Pathological gamblers' views on harm reduction and prevention: an observational, real-world study

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Summary

Objective. Gambling disorder (GD) is a recognized global public health issue, with rising prevalence and significant associated harms. In Italy, GD is increasingly concerning due to limited effective treatment options and a growing number of affected individuals. This study aims to investigate the epidemiological profile and gambling behaviors of individuals diagnosed with GD in Italy, and to assess their perspectives on prevention and harm-reduction policies.

Methods. This cross-sectional, observational study recruited 104 participants, aged 18-75, diagnosed with GD by certified psychiatrists from clinical centers across Italy. Data on socio-demographics, gambling behaviors, and attitudes toward current gambling regulations were collected using a structured questionnaire. The South Oaks Gambling Screen (SOGS) was used to confirm GD diagnosis and assess its severity.

Results. The sample was predominantly male (87.5%) with a mean age of 36.96 ± 12.9 years. The mean SOGS score was 10.2 ± 5.11, indicating moderate to severe GD. On average, participants lost 44.4% of their monthly income to gambling, and 51.6% had incurred debt as a result. The most frequently used gambling modalities were physical slot machines (53.1%), online betting (50%), and in-person betting (43.7%). A substantial proportion of participants (75%) engaged in multiple forms of gambling, with 59.4% utilizing online platforms. Most respondents (71.9%) believed that existing restrictions on in-person gambling were ineffective, while 70.6% indicated that online gambling allowed them to bypass these restrictions.

Conclusions. The findings suggest that current gambling regulations in Italy, which largely focus on in-person gambling, may be insufficient to reduce harms associated with GD. Participants expressed support for a more unified and comprehensive regulatory framework that addresses both physical and online gambling activities. Given the widespread use of multiple gambling channels, a holistic strategy encompassing all forms of gambling is essential to reduce GD-related harms. Future research should focus on longitudinal studies to evaluate the long-term efficacy of regulatory interventions and track the evolving landscape of the gambling industry.

Keywords: gambling disorder, epidemiology, prevention, harm reduction

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INTRODUCTION

Gambling is a widely practiced recreational activity. In most cases, it occurs infrequently and does not compromise the quality of life of those who engage in it. However, gambling may become pathological when the person is unable to control

their behavior, leading to maladaptive and persistent patterns that impair the quality of life [1,2]. In the latest edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR), gambling disorder (GD) has been included in the section on "Substance Use Disorders" [3]. In fact, the syndromic framework, brain correlates, and physiology of GD are similar to those of substance use disorders, despite gambling not involving the intake of psychoactive substances [4]. Specifically, it has been found that the anticipatory dopamine response is the core of both disorders and could be associated with an increase in dopamine levels even in the absence of substance intake [5]. GD can have significant health consequences, with considerable legal and financial implications [6]. Moreover, to date, effective treatment strategies are limited [7,8] and also focused on certain types of gambling. Current treatment strategies for GD, as defined in the DSM-5-TR [3], encompass both psychotherapeutic and pharmacological interventions. Cognitive-behavioral therapy (CBT) is the most widely supported therapeutic approach, focusing on restructuring maladaptive beliefs and behaviors associated with gambling [9]. Motivational interviewing (MI) and contingency management are often employed to enhance treatment engagement and encourage behavior change [10]. Pharmacologically, opioid antagonists such as naltrexone and mood stabilizers have shown efficacy in reducing gambling urges and associated impulsivity [11]. Additionally, support groups like Gamblers Anonymous (GA) provide psychosocial support, complementing these interventions [12]. An integrated approach tailored to the individual's needs is considered most effective.

Epidemiological studies on GD are significantly fewer than those on substance abuse. Nevertheless, research has identified a global prevalence ranging from 0.12 to 5.8% of the world's population, with males, unmarried individuals or those married for less than 5 years, those living alone, individuals with low educational levels, and those with economic problems being more affected [13].

In Italy, according to the ESPAD 2022 study, about 57.2% of individuals aged 15 to 19 reported having gambled at least once in their lifetime [14]. According to data from the Monopolies Agency in 2022, approximately 136 billion euros were collected, marking a 292% increase from 2006 to 2022. A drastic decrease in physical gambling from 2019 to 2022 has been noted, along with a marked increase in online gambling, partly due to the inability to visit some physical locations during the COVID-19 pandemic as a result of restrictive measures that affected some, but not all, types of games available in physical locations. According to 2022 data compared to periods before the pandemic, in terms of user spending, on-site gambling (e.g., in bars, betting centers, and lottery retailers) remains the most practiced (42%) with a decline in some types of games (e.g., gaming machines) and an increase in others. Online gambling (e.g., sports betting and virtual casinos) is commonly practiced by younger individuals [15]. When looking at the volume of bets (spending and re-bets), despite the decline in some on-site products (gaming machines), the online offer has surpassed the overall on-site offer.

Prevalence analyses have noted a growing increase in GD among the population since 2003. According to the Eurispes report, the typical Italian disordered gambler is predominantly male, works in central-southern regions, holds a high school diploma, and uses alcohol (56.4% at risk of alcohol abuse) and tobacco (34.6% heavy smokers) [16].

Given the significant growth and the negative consequences associated with GD, it can be stated that the damage caused by gambling has become a major public health issue [17]. Therefore, this observational study aims to highlight the various epidemiological and gambling characteristics of disordered gamblers in 2024 in Italy through interviews with individuals receiving treatment for GD, to find valid strategies to contain the trend. Moreover, the study involved patients affected by GD, interviewing them on the policies they believe would be most useful to make gambling safer.

MATERIALS AND METHODS

Participants and procedures
The research follows a real-world, observational, cross-sectional design. Inclusion criteria were as follows: aged 18–75, currently speaking Italian, and having a present diagnosis of GD performed by a certified psychiatrist. No exclusion criteria were set. Several clinical centers (both hospitals and outpatients services) from Lazio, Abruzzo, Campania, Sicily, Piedmont, Lombardy, and Molise participated in the recruitment, ensuring coverage of the entire national territory.

Measures
A specific questionnaire was developed by a committee from the Italian Society of Psychiatry (SIP). Sociodemographic and in-depth clinical data were gathered from participants. Additionally, several questions about the organization of gambling in Italy and possible methods for prevention and harm reduction related to GD were asked. The questionnaire, written in Italian, consisted of 55 self-administered questions and took approximately 25 minutes to complete. Since this was an exploratory study, the questionnaire had not been previously validated.

To confirm diagnosis and evaluate severity, the South Oaks Gambling Screen (SOGS) was administered. This is a 20-item questionnaire based on DSM-III criteria for GD that assesses gambling habits and preferences. The total SOGS scores range from 0 to 20, with scores of 1-2 representing "non-problem gamblers," scores of 3-4 representing "at-risk gamblers," and higher scores (≥5) indicating "probable disordered gamblers" [18,19].

RESULTS

Sociodemographics and gambling characteristics
A sample of 104 subjects was recruited. The participants were

TABLE I. Descriptive characteristics of the sample.

Age, mean ± SD	36.96 ± 12.9 (range 21-74)
Sex, M	87.5%
Marital status	
Single	62.5%
Married/in a relationship	28.1%
Divorced	9.4%
Psychiatric comorbidities, yes	46.8%
Mood disorders	28.1%
Personality disorders	6.2%
Psychotic disorders	3.1%
Addictive disorders	6.2%
Anxiety disorders	3.1%

TABLE II. Gambling products.

Type of gambling	Percentage
10&lotto	18.7%
Scratch cards	21.9%
In-person betting	43.7%
In-person virtual betting	34.4%
Online betting	50%
Bingo	21.9%
Online casinos	43.7%
Physical slot machines	53.1%
Physical VLTs (video lotteries)	25%

mostly men (87.5%) with a mean age of 36.96 ± 12.9 years (Tab. I). The mean age of first gambling was 20.7 ± 9.29 years, while the mean age at GD diagnosis was 25.2 ± 7.27 years. Participants reported losing an average of 44.4% of their monthly income due to gambling, and more than half of the sample (51.6%) reported having debt due to gambling. All participants scored higher than 5 on the SOGS, with a mean SOGS total score of 10.2 ± 5.11 points.

Participants reported that the most used gambling products were online and in-person betting (50% and 43.7%, respectively), in-person slot machines (53.1%), and online casinos (43.7%) (Tab. II). A large percentage of participants reported using more than one gambling product (75%), including at least one form of online gambling (59.4%).

Harm reduction and prevention policies

A total of 71.9% of all respondents did not consider the current gambling restrictions, which apply only to certain types of in-person games (e.g., opening hours of the gambling venues, night closures, distance of the gambling venues from home, etc.), to be an obstacle to gambling activities. In this regard,

70.6% of subjects who engage in online gambling believed that online gambling was a way to overcome in-person limitations. In general, online gambling is considered preferable over physical gambling because it is more accessible (81.1%) and provides opportunities to play longer (45.4%). Consequently, the participants believe that increasing gambling restrictions on only certain types of in-person games cannot be a solution to counteract GD when considering all gambling products.

DISCUSSION

The present study recruited a real-world, treatment-seeking sample of subjects affected by GD from across the Italian territory, interviewing them regarding their opinions on prevention and harm reduction. By focusing on patients with a specialist diagnosis, the study provides important insights into how individuals with GD view the current organization of gambling in Italy and how they believe policies should be developed to protect consumers.

The socio-demographic and clinical data align with recent epidemiological studies concerning Italian GD patients [20]. A higher prevalence of male subjects over 30 is consistent with previous international and Italian studies [4,21]. The mean SOGS score over 10 indicates the presence of moderate to severe GD among the subjects in the study. The data show that the typical disordered gambler uses more than one product, both online and in-person, and that exclusive physical gambling is in the minority.

The imposition of uniform and coordinated restrictions, which take into account the complexity of various gambling products and distribution channels, both in-person and online, receives greater general consensus, especially among those who use different distribution channels. This framework reinforces the idea that harm reduction policies should decisively move towards unitary and coherent regulating gambling for all gambling products and distribution channels [6]. As we know, the current restrictions (such as walking distances and time limitations) affect only certain types of in-person gambling, particularly on-site machines. A self-exclusion registry is in place for online gambling [22] and could be extended to on-site gaming. Therefore, as also suggested by the interviewed patients, it is desirable to address the regulatory gap [23] with uniform and coordinated measures and appropriate regulation at the level of the relevant institutions.

According to the interviewed patients, different gambling distribution channels (online and in-person) not represent a real alternative reducing GD-related harm. The way supply is structured today, some gambling products can certainly be more attractive (with the well-known pay out mechanism) or even more accessible (because without territorial spacings), or always available (because without hourly limitations). The phenomenon of craving, both in relation to a substance and to gambling, is characterized by being compelling and not deferrable. Due to various gambling products and distribution channels, the lack of a coordinated strategy to combat GD

among all games and among all forms of distribution renders the containment measures currently planned useless.

The present work offers interesting insights into the gambling landscape in Italy, as interpreted by treatment-seeking patients affected by GD. This aspect, along with the real-world nature of the investigation, constitutes its main strengths. Among the limitations are the lack of longitudinal observation to compare patients' opinions throughout their treatment journey and the limited sample size.

CONCLUSION

In conclusion, our sample highlights the central role of online gambling. Specifically, 50% of gamblers primarily use online gambling products, and 75% engage in multiple forms of gambling, with 59.4% of these involving at least one online platform. Furthermore, it is clear that gamblers do not perceive current restrictions as a barrier to gambling. On the contrary, they view online gambling as a way to circumvent limitations imposed on in-person gambling. The majority of the sample perceives online gambling as more accessible, and nearly half believe it allows for longer gaming sessions. Consequently, according to the gamblers themselves, restricting only certain forms of gambling is unlikely to be effective in reducing gambling-related problems Given the importance of this issue, additional studies are necessary to validate these findings and to develop the most effective prevention and harm reduction policies specifically suited to the Italian context.

LIMITATION

This study has several limitations. Primarily, despite the involvement of different regions, the number of participants is relatively small. Additionally, our findings may have limited generalizability, as the study is designed as a cross-sectional analysis, the sample is exclusively Italian, and the survey questions are based on the structure of the Italian gambling industry.

Conflict of interest statement

The authors declare no conflict of interest.

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None.

Ethical consideration

The study was performed in accordance with the Declaration of Helsinki and was approved by the local Ethics Committee. All patients provided their written informed consent after a complete description of the study was provided.

Authors' contribution

Conceptualization: G.M., M.L., A.F.; Investigation: F.D.C., I.R., S.P., G.T., C.M., T.P., N.C., S.C., P.C.; Supervision: G.M., A.F.; Writing - original draft: F.D.C., S.P., I.R., N.C., T.P.; Writing - review & editing: M.P., M.L., M.S.S., A.F.. All authors read and approved the final version.

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