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# Preventive strategies in gambling disorder: a survey investigating the opinion of gamblers in the Lazio region

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## Summary

**Background.** Gambling disorder is an increasing phenomenon around the world. In Italy, its prevalence is about 1.01%. To date, many international governments have adopted restrictive measures to contain and prevent the transition from social to problematic behaviours and psychopathological consequences, but further evaluation is needed. Because of the poor effectiveness of the gambling restrictions policies, the aim of this observational, cross-sectional study was to explore both gamblers' and mental health professionals' opinions about prevention strategies for gambling disorder.

**Methods.** A specific questionnaire was formulated by experts from the Italian Society of Psychiatry (SIP) and widely disseminated. The only inclusion criterion was to have gambled at least 5 times in the last year on sports betting, poker, online games, or slots. The questionnaire was disseminated online, in gambling halls, and in outpatient and inpatient units. Data from clinicians dealing with gambling disorder were collected through a different questionnaire formulated by SIP experts and disseminated through an online survey.

**Results.** A total of 250 people fulfilled the inclusion criterion and were included in the study. The evaluated sample included 75 pathological gamblers (PG), 58 problematic gamblers (PrG) and 117 non-pathological gamblers (NPG) according to the SOGS assessment tool. Opinions of the subjects were differentiated according to the answers given as rational, NPGs, PrGs, or PGs. Differences between the three groups with respect to opinions were not significant apart from a proposal regarding the possibility of inserting betting limits based on the time interval of a "game" (negative opinions: PG, 61.1%; PrG, 38.5%; NPG, 41.1%), limitations of opening hours for gambling halls (negative opinions: PG, 64.2%; PrG, 48.7%; NPG, 48.2%), and the establishment of minimum distances between gambling halls and meeting centres (negative opinions: PG, 62.2%; PrG, 50.0.5%; NPG, 43.2%). The opinions of professional workers (psychiatrists, psychologists, psychiatric rehabilitators) confirmed the relevance of exclusion registers.

**Discussions.** The most desired proposal was the creation of exclusion registers determined by the gamblers themselves (self-exclusion registers), by the patients' relatives, or even by the mental health operators. Other possible measures concerned revising the gambling parameters of devices in order to direct individuals at risk to the network of territorial care services and to improve

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psychoeducation. Applying the results of neuroscience research dealing with addiction is necessary to assess the impact of the most diverse measures adopted, with the goal of establishing at an early stage the strategies aimed at effectively identifying vulnerable individuals at risk of addiction.

**Key words:** gambling disorder, prevention, treatment

## Introduction

Gambling disorder is the only behavioural addiction included in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) under the category "Substance-Related and Addictive Disorders" [1] The characteristic of gambling disorder is a maladaptive gambling behaviour, persistent and recurrent, that modifies the personal [2,3] and/or professional life of the patient [4]. The severity of the disorder can be mild, moderate or severe.

Many works have studied the prevalence of adult problem gambling in recent years. Extended gambling availability and participation have been connected with significant increases in the prevalence of gambling disorder, associated comorbidities and other gambling-related problems. Globally, prevalence ranges from 0.2% to 5.3% in adult populations. This number increases twice or three times when considering people experiencing subclinical problematic gambling [2]. The countries with the highest prevalence are the US (0.4-0.6%), UK (0.6-0.9%), Germany (0.2-0.6%), Australia (0.5-2.0%) and Hong Kong (1.8%) [5].

The Italian situation was surveyed by Barbaranelli et al. in 2013 with a sample of 1,979 people. The prevalence of gambling disorder was about 1.01%, as evaluated by the South Oaks Gambling Screen (SOGS) and the Problem Gambling Severity Index (PGSI) [3] Lotteries were the most played games, but the percentage of people involved in online gambling at least once was much more restricted. According to an approximate estimate, the money used for gambling ranged from 0.5 to 2,300 euros per year. People began to gamble at a mean age of 27, but there was a small percentage (8%) who started to gamble under the age of 18. A quarter of gamblers had a parent who gambled regularly, and about 6% had a problematic gambler as a parent. People who had other family members who gambled regularly made up 48% [3].

In recent years, problematic gambling has been increasingly considered a public health concern, and governments have tried to regulate it, promoting responsible gambling and providing assistance to problematic gamblers. Prevention strategies play a crucial role in reducing gambling-related harm, both for the general population and for at-risk or problematic gamblers. As demonstrated by recent reviews, the strategies of governments and the gambling industry have generally failed to reduce gambling damage. Although a number of measures seem to have some efficacy, they are not supported by sufficient evidence-based data, and the most commonly implemented interventions are often the least effective [2]. According to recent studies, demand reduction interventions, which are mainly focused on risk awareness, have been found to have limited effects. Conversely, one of the most effective strategies seems to be restrictions on smoking and alcohol inside game rooms [6].

To date, the European Parliament has not established specific regulations to intervene in gambling problems. However, between 2013 and 2014, interventions were legitimized in the member states in order to protect consumers, regulate online gaming and reduce the gambling phenomenon among minors. In Germany, self-exclusion lists are widespread in the territory and managed by Germany's State Treaty on Gambling. In Spain, a dedicated register lists everyone who voluntarily excludes themselves. In both countries, self-exclusion lists have emerged as an effective prevention strategy [7]. In the UK, the Gambling Commission is a non-departmental public executive body of the government that it is responsible for regulating gambling and supervising gaming law. The Gambling Commission also monitors the percentage of pathological and non-pathological gamblers. Their BeGambleAware project provides advice for responsible gambling, a smartphone app to supervise a personal budget, a social media interface that hides gambling advertising, and the Gambling Therapy app that provides cognitive-behavioural therapy (CBT) support. In addition, other free of charge services, including a national helpline, London Problem Gambling Clinic and Game Care, are available to support people with gambling-related problems [8,9].

Because gambling is legal under US federal law, each state is free to regulate or prohibit the practice within its borders. Online gambling has been more strictly regulated: The Unlawful Internet Gambling Enforcement Act of 2006 (UIGEA) outlaws financial transactions involving online gambling service providers [10] In Australia, since the introduction of new gambling services, including online gambling, the Commonwealth has taken a more active role, and the Australian gambling industry is also regulated by state and territory authorities [11]

In Italy, since 2012, many strategies have been implemented through Decreto Balduzzi [12] (Legge 189/2012), such as including gambling disorder in essential medical assistance levels (LEA), establishing a national gambling observatory, and prohibiting entry for minors in gambling areas. The "Distanziometro" is a restrictive measure to relocate gaming areas 300 or 500 meters away from sensitive places such as educational institutions of all levels, residential or semi-residential facilities in the health or socio-medical field, places of worship, accommodation facilities for protected categories, youth gathering places, sports facilities and oratories. Other restrictions have been introduced through the Decreto Dignità [13] (Legge 96/2018), such as obligatory health insurance cards and specific opening times to access gambling areas,

absolute prohibition of gambling advertisements, and removal of non-standard equipment.
However, there are still doubts about the effectiveness of these restrictions. The prohibitionist approach that many states have adopted does not seem to reduce the gambling phenomenon. PGs are less sensitive to externally imposed limitations, considering psychobiological dysregulation, and most gamblers can easily decide to choose another gambling area farther away. Moreover, the ban on gambling in urban areas could paradoxically favour pathological gambling (stigma), and online gambling could even be increased [14]. Furthermore, most of the intervention strategies to tackle gambling disorder have been proposed by experts or determined by political needs, without taking into consideration the opinions of the gamblers themselves and of the professionals who have direct contact with them.
To fill this gap, the primary aim of the present study was to directly ask gamblers, divided into different levels of gambling severity, what preventive measures they would consider to be useful for reducing the impacts of gambling disorder. The secondary aim was to ask professional workers (psychiatrists, psychologists, psychiatric rehabilitators) operating in the gambling area, which, according to their experience, are the strategies most likely to be effective and capable at preventing the development of gambling disorder.

## Materials and Methods

### *Design*

This was an observational, cross-sectional study.

### *Procedures*

For the primary outcome of the study, a specific questionnaire consisting of 79 questions was developed by a board of experts from the Italian Society of Psychiatry (Società Italiana di Psichiatria, SIP). The questionnaire was self-administered, and the mean completion time was 25 minutes. The only inclusion criterion in the study was to have gambled (sports betting, poker, online games, slots) at least 5 times in the last year. This was decided to ensure inclusion in the sample of only those who actively gamble. In order to have a better chance of collecting a large sample, the questionnaire was disseminated both through an online survey and by physically going to betting rooms, bingo halls, casinos and tobacconists with slot machines. Eight gaming rooms that had previously expressed their availability to participate were involved in the project. They were all located in Rome and surrounding areas. A further part of the sample was selected from clinical centres for gambling disorder in the Lazio region (ASL-Roma 1, Roma, SRP Villa Maria Pia, Roma, Sportello Adolescenza, Fondi [LT]). Participation in the study was anonymous and in most cases free of compensation. Only individuals surveyed in betting rooms and clinical centres received a shopping voucher of 5.29 euros for their participation.
For the secondary outcome of the study, a specific questionnaire was developed to address clinicians dealing with gambling disorder, including psychiatrists, physicians and other professional workers (psychologists, psychiatric rehabilitators) working in addiction services (SERDs). The questionnaire was disseminated through an online survey throughout the Lazio region. Participation was anonymous and free of compensation.

### *Measures*

The questionnaire addressing gamblers was divided into four sections. The first section collected socio-demographic data (sex, age, education, marital status, psychiatric diagnoses, use of psychotropic medications, substance use). The second section included the South Oaks Gambling Screen (SOGS) questionnaire and a series of questions about gambling habits and preferences. The third section (see Tab. I for details) included many questions investigating the opinions of gamblers regarding some of the most common gambling-reduction interventions provided by different European governments. Finally, the last section investigated the consequences of the Covid-19 pandemic for gambling habits. The questionnaire addressing physicians was divided into two sections. The first investigated physicians' opinions about which regulations adopted in Europe to counteract the phenomenon of gambling disorder have had the greatest influence on the gambling habits of their patients. The last section investigated the consequences of the COVID-19 pandemic on the gambling habits of their patients.
The SOGS is a widely used screening tool for evaluating pathological gambling. It was developed on the basis of DSM-III criteria for pathological gambling in clinical populations [15]. It is widely used in epidemiological and clinical studies [2] and investigates different aspects of gambling, such as the frequency of gambling activities, daily budget, difficulty in controlling gambling behaviours, and awareness of one's gambling problem. Accuracy of SOGS in the general population was verified by Stinchfield [16] on the basis of DSM-IV criteria [17] proclaiming a high hit rate (0.96), with high sensitivity (0.99), modest specificity (0.75), low false positive rates (0.04) and low false negative rates (0.11). The total score on the SOGS ranges from 0 to 20. Based on SOGS scores, the sample was divided into three subsamples: those with SOGS scores of 1 and 2 were classified as non-pathological gamblers (NPG), those with scores of 3 and 4 were classified as problem gamblers (PrG) and those with scores equal to or greater than 5 were identified as pathological gamblers (PG).

## Results

A total of 933 people fulfilled the inclusion criterion and were included in the study. An additional 3,781 people

**Table I.** Questions about the preventive strategies of the questionnaire administered to the reference sample.

| |
|---|
| How useful do you consider the ban on creating an account with virtual gaming sites? |
| How useful do I think it is to protect people who have submitted an application, on a voluntary basis (or by family members), to be prohibited from participating in gambling? |
| How useful do you think it is to remove slot machines from bars and public places? |
| How useful do you think it is to ban advertising gambling? |
| How much do you think it is useful to adequately inform users about the risks related to gambling? |
| How useful do you think it is to define a maximum betting limit? |
| How useful do you think it is to limit the number of arcades or the number of gaming machines per inhabitant? |
| How useful do you think it is to limit the visibility and advertising of games on Internet? |
| How useful do you think it is to allow the game ONLY in dedicated spaces? |
| How useful do you think the obligation to use the health card to play is useful? |
| How useful do you think it is to ban gambling to minors? |
| How useful do you think it is to establish minimum distances (250 to 500 meters) between gaming halls and meeting centers (schools, sports centers, places of worship, residential structures, etc.)? |
| How useful do you think it is to limit the opening hours of the gambling halls (slots and video lottery)? |
| How useful do you think the ban on serving alcohol in gambling halls is? |
| How useful do you think it is to limit your bets based on the time frame of a "game" (for example: the maximum use of 20 cents is allowed in 5 seconds of euros and 2 euros of winnings; maximum hourly loss of 80 euros; maximum payout per hour of 500 euros) |
| How useful do you think it is to prohibit gambling for people clinically suffering from Pathological Gambling, placing them in protected lists? |
| How useful do you think it is to ban betting rolls transmitted duringlive events (ex. during a football match the wording appears on the site"bet now!" with the odds at that precise moment)? |
| How useful do you think it is to prevent "no deposit bonuses" or "free bets"? |
| How useful do you think it is to create a national database with the gaming profiles of all citizens by imposing a maximum monthly limit of money used in gaming calculated on the basis of declared income? |
| How useful do you think it is to ban the use of cash in all types of gambling? |
| How useful is it to prohibit the distribution of food in gambling establishments (slot rooms, bingo etc.)? |

were surveyed but did not meet the inclusion criterion and so were excluded from the analysis. Ultimately, the evaluated sample included 289 PG, 259 PrG and 385 NPG, according to the SOGS assessment tool.

The socio-demographic characteristics of the sample are given in Table II, which shows a strong prevalence of males (M:F = 4:1). In the sub-sample of PGs, there is, in addition to the higher prevalence of males, an average

**Table II.** Sociodemographic and clinical data of the sample divided according to the score of SOGS.

| | Gender | Age (average) | Educational qualification | Occupation | Marital status | Psychiatric diagnosis |
|---|---|---|---|---|---|---|
| **SOGS 1, 2 (NPG)** | M= 76,03% | 32,68 years | middle school 9,92% | students 42,98% | married 22,31% | yes 4,96% |
| | F= 23,97% | | high school diploma 62,81% | unemployed 13,22% | engaged 34,71% | no 95,4% |
| | | | master's degree 27,27% | employees 38,84% | single 42,98% | |
| | | | | retired 4,96% | | |
| | **Gender** | **Age (average)** | **Educational qualification** | **Occupation** | **Marital status** | **Psychiatric diagnosis** |
| **SOGS 3,4 (PrG)** | M= 85,96% | 31,61 years | primary school diploma 1,75% | students 38,59% | married 15,78% | yes 3,5% |
| | F= 14,03% | | middle school 15,78% | unemployed 12,28% | cohabiting 12,28% | no 96,5% |
| | | | high school diploma 61,40% | employees 38,59% | engaged 33,33% | |
| | | | three-year degree 10,52% | self employed 7,01% | single 38,59% | |
| | | | master's degree10,52% | entrepreneur 1,75% | | |
| | | | | retired 1,75% | | |
| | **Gender** | **Age (average)** | **Educational qualification** | **Occupation** | **Marital status** | **Psychiatric diagnosis** |
| **SOGS ≥5 (PG)** | M 86,08 % | 41 years | primary school diploma 1,26% | students 26,92% | married 21,79% | yes 8,86% |
| | F 13,92% | | middle school 20,25% | unemployed 8,97% | cohabiting 12,82% | no 91,14% |
| | | | high school diploma 58,22% | employees 43,59% | engaged 28,20 % | |
| | | | three-year degree 10,13% | self employed 15,38% | single 37,18% | |
| | | | master's degree 8,86% | retired 3,85% | | |

age of 41, a marital status of single, and the presence of a psychiatric comorbidity in 8.86% of the sample. The subsample of pathological gamblers evidenced a preference for games such as slots and poker machines.

Table III shows the opinions of the subjects in relation to possible strategies useful for preventing pathological gambling. The opinions were differentiated according to the answers given by NPGs, PrGs and PGs. The possible strategies considered most effective, with minimal differences between groups, were: 1) restriction of entry into the rooms or spaces of those people who have submitted an application, on a voluntary basis (or by family members), with respect to participation in gambling (88.2% of PGs had a positive opinion about this proposal); 2) restriction of entry into rooms or spaces dedicated to gambling of patients diagnosed with pathological gambling disorder (78.1% of PGs had a positive opinion about this proposal); 3) increased preventive aspects useful for providing clear indications about damages due to pathological gambling (73% of PGs had a positive opinion about this proposal); and 4) the insertion of a maximum limit on the amounts gambled (67.8% of PGs had a positive opinion about this proposal). In addition to these opinions, there is a strong and univocal indication of the obligation to prohibit access to the rooms or gaming places for subjects under the age of 18.

The strategies considered less effective were reported as: 1) limiting distribution of food in gambling areas (76.2% of PGs had a negative opinion about this proposal); 2) limiting the global number of gaming rooms (60.1% of PGs had a negative opinion about this proposal); 3) limiting the opening hours for gambling halls (60% of PGs had a negative opinion about this proposal); 4) establishing minimum distances between gambling halls and meeting centres (59.3% of PGs had a negative opinion about this proposal); 5) inserting betting limits based on the time interval of a game (58.4% of PGs had a negative opinion about this proposal); and 5) limiting the use of cash (58.2% of PGs had a negative opinion about this proposal).

Differences between groups (PGs, PrGs, NPGs) with respect to the different opinions were not significant, apart from the proposal regarding inserting betting limits based on the time interval of a game (negative opinions: PG, 61.1%; PrG, 38.5%; NPG, 41.1%; $p < .05$), limiting the opening hours of gambling halls (negative opinions: PG, 60%; PrG, 48.7%; NPG, 48.2%; $p < .05$) establishing minimum distances between gambling halls and meeting centres (negative opinions: PG, 59.3%; PrG, 50.9%; NPG, 43.2%; $p < .05$).

Table IV provides the opinions of professional workers (psychiatrists, psychologists, psychiatric rehabilitators) operating in the field of gambling disorder in relation to possible useful strategies for preventing the development of pathological gambling.

## Discussion

In this pilot study, conducted in the Lazio region, the opinions of subjects who presented a pathological level of gambling (PG) were evaluated in comparison to others who presented a problematic (PrG) or non-pathological type of gambling (NPG), in line with the criteria of the SOGS scale. This study is the first scientific contribution that has systematically evaluated the opinions of a large number of gamblers selected through online dissemination of a specific questionnaire and concretely intercepting significant levels of gamblers in specific contexts, such as gaming rooms in the territory of the Lazio region and in

**Table III.** Opinions of the subjects in relation to possible strategies useful for preventing pathological gambling. For each question it is implied "How useful do you think it is..". A possible answer, not indicated in the table, was "not applicable".

| | SOGS [1,2] | SOGS [3,4] | SOGS [5] |
|---|---|---|---|
| …to remove slot machines from bars and public places? | Negative 26,9% Positive 70,08% | Negative 19,63 % Positive 80,35% | Negative 39,8% Positive 60% |
| …to ban advertising gambling? | Negative 37,59% Positive 58,11% | Negative 42,85 % Positive 57,13 % | Negative 47,8% Positive 47,9% |
| …to adequately inform users about the risks related to gambling? | Negative 18,79% Positive 78,63% | Negative 16,06 % Positive 82,13 % | Negative 24% Positive 73% |
| …to define a maximum betting limit? | Negative 4,77% Positive 71,79% | Negative 16,05 % Positive 82,13% | Negative 29,7% Positive 67,8% |
| …to limit the number of arcades or the number of gaming machines per inhabitant? | Negative 49,56% Positive 47% | Negative 41,06 % Positive 57,13% | Negative 60,1% Positive 33,3% |
| …to limit the visibility and advertising of games on Internet? | Negative 21,35% Positive 73,49% | Negative 33,91 % Positive 64,28 % | Negative 37,3% Positive 58,6% |
| …to allow the game ONLY in dedicated spaces? | Negative 26,49% Positive 70,93% | Negative 24,99 % Positive 69,64 % | Negative 29,3% Positive 66,3% |
| …to use the health card to play is useful? | Negative 51,27% Positive 44,43% | Negative 39,27 % Positive 60,7 % | Negative 50,6% Positive 45,3% |
| …to ban gambling to minors? | Negative 11,10% Positive 84,61% | Negative 8,92 % Positive 91,06 % | Negative 9,4% Positive 82,6% |
| ...to establish minimum distances (250 to 500 meters) between gaming halls and meeting centers (schools, sports centers, places of worship, residential structures, etc.)? | Negative 43,5% Positive 53% | Negative 50,9 % Positive 48,21 % | Negative 59,3% Positive 38,4% |
| …to limit the opening hours of the gambling halls (slots and video lottery)? | Negative 48,2% Positive 47,86% | Negative 48,7 % Positive 49,99% | Negative 60% Positive 34,7% |
| …the ban on creating an account with virtual gaming sites? | Negative 39,27% Positive 57,14% | Negative 43,74 % Positive 53,07 % | Negative 32,2% Positive 55,8% |
| …the ban on serving alcohol in gambling halls? | Negative 36,74% Positive 58,11% | Negative 47,35 % Positive 45,6 % | Negative 48,1% Positive 50,6% |
| …to limit your bets based on the time frame of a "game" (for example: the maximum use of 20 cents is allowed in 5 seconds of euros and 2 euros of winnings; maximum hourly loss of 80 euros; maximum payout per hour of 500 euros) | Negative 41% Positive 50,42% | Negative 38,59 % Positive 54,38 % | Negative 58,4% Positive 29,3% |
| …to prohibit gambling for people clinically suffering from Pathological Gambling, placing them in protected lists? | Negative 17,93% Positive 76,91% | Negative 15,77 % Positive 78,94 % | Negative 19% Positive 78,1% |
| …to protect people who have submitted an application, on a voluntary basis (or by family members), to be prohibited from participating in gambling? | Negative 14,28% Positive 80,95 % | Negative 15,62 % Positive 84,37 % | Negative 10,8% Positive 88,2% |
| …to ban betting rolls transmitted during live events (ex. during a football match the wording appears on the site"bet now!" with the odds at that precise moment)? | Negative 41,87% Positive 53,84% | Negative 29,81 % Positive 66,66 % | Negative 41,3% Positive 54,6% |
| …to prevent "no deposit bonuses" or "free bets"? | Negative 51,27% Positive 44,43 % | Negative 50,87 % Positive 45,6 % | Negative 45,3% Positive 48% |
| …to create a national database with the gaming profiles of all citizens by imposing a maximum monthly limit of money used in gaming calculated on the basis of declared income? | Negative 38,46% Positive 44,42 % | Negative 47,35 % Positive 42,1 % | Negative 53,3% Positive 40% |
| …to ban the use of cash in all types of gambling? | Negative 52,98% Positive 35,88% | Negative 64,89 % Positive 28,06% | Negative 58,2% Positive 38,6% |
| …to prohibit the distribution of food in gambling establishments (slot rooms, bingo etc.)? | Negative 61,53% Positive 31,61 % | Negative 80,69 % Positive 17,53 % | Negative 76.2% Positive 16% |

bars where there are slot machines and other types of games. Furthermore, in order to identify severe pathological gamblers, the evaluation concerned clinical reference centres where patients receive a specific treatment for gambling disorder.

The socio-demographic and clinical data identified through the SOGS scale are in line with recent epidemiological studies concerning the Italian population in relation

**Table IV.** Opinions of professional workers (psychiatrists, psychologists, psychiatric rehabilitators) operating in the field of gambling disorder in relation to possible useful strategies for preventing the development of pathological gambling. "Based on your clinical experience, how useful do you think it is…" is provided for each question.

| QUESTIONS | NEGATIVE | POSITIVE | NOT APPLICABLE |
|---|---|---|---|
| 1) Based on your clinical experience, how useful do you think it is to remove slot machines from bars and public places for GD patients? | 16,4% | 81,97% | 1,64% |
| 2) …forbidden to advertise gambling for GD patients? | 24,6% | 75,4% | 0 |
| 3) …to adequately inform GD patients about gambling risks? | 3,28% | 96,72% | 0 |
| 4) …to define a maximum limit in games for GD patients? | 21,3% | 75,4% | 3,28% |
| 5) …to limit the number of arcades or the number of gaming machines per inhabitant for GD patients? | 21,32% | 78,69% | 0 |
| 6) …to limit the visibility and advertising of gaming on the internet for GD patients? | 14,76% | 85,25% | 0 |
| 7) …to allow play ONLY in dedicated spaces for GD patients? | 40,98% | 59,02% | 0 |
| 8) …the obligation to use the health card for GD patients? | 32,78% | 67,22% | 0 |
| 9) …to ban gambling from minors GD patients? | 13,12% | 85,24% | 1,64% |
| 10) …to establish minimum distances (from 250 to 500 meters) between gaming rooms and aggregation centers (educational establishments, sports centers, places of worship, residential structures, etc.) for GD patients? | 34,43% | 65,58% | 0 |
| 11) …to limit the opening hours of the gaming rooms (slots and video lotteries) for GD patients? | 18,04% | 81,96% | 0 |
| 12) …to ban alcohol serving in gambling halls for GD patients? | 21,3% | 78,7% | 0 |
| 13) …to limit the bets based on the time interval of a "game" (for example: maximum use of 20 euro cents and 2 euros of winnings is allowed in 5 seconds; maximum hourly loss of 80 euros; maximum hourly payout of 500 euros) for GD patients? | 18,04% | 81,96% | 0 |
| 14) …to forbid gambling for people clinically affected by Pathological Gambling, placing them on protected lists? | 29,51% | 62,3% | 8,2% |
| 15) …to ban betting rolls transmitted during live events (eg during a football match the word bet now! Appears on the website with the odds at that precise moment) for the GD patients? | 21,32% | 77,05% | 1,64% |
| 16) …to prevent "no deposit bonuses" or "free bets" for GD patients? | 22,96% | 73,77% | 3,28% |
| 17) …to create a national database with the gaming profiles of all citizens by imposing a maximum monthly limit of money used in gaming calculated on the basis of declared income? | 24,6% | 57,37% | 18,03% |
| 18) …to ban the use of cash in all types of gambling for GD patients? | 26,23% | 67,21% | 6,56% |
| 19) …to forbid the distribution of food in gambling establishments (eg slot rooms, bingo) for GD patients? | 39,34% | 57,37% | 3,28% |
| 20) Based on your clinical experience, throughout the closing of the betting / bingo halls during the lock down for the Covid-19 pandemic, the frequency of gambling of GD patients, on average, is: | Decreased: 36,07% | Increased: 21,31% | Unchanged: 42,62% |

to the gambling phenomenon (National Institute of Health, National Gaming Survey 2018) [18]. However, we need to emphasize that our sample does not represent a clear picture of the gambling situation in the region, but was specifically determined with the aim of recruiting a larger number of PrGs and PGs, whose opinions were a main target of the study. In our sample, the higher prevalence among gamblers of male subjects, who were over 30, single, and had unstable work situations was consistent with previous international and Italian studies [18].

The proposal that gained the most consent among all the typologies of gamblers concerned the possibility of creating dedicated registers listing those people who are prohibited in gambling sites. This proposal is of great interest with respect to gambling areas in which it is possible to play without limitation. The creation of these registers could be determined by the gamblers themselves (self-exclusion registers), by the patients' relatives, or even by the operators (psychiatrists, psychologists, psychiatric rehabilitation technicians, and so on) who treat affected patients. This type of model has been proposed in other countries with favourable and very promising long-term results, especially if guided and well-integrated with the territorial health network of addiction services, mental health centres (CSM) and the qualified Third Sector. The implementation of integrated early intervention and active

prevention tools should necessarily consider reporting by the player's family members.
It would also be very useful, as evidenced by the responses to the questionnaire of all types of interviewees, to clearly exclude individuals under 18 from accessing gambling venues. Minors are undoubtedly at risk due to a still partial neurodevelopment process. These aspects also apply to preventive strategies for substance use disorders and would find a parallel application area in gambling.
Another central area that emerges from the pilot study is that, regardless of the severity of the clinical situation, there is a need to increase prevention with more targeted psychoeducation strategies. This should be able to detail all the possible risks deriving from the game and also highlight all the cognitive biases reported by gamblers. These cognitive biases in fact represent false illusions in the imaginations of gamblers, which exacerbates the clinical picture by pushing gamblers to continue gambling while chasing cognitive tricks.
Regarding the opinions of specific strategies to be implemented to prevent and limit the development of pathological gambling, it is surprising to note how the strategies recently proposed in Italy received a low consensus among gamblers. However, knowing the neurobiological mechanism of craving, it is somehow understandable that the use of the metre distance may play a limited role. The gambler, particularly if pathological, is certainly not dissuaded from not having the ability to play at hand. The compulsive aspects of the pathological search for the source of pleasure go far beyond geographic limitations. The gambler is a subject who, without particular limitations, is ready to leave the neighbouring areas in order to satisfy his specific requests. This mechanism is typically observed in not just gambling, but also in the vast world of addictions when the addicted patient is ready to make enormous efforts to reach the place of sale to purchase the substance. The phenomenon of craving, in relation to both a substance and to gambling, is characterized by being compelling and not deferrable, despite any type of limitation. For this reason, it is not surprising that we found a higher prevalence of negative opinions about this preventive proposal among PGs with respect to PrGs and NPGs. PGs are well aware that such a typology of limitation can barely limit their craving for gambling. Recent data are consistent with our study and highlight how a portion of problem gamblers (on average 10%) often choose to go to rooms distant from their home, precisely to hide the discomfort that may arise. A recent Italian document [19] points out that most gamblers have no problem choosing a venue farther away: 69% of sports betting players, 65% of slots players and 61% of players would move to another point of sale. The practically absolute ban on gambling in urban areas could paradoxically favour those affected by gambling disease, thus determining the concentration of the venues in peripheral places, isolated from the gaze of others and the resulting stigma. Furthermore, relocating the gambling areas to outside major centres would end up creating a high concentration of gambling venues in marginal areas, further depressing peripheral areas that are already heavily penalized, with a probable negative influence on the social gamblers normally residing in the same areas.
The same considerations apply to the restrictions concerning gambling time. Although it may, in fact, seem reasonable to put limitations on the 24-hour availability of gambling, too-restrictive limitations could hardly be expected to lead to tangible results, as was also clearly reported by the interviewed gamblers. In agreement with our data, a recent study showed that the interruption of the game not accompanied by a specific intervention to be implemented during the break period, is not an effective tool for treating this behaviour [14].
These considerations are in line with what has been reported with prohibitionist drug policies, which did not lead to a contraction of the supply or a reduction of substance use. Clinic treating addiction, in particular substances, have confirmed this for decades: those who have an addiction are not sensitive to limitations imposed from the outside, as evidenced by almost a hundred years of prohibitionist strategies, the *Volstead Act* in the US (1927) and the recent *war on drugs* in the Philippines (2020). These experiences that tended to be unsuccessful seem to have induced more than anything else the maintenance of damage induced by the illicit use of substances and facilitated a progressive impoverishment of public resources that could have been dedicated to the addiction sector to activate appropriate preventive, rehabilitative and treatment strategies. It seems clear that these efforts should be redirected towards the development of different models of care, where treatment and rehabilitation capable of increasing early knowledge of risk factors have paramount importance [20,21].
Another element that emerges from the data is the answers provided by health professionals who work with problems related to gambling. The opinions are in line with what has been reported by gamblers, firmly confirming the greater relevance of some strategies, such as exclusion registers, than that of others.

## Conclusion

What emerged from this pilot study carried out in the Lazio region is that preventive strategies for a phenomenon of such severe gravity should be based on logic derived from profound clinical reflections of psychiatrists and health professionals who work directly in the field of pathological gambling and who know, in depth, the reality of gamblers. The search for simplistic solutions, able to reduce the gambling sector present in our country, can only partially and temporarily stem the problem. Instead, it would be desirable to favour controlled and legal gambling venues along with appropriate monitoring systems, such as the exclusion lists. This operation would help avoid the development of illegal and clandestine gambling and temper the development of online gambling, which is more

difficult to control and manage. It would then be desirable that the income guaranteed by the gambling sector could then really contribute to favouring psychoeducational intervention strategies, as also reported by the opinions of the gamblers interviewed.

Other possible measures concern the revision of the gambling parameters of devices to make it possible to trace and measure access to gambling in terms of time spent and money spent, allowing the possible early identification of at-risk individuals. The development of systems of this type could hopefully allow for the identification of those in need of a specific intervention. These interventions should be implemented by practitioners specifically trained in counselling tools and psychological support and able to direct those who are vulnerable to the network of territorial care services (CSM, Third Sector) and should include those who have repeatedly exceeded the limits in the exclusion register, as acknowledged by the gamblers interviewed in our study. The management of the exclusion register could provide for temporary or definitive exclusions, or even differentiations regarding the type of game, limiting exclusive access to those games with rapid turnover, which more typically afflict and characterize those who are suffering from gambling disorder.

In this scenario, it is therefore desirable to have a greater influence of those who dedicate themselves to the treatment of addictions every day, as well as greater consideration of the results of neuroscience research dealing with addiction [22]. This approach would make it possible to promptly and objectively assess the impact of the most diverse measures adopted, with the goal of establishing strategies aimed at effectively identifying vulnerable individuals at risk of addiction at an early stage.

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