. The therapeutic intervention is CBT-based and guided by one of the clinical therapists of the Unit. These professionals (i.e., psychologists or psychiatrists) have extensive experience in the field of behavioral addictions and CBT, and are also involved in the diagnostic process.

3.2.1. Standard therapeutic approach

The group modality is the conventional therapeutic approach. This modality enables therapeutic care to be extended to a greater number of patients at the same time, with the corresponding social benefits derived from group dynamics, while maintaining therapeutic efficacy. As part of the protocol, different inclusion criteria are defined for group modality: a) having insight of the behavioral problem; b) being motivated to change (e.g., preparation and action stages); c) acceptance of abstinence from all types of gambling (not only the type of gambling that has prompted the seeking of treatment); d) the absence of other comorbidities, except for adaptive disorders reactive to the consequences of the gambling problem; e) having family or social support during the therapeutic process. In the program, we refer to

the figure of the co-therapist as the member of the patient's family or inner social circle who collaborates in the treatment. This person is usually one of the individuals who accompanied the patient during the admission process to the Unit and/or during the diagnostic phase, and is typically affected in a collateral way due to the patient's gambling problem. If several people are involved in accompanying the patient throughout the diagnostic process, it is recommended that the patient designate one of them to collaborate with both the therapist and the patient during the treatment phase. Alternatively, a therapeutic intervention in individual modality is offered to those patients who have circumstances other than those set out above and will be addressed in more detail throughout the manuscript.

The intervention consists of 16 weekly outpatient sessions (90 minutes/session) with an optimal number of participants between 10 and 14 patients per group. The co-therapist attends 7 of the 16 sessions: the first and second (psychoeducational sessions), fourth, seventh, tenth, thirteenth and sixteenth, in addition to the follow-up meetings. The main therapeutic objectives are: a) reduction of craving and the need to gamble; b) recovery of self-control and increasing self-esteem; c) lifestyle change towards more healthy habits and alternative and more adaptive leisure activities; d) being able to identify risk situations for gambling and acquiring more adaptive coping strategies; and e) recovering family and social functioning. For that purpose, the therapeutic program incorporates several techniques: psychoeducation, stimuli control, assertiveness and other skills training, response prevention strategies, acquisition of new healthy behaviors to replace those associated with gambling, familiar intervention, relapse prevention strategies, cognitive restructuring, and reinforcement and self-reinforcement. The following provides a contextualized overview of the application of the different strategies within this protocolized intervention:

a. Psychoeducation and stimuli control

Psychoeducation has been deemed to be very useful from the first session onwards for patients. Accordingly, the first two sessions of the treatment program focus on this topic. Throughout these sessions, therapists and patients are also able to introduce themselves. Specifically, in the first session, the therapist gives detailed information about what the GD entails: the main symptoms, conceptualization of the disorder as an addiction, some interesting epidemiological data, the biopsychosocial model of GD, differentiation of types of gambling and clinical profiles, as well as risk and maintenance factors. The second session is globally focused on providing information about therapeutic intervention: CBT approach and main results so far, therapeutic objectives with a special importance placed on definitive and absolute abstinence, relapses, duration of the treatment program and structure.

In these sessions, the therapist also provides patients with some relevant bibliographical information and explores aspects related to their gambling behavior at the beginning of the treatment (e.g., type of gambling, use of online modality, state of motivation, abstinence). In this initial phase of the treatment, one of the objectives of the therapist is to conform an overall picture of the gambling behavior of the patient (or each patient, in the case of the group modality). This procedure is not based on a structured interview nor questionnaires, as in the diagnostic period, due to the professional having this information available to consult it. That said, exploring these data during the first sessions of the treatment is useful to build the therapeutic bond due to sometimes the professional who attended the patient during the diagnostic period is not the same that delivers the treatment and has not met the patient before. Also, it is valuable for patients to introduce themselves and their motives to seek for treatment to other patients in the group modality. Additionally, this serves to examine the grade of motivation to change and achieve abstinence in each patient at this first stage of the treatment, and to put the focus on aspects such as recommending self-exclusion or working on resistance through motivational strategies. In this line, the availability of useful measures of motivation to change would enable treatment outcomes to be optimized through the application of specific therapeutic interventions (30). Likewise, preventive measures such as self-exclusion could be expected to be used as a facilitating variable in the therapeutic process, being associated with low relapse rates (25).

At this point, the therapist also explains the general treatment guidelines related to stimuli control. This strategy implies external financial control based on carrying only the amount of money foreseen for each day, using wallet cards, asking for receipts of expenses, a periodical review of the bank accounts with the co-therapist, and closing of alternative bank accounts that may finance gambling. Also, stimuli control involves other measures such as avoiding risky situations and looking for alternative routines, blocking advertisements, recognition of debts and repayment planning, as well as self-exclusion from offline and online gambling sites. Strategies for stimuli control can be flexible depending on the evolution of the patient.

When the treatment is initiated, the therapist, the patient, and their co-therapist should also sign a therapeutic contract, where each one is committed to their role as part of the treatment program. In this sense, the therapist reinforces the relevance to comply with guidelines, attend to treatment, and explain how to fill out self-reports related to gambling behavior and control of expenses. These self-reports will be a daily task for the patient that needs to be checked by the co-therapist and will be analyzed weekly in each clinical session. Below is a brief explanation of the nature of these periodic reports:

o Self-report on gambling behavior: A series of items should be completed regardless of whether the patient is actively gambling or abstinent (in the latter case, by crossing out the boxes with an “X”). Most sections require open-ended responses, such as: date, gambling location, means of access, type of

gambling, whether the patient gambled alone (yes/no), amount of money (before gambling, amount wagered, and money remaining), and time spent on gambling. Additionally, the presence of craving and potential exposure to high-risk situations should be recorded, as this information allows for therapeutic work focused on managing and reducing the urge to gamble —an urge that can influence gambling behavior and jeopardize abstinence.

o Self-report on expenses: it contemplates the date, the agreed-upon daily spending limit, the actual daily expenses, and the remaining money, as well as the signature of the co-therapist if they approve of patient's financial management. This record must be accompanied by receipts or supporting documents that verify the expenses reported by the patient. The purpose of this self-report is to enhance of the patient's awareness of money management and its value —an area often distorted and representing a premorbid issue in many cases.

b. Assertiveness, response prevention strategies, and acquisition of adaptive habits

Assertiveness techniques play a crucial role in the treatment of GD by providing individuals with effective skills to communicate clearly, directly, and respectfully in gambling-related situations. These techniques enable them to express their needs, limits, and desires appropriately, both in and outside of the treatment context. By learning to be assertive, individuals can resist social pressure to engage in gambling activities, set healthy boundaries with family and friends who may influence their behavior, and advocate for themselves when seeking support and resources for recovery. In addition, assertiveness helps them develop greater self-confidence and self-esteem, which strengthens their ability to meet the challenges of their disorder and maintain a strong and sustainable recovery path. During the third session, the therapist works on identifying the communication styles that each patient uses in different contexts, exploring and explaining assertive responses to everyday situations. To put it into practice, role playing is proposed during this session. Patients should learn how to anticipate daily situations that trigger non-assertive behaviors.

Additionally, the therapist works on response prevention strategies, which are designed to prevent the individual from engaging in maladaptive behaviors when exposed to triggers or urges. By systematically reducing the reinforcement of the addictive behavior, patients can learn to cope with cravings and avoid acting on impulsive urges, leading to more sustainable long-term recovery. These strategies encourage individuals to face situations that typically trigger their behavior, but without acting on the impulse to engage in the addictive behavior. In this line, difficulties in emotion regulation and in adaptively coping with stressful situations might lead to use gambling as a maladaptive way to regulate emotional states, as well as to "escape" from emotional distress linked to a loss of control and gambling consequences such as financial problems or social isolation. This vicious cycle that involves cognition, emotion, and ultimately behavior contributes to perpetuate the problem and increase its severity. Over time, the therapeutic process will help to weaken the connection between triggers and their behavioral response, as well as to enhance adaptive coping strategies. At this point, it is vital for patients to identify factors that act as triggers in their case with the help of the therapist and co-therapist, and to remain vigilant for the emergence or change of these triggers over time, in order to detect them early.

Closely related to this fact, the therapist introduces the need to change habits/lifestyle by promoting alternative activities and encouraging patients to develop their own leisure plan in an intent to promote the acquisition of adaptive habits. For that purpose, patients are encouraged to create their own list of alternative recreational activities, which they should incorporate into their life plan. Throughout therapy, the degree of establishment and commitment to these new habits will be monitored.

c. Family intervention

As mentioned above, the co-therapist attends some therapeutic sessions and usually is represented by the couple or other relative of the patient. During the treatment course, this figure is very valuable in providing additional observations, facilitating communication and emotional comfort, or helping the patient feel more comfortable and confident with the treatment. Their presence enriches the therapeutic experience by offering different perspectives and complementary skills, which can promote a more complete and effective change in behavior for the patient. The introduction of family intervention plays a crucial role in the treatment of GD, as this disorder affects not only the individual, but also their loved ones and the overall functioning of the family environment. By involving the co-therapist in the therapeutic process, socio-familial factors that may contribute to the problem, such as lack of communication, interpersonal conflicts, or dysfunctional dynamics, can be addressed. This intervention not only provides emotional support to the individual in treatment, but also educates their social environment about GD, promotes understanding and empathy, and facilitates the creation of an environment that is more conducive to recovery and maintenance of change. Family intervention can contribute to strengthening socio-familiar ties, improving the quality of life of all involved, initiating a process of recovery of trust in the patient that has been broken by the gambling problem, and favoring a more effective and sustainable therapeutic process.

Bearing this in mind, some sessions specifically dedicated to both patient and co-therapist (i.e., fourth, seventh, tenth, thirteenth) aim to analyze family-patient relationships (e.g., attitudes of mistrust and trust), understand the family's impression of the problem, as well as examine their global signs of emotional distress and suffering due to these circumstances. In cases where the co-therapist does not belong to the patient's family environment but rather to their social network, these sessions also serve

to explore the therapeutic alliance and relational dynamics established between the patient and the co-therapist. Furthermore, these sessions also help to carry out a joint evaluation of the therapeutic progress together with the co-therapist.

d. Relapse prevention

This technique refers to the set of strategies designed to avoid or reduce the likelihood of relapsing into addictive behaviors after having initiated a recovery process. Relapse prevention involves identifying triggers that can lead to relapse, developing effective coping skills to manage risky situations, and strengthening personal and support resources to maintain a healthy lifestyle. Relapse prevention is a critical component in the treatment of various addictions, as it helps individuals consolidate positive changes and maintain progress toward a life free of problem behaviors.

In the context of addiction, the therapist should explain the differences between "lapse" and "relapse". The term "lapse" refers to a one-time episode of gambling during the period when a person is trying to abstain, while "relapse" implies a sustained return to gambling behavior after a period of abstinence. It is important to approach lapses and relapses with understanding and support, as both can be opportunities to learn and strengthen relapse prevention strategies on the road to sustained recovery. For that purpose, the analysis of the short- and long-term advantages/disadvantages of hiding versus communicating a lapse or relapse should be acknowledged to encourage patients to communicate these episodes as soon as possible. Besides, explaining the phenomenon of cognitive dissonance, the effect of abstinence violation attributed to internal factors of vulnerability, and coping strategies to deal with cognitive dissonance are other objectives included under the umbrella of relapse prevention techniques. Usually, Marlatt & Gordon's relapse model (31) is used during treatment to describe the relapse process in the context of addictions. It proposes that relapse is a gradual process involving a series of stages, starting with vulnerability factors, such as stress, unpleasant emotions or triggering situations. These factors can trigger automatic thoughts and seeking or addictive behavior. The next stage involves making decisions regarding use, where pros and cons are weighed. Failure to apply effective coping strategies leads to a relapse. However, the model also emphasizes the importance of relapse prevention strategies, which include early recognition of relapse signs, development of alternative coping skills, and reinforcement of self-efficacy to avoid relapse. In summary, Marlatt and Gordon's relapse model offers a detailed understanding of the relapse process and provides a framework for relapse prevention and management in the treatment of addiction (31).

Basically, from the fifth to the eighth session, therapy is focused on relapse prevention, emphasizing different aspects. Later, in the fourteenth and fifteenth sessions, the knowledge acquired is reinforced together with its implementation.

e. Reinforcement and self-reinforcement

Self-reinforcement is the predominant subject of the ninth session. This strategy focuses on teaching individuals to reward themselves for positive behaviors and for achieving goals related to gambling control. Thus, patients learn to identify and value their accomplishments, whether by resisting the urge to gamble, participating in alternative activities, or meeting treatment goals. By reinforcing their own successes, individuals strengthen their intrinsic motivation and self-efficacy, which helps them maintain commitment to change and resist the temptation to relapse into problematic gambling patterns. This technique promotes patient autonomy and empowerment, providing them with effective tools to manage their problems over the long-term. Self-reinforcement training could include analyzing the quality of life which has been achieved during treatment and improvements at different levels. Also, it is important that the therapist reinforces achieved abstinence and compliance with the guidelines.

f. Cognitive restructuring

This is a fundamental process in human development, where beliefs, thoughts, and perceptions are revised and adapted to accommodate new information or experiences. Cognitive restructuring involves modifying ingrained mental patterns, opening doors to a deeper and more flexible understanding of the world around us. Through cognitive restructuring, people can challenge and change their automatic thoughts and cognitive biases, promoting personal growth and greater adaptability in the face of life's challenges. In the eleventh and twelfth sessions, irrational thoughts in the context of gambling such as illusion of control over gambling, magical thinking, etc., are explored. Likewise, the therapist works on risky thoughts/behaviors such as testing yourself, beliefs like "I'm cured," etc., and explains the concept of "chance" -as randomness / uncontrollability-, confronting it with the concept of "luck" -as a subjective experience.

g. Problem-solving techniques

At this stage of treatment, introducing problem-solving techniques could contribute to strengthening the patient's decision making –these patients are usually characterized by difficulties in planning and impulsive decision-making– and avoid risky situations based on the patient's attempt to "escape" from unpleasant emotional states. Therefore, some related strategies are to operationally define problems and generate multiple alternative solutions, as well as establish criteria for the evaluation of these possible solutions. After that, the patient should select the most appropriate ones and check their effectiveness (32).

In each session, the therapist routinely assesses the presence of craving and any relapse, works on identifying potential triggers, and emphasizes the importance of reporting any relapse that may occur. The therapist also explores the patient's current emotional state, including feelings of guilt or possible

suicidal ideation linked to the gambling problem, while reinforcing the therapeutic goal of achieving and maintaining full abstinence. To support this process, the therapist completes a structured record for each session, which includes: a) patient attendance and motivation; b) co-therapist attendance; c) abstinence or active gambling behavior; d) details of gambling episodes (type of gambling, amount spent, prize reinvestment, frequency); e) presence of relapse; and f) relapse details, if applicable. Starting from the second session, time is allocated at both the beginning and end of each meeting to address any incidents or questions related to the previous session or the content of the current one. During the final session (i.e., the sixteenth), the group evaluates the therapeutic process and the changes achieved, and discusses future expectations regarding the maintenance of healthy habits and engagement in alternative activities. This final meeting is also used for patients to complete the same battery of self-report psychometric tests administered at baseline, as well as to schedule the follow-up sessions.
Table 1 shows a schematic form of the treatment program, specifying the theme and main content of each session, the assistance of the co-therapist, and the sessions that incorporate a psychometric evaluation during the treatment and follow-up period.

Treatment - Session	**Subject**	**Objectives**	**Assistants**	**Home Tasks**	**Psychometric Evaluation**
I	Psychoeducation	Giving information about gambling disorder	Patient + co-therapist	Self-record of gambling activity	At baseline (pre-treatment)
II	Psychoeducation	Giving information about treatment and rules Signing therapeutic contract	Patient + co-therapist	Self-record of gambling activity	
III	Alternative activities and habits - assertiveness training	Analysis of risky situations and identification of alternative leisure activities Role-playing to promote assertiveness	Patient	Self-records of gambling activity and expenses Collecting tickets	
IV	Patient-family relationship	Exploring family bonds and trust	Patient + co-therapist	Self-records of gambling activity and expenses Collecting tickets	
V	Relapse prevention	Identifying risk factors and learning how to anticipate them	Patient	Self-records of gambling activity and expenses Collecting tickets	
VI	Relapse prevention	Definition of relapse, viewing relapse as a learning opportunity Incorporating alternative activities and healthy habits	Patient	Self-records of gambling activity and expenses Collecting tickets	
VII	Relapse prevention	Fostering effective communication and rebuilding trust with the patient's social and family networks Working on Marlatt and Gordon's relapse model	Patient + co-therapist	Self-records of gambling activity and expenses Collecting tickets	
VIII	Relapse prevention	Analysis of cognitive distortions, coping strategies and consequences of non-abstinence	Patient	Self-records of gambling activity and expenses Collecting tickets	
IX	Self-reinforcement	Working on reinforcing changes and achievements, improving the quality of life	Patient	Self-records of gambling activity and expenses Collecting tickets	
X	Patient-family relationship	Analyzing changes in interpersonal relationships and trust during treatment	Patient + co-therapist	Self-records of gambling activity and expenses Collecting tickets	
XI	Cognitive restructuring	Identifying and working on the patient's cognitive distortions	Patient	Self-records of gambling activity and expenses Collecting tickets	

		Differentiating concepts of chance and luck			
XII	Cognitive restructuring	Exploring risky thoughts and behaviors Making a preliminary assessment of treatment	Patient	Self-records of gambling activity and expenses Collecting tickets	
XIII	Analysis of progress	Analyzing changes in interpersonal relationships, trust, and familiar-personal economy during treatment	Patient + co-therapist	Self-records of gambling activity and expenses Collecting tickets	
XIV	Analysis of insight	Working on disorder awareness, chronicity, and adaptive alternative behaviors	Patient	Self-records of gambling activity and expenses Collecting tickets	
XV	Relapse prevention	Reinforcing preventative strategies	Patient		
XVI	Therapeutic assessment and closure	Debate about the treatment assesment, future perspectives, and the maintenance of complete abstinence Dates for the first follow-up session are set	Patient + co-therapist		X
Follow-up	**Subject**	**Objectives**	**Assistants**		**Psychometric Evaluation**
1, 3, 6, 12, and 24 months after treatment	Reviewing strategies learned during treatment (e.g., assertiveness, relapse prevention, stimulus control, cognitive restructuring, interpersonal relationships)	Analyzing the evolution of the behavior, the maintenance of abstinence, if there has been a relapse; identification of new risky situations post treatment; reinforcing some specific strategies; examination of the state of interpersonal relationships and trust	Patient + co-therapist		X

Table 1. Scheme of the protocolized therapeutic program for GD (group modality) - Behavioral Addiction Unit, Bellvitge University Hospital (Barcelona, Spain)

3.2.2. Adaptations to the standard therapeutic approach

As previously outlined in the preceding section, an individual therapeutic approach is generally indicated under specific circumstances, including: a) the presence of severe comorbid psychopathology (e.g., Axis I or II disorders); b) factors that limit comprehension and/or active participation in treatment, such as language barriers, intellectual disability, or any neurodevelopmental and/or neurological disorder causing functional impairment; c) the absence of socio-familial support that could be engaged in the treatment process as a co-therapist; and d) the patient's personal preference for this therapeutic modality. This protocolized individual intervention maintains a structure and content comparable to that of the group-based approach. When a co-therapist is available to support the patient, their attendance should follow the same sequence outlined in the group treatment protocol. One of the adaptations made to the standardized protocol of our Unit relates to the admission of patients who develop a behavioral addiction in the context of a neurological condition such as Parkinson's disease. In addition to recommending an individual treatment modality, a particular emphasis should be placed on the characteristics and contributing factors associated with the neurological condition (e.g., dopaminergic treatment, impulsivity, impaired inhibitory control) that may trigger or sustain gambling problems (33). Therapists should also reinforce the development of alternative, adaptive leisure activities and stress the importance of adherence to neurological follow-up. Furthermore, specific risk situations and other impulsive behaviors must be actively addressed to provide adequate support in managing chronic medical conditions.

On the other hand, there is an increasing number of studies pointing to a shift in gambling profiles, partly driven by the widespread integration of the Internet and technological devices into daily life, as well as the expansion of online gambling (34–39). This phenomenon has led clinicians and researchers to focus on specific population groups whose gambling behavior and disorder trajectory may differ from the prototypical patient profile traditionally seen in treatment —typically middle-aged men engaged predominantly in land-based slot machine gambling (40,41). In this regard, it has been

proposed an adaptation of the standard group-based treatment protocol in an effort to achieve greater homogeneity within therapy groups, based on factors such as age, sex, or the type of gambling. Although these adapted protocols retain the foundational structure, they include tailored content addressing vulnerability and risk factors, psychosocial variables (e.g., personality traits, emotional regulation, coping strategies, comorbid psychopathology), and sociocultural roles that may significantly influence the development and expression of addictive behavior in populations such as young people or women. Thus, integrating such elements into the intervention —even within heterogeneous group settings where diverse clinical profiles coexist— can help individuals feel better represented within the therapeutic process, thereby enhancing the therapeutic alliance and improving treatment adherence. In this context, sociocultural aspects related to stigmatization of the gambling behavior, particularly in the case of women, could also have a negative influence on motivation for help-seeking (42). So, these adaptations may also help reduce the stigma associated with the disorder and encourage proactive treatment-seeking. Moreover, conceptual updates and familiarity with new gambling formats enable therapists to more effectively identify risk situations and address cognitive distortions that may vary across gambling modalities.

3.3. Follow-up period

So far, most of the studies related to the evaluation of treatment response suffer from a lack of a follow-up period to evidence whether the therapeutic effectiveness is maintained after the end of treatment, in the medium and long-term. Besides, there is a lack of consensus on the most appropriate assessment tools to be used in this period and on the temporal frame established to define its duration. Although some barriers, such as structural and economic issues, may limit the continuity of follow-up care for these patients, this period will provide valuable information about crucial clinical aspects (e.g., the maintenance of abstinence from all types of gambling, the identification of risky situations, etc.). Therefore, the treatment period should be accompanied by a periodical follow-up phase in which the patient's status related to the addictive behavior is reviewed.

In this line, our protocolized therapeutic program includes single meetings at one, three, six, twelve and twenty-four months after the last treatment session. These sessions take around 60 minutes and are conducted in the same modality as the treatment period (i.e., group or individual modality).When this role is present, the co-therapist is also encouraged to attend. This fact allows the clinician to assess the state of the patient's interpersonal relationships, and the maintenance of some adaptive social dynamics aimed at promoting effective communication and reinforcing trust within their social environment. In each session, patients also complete the same battery of self-report psychometric tests that were administered at baseline.

3.4. Inpatient setting

Although hospitalization in the context of GD is generally an uncommon occurrence, it is important to know the scenarios in which the referring professional should consider this option.

The Behavioral Addictions Unit of the Bellvitge University Hospital (Barcelona, Spain) has up to four inpatient beds available in case admission is necessary due to a behavioral addiction. Reasons for inpatient admission may stem from various scenarios closely related to gambling behavior and/or its consequences. Situations that are considered indicative of inpatient admission would be having a formal diagnosis of GD and one or more of the following: a) severe gambling behavior and/or significant negative consequences; b) repeated failure of outpatient treatment; c) significant family conflict and/or lack of socio-familiar support due to gambling behavior; d) high impulsivity associated with gambling behavior; e) self- or hetero-aggressive behavior linked to gambling; f) self-injurious behavior due to gambling.

The patient's referring professional must determine whether the admission can be planned in advance on a scheduled basis or needs to be urgent, based on the patient's clinical context. In general terms, admission will be voluntary, and a signed consent form will be required. Inpatient admission allows the possibility of an intensive therapeutic approach, typically lasting one week. Upon discharge, the patient will have an outpatient assessment scheduled with the referring professional of the Unit to continue the therapeutic plan at the outpatient level.

In some cases, the reasons for inpatient admission may be more directly linked to a clinical and/or psychosocial context rather than linked to the this specialized unit. While gambling behavior may still be present and potentially severe, the situation that motivates the request for inpatient admission is not GD per se. Excluding somatic reasons, a decisive example would be the presence of decompensated comorbid psychiatric disorders. Therefore, communication between referring professionals is crucial to ensure a comprehensive and ongoing evaluation of the different clinical and psychosocial processes affecting the patient. In such cases, the referring professional during the inpatient admission and/or patients themselves should contact the specialized unit to resume clinical intervention for GD after discharge.

3.5. Treatment outcomes

Lastly, this section aims to succinctly present the key outcomes related to treatment response derived from the application of the outlined intervention program.

3.5.1. Remission

In the literature, heterogeneity does exist when measuring and reporting treatment outcomes in GD, with a lack of consensus regarding what aspects should be universally considered as part of the

treatment response to define a good or a bad outcome, as well as a complete or a partial remission (43). Certainly, one of the main treatment goals in GD is focused on symptomatic remission, which is understood as the consecution of a state of maintained and complete abstinence from any type of gambling. Globally, short- (i.e., typically understood as less than 6 months) and middle-term (i.e., period ranging from 6 months to 1 year, although in some cases may extend) results support the efficacy of CBT in addressing GD (15), describing gambling abstinence rates above 75%, which are in agreement with results derived from the application of our therapeutic program (16,22,44). Nonetheless, the therapeutic intervention in GD should also look for the achievement of functional recovery by restoring premorbid levels. This is one of the reasons why further longitudinal studies are warranted, including a post-treatment follow-up period in the medium and long term, both at the clinical and research levels.

3.5.2. Dropout and relapse

Relapse and treatment dropout are usually understood as bad therapy outcomes. Broadly, treatment dropout has been defined as the discontinuation of a specific treatment program before it is completed or, in the case of a specific protocol, failure to attend a given number of sessions (45). Particularly, our protocolized therapeutic program describes dropout as the unjustified non-attendance to at least 3 consecutive treatment sessions. Globally, treatment dropout rates in GD have been reported to vary between 14% and 50%, with our group's findings in the Spanish population showing an approximate rate of 32% (27). Similar to relapse, treatment dropout was more frequent during the first therapeutic sessions (19), which underscores the need to address motivational aspects and introduce motivational strategies starting from the diagnostic phase and the feedback of results.

3.5.3. Predictive factors of treatment outcomes

Our group has published several works focusing on the analysis of treatment response and the detection of modulatory and predictive factors as a result of the development and application of the protocolized therapeutic program. These studies considered large clinical samples, and some findings have been reported in the middle/long-term. Over the past two decades, different clinical profiles of treatment response have also been described, as well as latent classes and evolutionary trajectories from a longitudinal perspective.

a. Psychological features

Impulsivity and compulsivity conform crucial multidimensional processes that modulate treatment response. On the one hand, higher reward sensitivity and impulsive personality traits (i.e., high sensation-seeking and high novelty-seeking) increased the risk of dropout (46), even at 2 years follow-up (23,24). Likewise, these impulsive tendencies also predicted low compliance and relapse during the first sessions of the clinical intervention (24,29), with a more impulsive clinical profile being associated with the commission of gambling-related offenses (47) —which could also negatively impact GD severity and treatment adherence (48). Interestingly, GD severity seemed to be a mediational factor in the association between impulsivity, personality traits, and poorer CBT outcomes (49). On the other hand, a poorer cognitive flexibility was also linked to higher dropout rates, lower compliance, and a higher risk of relapse in the short- and middle-term (24). The presence of greater difficulties in emotion regulation is another crucial aspect intimately linked to affect-driven impulsivity traits and considered a predictor of relapse (24) and dropout in patients with GD (50). In this regard, patients have shown significant improvements in both emotional distress and the severity of the gambling behavior after this CBT-based program (22).

b. Clinical and sociodemographic features

Gambling preferences have aroused considerable interest in the analysis of the response to treatment. In this sense, patients with strategic gambling preferences showed a higher risk of poor treatment outcomes from the first stages of the disorder, highlighting the importance of an early intervention among these patients (51). Moreover, individuals with both online and strategic gambling have heightened gambling-related biases associated with premature treatment cessation and relapse (52).

Regarding sociodemographic factors, the modulatory role of age and sex on treatment outcomes has been predominantly explored. In this line, females have shown a higher risk of poor treatment outcomes than men from the first stages of the disorder (51,53). Remarkably, findings from our group have delved into women-specific predictors of therapy outcomes. As one of the main results, the dropout risk was higher for women with lower GD severity and higher emotional distress. As well, lower education levels were a significant predictor of the relapse risk, and the frequency of relapses was higher for women with a preference for non-strategic gambling and substance consumption (19). A latent class analysis conducted on women with GD evidenced that the class characterized by a good progression to recovery grouped patients with the best CBT outcomes (i.e., lowest risk of dropout and relapses), who had a more functional personality structure ((i.e low harm-avoidance and high self-directedness) and a lower emotional distress (54). This finding was supported by a contemporary cluster analysis aimed to identify treatment response subtypes among women with GD (55).

Another notable finding was the higher likelihood of dropout observed among younger patients (22,56). In this regard, different response trajectories over time have been described not only in adult patients, but also in youth. On the one hand, in adult population, five trajectories were detected. The emotional state and personality traits were the most discriminative factors between trajectories. The biggest category showed positive progress to recovery during the follow-up period, although it was characterized by the greatest gambling severity at baseline. The other trajectories were composed of

patients with high GD severity, but a therapeutic response from good to poor, according to compliance with therapy guidelines and the presence of relapse (27). On the other hand, three response trajectories were identified among young adults (19-35 years old). The trajectory composed of those who experienced a poor evolution after CBT was characterized by a severe disorder at baseline, lower social index positions, high emotional distress, and a more dysfunctional personality structure (i.e., high scores in harm-avoidance and low scores in self-directedness) (26).

c. The figure of the co-therapist

Patients with the implication of significant others have been associated with higher treatment attendance and reduced risk of dropout, as the lack of family support constitutes a good predictor of a worse treatment outcome (53). Nonetheless, the involvement of a family member needs to be carefully considered since it may have a negative effect on the response to treatment if not adequately managed (22). For example, in the particular case of spouses or partners, it is not infrequent to find couple or marital problems related to the gambling behavior, as one of the preceding, consequential, and/or maintaining factors of gambling problems. In this context, the involvement of a partner or spouse has been described as a predictor of relapse in gambling behavior (22). This fact opens the debate among the authors about the need to incorporate treatments for GD that address relationship difficulties, such as couple therapy and interpersonal therapy, rather than being exclusively focused on gambling symptomatology.

4. CONCLUSION

The clinical protocol developed at the Behavioral Addictions Unit of the Bellvitge University Hospital (Barcelona, Spain) represents a structured and evidence-based approach to the treatment of GD. Grounded in CBT, this standardized therapeutic program consists of 16 weekly outpatient group sessions incorporating psychoeducation, stimulus control, assertiveness and other skills training, response prevention strategies, acquisition of healthy habits, relapse prevention techniques, cognitive restructuring, problem-solving, and reinforcement and self-reinforcement. Motivational strategies and familiar intervention —linked to the participation of significant others in the treatment as a co-therapist are also included. The therapeutic intervention is framed by an initial formal diagnostic phase and a two-year posttreatment follow-up period. Notably, various adaptations of this approach have been developed, including individual outpatient formats and inpatient admission, as well as considering the existence of heterogeneous clinical profiles in the group modality. The systematic implementation of this therapeutic program over more than two decades in a large clinical sample of more than 5000 patients has yielded consistent outcomes in terms of symptom reduction, treatment adherence, and relapse prevention. These findings highlight the relevance of protocolized, multidisciplinary, and person-centered interventions in GD. Future efforts should focus on broader dissemination and ongoing adaptation to evolving clinical profiles.

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