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Short Report

Gambling in Ireland: profile of treatment episodes from a national treatment reporting system

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Abstract

Objectives: Globally, problem gambling prevalence is estimated at between 0.1% and 5.8%. Problem gambling can have many negative consequences; including on physical, and psychological health, and social functioning. There is a need to better understand treatment uptake as only a small proportion seek treatment. This is the first Irish national study using routinely gathered health surveillance data to describe treated problem gambling. Results will inform service policy and planning.

Methods: An analysis of episodes treated for problem gambling collected by the National Drug Treatment Reporting System was undertaken. Included were episodes entering treatment between 2008 and 2019 ($n = 2999$). Variables of interest included service types accessed, demographics, socioeconomic information, referral and assessment details, current problems (up to five) and treatment history.

Results: The majority (93.8%) were male. One fifth (20.9%) lived with dependent children, 7.4% were homeless. There were high levels of employment (35.4%) and formal education qualifications; half (53.8%) had completed second or third level education. Problem gambling frequently co-occurred with problem use of other substances (47.3%), which was most commonly alcohol (85.6%), followed by cannabis (32.3%), cocaine (28.0%) and benzodiazepines (10.9%). The majority were treated at inpatient settings (56.1%) with many self-referrals (46.3%).

Conclusions: This study provides insights into treated problem gambling nationally. Monitoring and surveillance can play a crucial role in measuring the successful efforts and help inform planning and treatment. The findings may have implications for treatment pathways.

Keywords: Gambling; treatment; Ireland; routine surveillance data; substance use

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Introduction

Gambling disorder, also known as gambling addiction or compulsive gambling (Fulton, 2015; Kerr *et al.* 2021), involves repeated problematic gambling behaviour and is characterised by a preoccupation with gambling, repeated unsuccessful efforts to control it, and results in significant negative consequences (American Psychiatric Association, 2013). The DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, fifth edition) recognises gambling as a behavioural addiction disorder (American Psychiatric Association, 2013). National gambling surveys have found that most people have gambled at some point (Calado & Griffiths, 2016). For a small proportion gambling can become problematic or develop into an addiction (Meyer *et al.* 2009). Global estimates of problem gambling prevalence vary across countries, with past year prevalence among adults estimated at between 0.1% and 5.8% (Calado & Griffiths, 2016), with two to three times as many people experiencing subclinical problem and at-risk gambling (Abbott, 2017). Gambling related harms

are diverse (Langham *et al.* 2016; Browne *et al.* 2016) and can impact on the physical, psychological and social well-being of a person. Harms include negative effects on finances and mental health, relationship problems including intimate partner violence, reduced productivity, absenteeism from work, loss of employment, emotional impacts including feelings of shame and stigma, physical harms including self-harm and increased risk of suicide death (Columb & O'Gara, 2018; Dowling *et al.* 2009; Dowling *et al.* 2016; Roberts *et al.* 2018; Griffiths, 2009; Binde, 2016; Hing *et al.* 2016; Karlsson & Håkansson, 2018). The negative consequences from gambling can also impact people around those who gamble, and the wider society (Wardle *et al.* 2018). 'Concerned significant others' can also experience emotional distress and negative impacts on their relationship, social life, finances, employment and physical health (Dowling *et al.* 2014). On average, one person's problem gambling affects six people (Goodwin *et al.* 2017).

It has been estimated that only 7–12% of problem gamblers seek treatment (Slutske, 2006). Of those who do seek treatment, approximately half (45–51%) will leave prematurely (Ronzitti *et al.* 2017; Roberts *et al.* 2020). The barriers to treatment include a lack of knowledge about services, cost, cultural and language issues (Gainsbury *et al.* 2014), as well as treatment availability and threat of stigmatisation (Dąbrowska *et al.* 2017). The secrecy surrounding problem gambling provides a challenge to service provision (Fulton, 2019). As problem gambling is often addressed at crisis

point, people may not have the financial means to access services if they are not free or affordable (Fulton, 2019).

Existing research confirms high levels of comorbidity or co-occurring conditions among problem gamblers (Kerr *et al.* 2021). Gambling disorder has been associated with co-existing psychiatric conditions including alcohol and other substance use disorders (Dowling *et al.* 2015; Lorains *et al.* 2011; Barnes *et al.* 2015). Higher prevalence rates of problem gambling have also been found among people in treatment for substance use disorders than among the general population (Cowlishaw *et al.* 2014). The burden of harm associated with gambling has been shown to be higher than that of drug dependence and some chronic physical illnesses and similar to that of major depressive disorder and alcohol misuse and dependence (Browne *et al.* 2016; Browne *et al.* 2017).

There is limited data on the prevalence of problem gambling in Ireland and no regular national survey (Kerr *et al.* 2021). The most recently available figures indicate that almost half (49.0%) of Irish adults have participated in some form of gambling and the prevalence rate for problem gambling is estimated as 0.3%; with prevalence higher among males (0.6%) than females (<0.0%) (Mongan *et al.* 2022). This is lower than the most recent prevalence rate for problem gambling (2.3%) reported in Northern Ireland (Dunne *et al.* 2017).

Within the public health system in Ireland there is no specific public health approach for gambling disorder (Kerr *et al.* 2021). Inpatient gambling treatment is provided free of charge in the Irish public health service (Kerr *et al.* 2021) and most people treated for problem gambling in Ireland are treated as outpatients, primarily through addiction counselling (Kerr *et al.* 2021). Outside the public health system there are some voluntary, and privately owned or commercial service providers that offer treatment for gambling disorder using helpline support or at outpatient or inpatient settings (Kerr *et al.* 2021). Barriers to gambling treatment access in Ireland include a lack of dedicated referral pathways for treatment within mental health or addiction services and variations in the level of available service provision across healthcare regions (Columb *et al.* 2018).

Gaps in knowledge and research about gambling disorder and harm in Ireland have been identified (Fulton, 2019; O'Gara, 2018; College of Psychiatrists of Ireland, 2020). This lack of information on gambling disorder and gambling-related harm has made it more difficult to understand and address gambling-related information and service needs (Fulton, 2019). The aim of this study is to better understand treatment uptake and provide an understanding about those who do seek treatment for gambling in Ireland, which will inform service policy and planning. This is the first analysis of national health data to describe treatment episodes for problem gambling in Ireland.

Methods

This study is an analysis using a subset of anonymous routinely collected epidemiological data from the Irish National Drug Treatment Reporting System (NDTRS), a national database of addiction treatment in Ireland (Carew & Comiskey, 2018; Kelleher *et al.* 2021). NDTRS data collection complies with the European Treatment Demand Indicator (TDI) protocol available at http://www.emcdda.europa.eu/publications/manuals/tdi-protocol-3.0_en and is a comprehensive measure of treatment demand (Bruton *et al.* 2021). The TDI methodology ensures that information on people entering drug treatment is collected in a harmonised, reliable and

comparable way across all European countries. Information is collected on all admissions to treatment during each calendar year. Standardised treatment data is collected at treatment service level and collated nationally. Outpatient services, inpatient services, general practices, and prisons submit data to the NDTRS. NDTRS data comprise of client demographic and socioeconomic information, referral and assessment details, up to five current problem drugs or other (behavioural) addictions, history of addiction treatment, injecting risk behaviours, treatments provided, and treatment outcome information at treatment episode end. NDTRS data coverage (numbers of admissions and treatment services reporting data) is high (Health Research Board, 2017), particularly in inpatient, outpatient and low threshold settings (Bruton *et al.* 2021). The NDTRS has a comprehensive process for checking and validating data before use, including a suite of automated validation checks which are applied to every episode. Reporting of gambling treatment to the NDTRS by service providers is currently voluntary.

As there is no national unique health identifier in Ireland NDTRS data are episode based. Consequently, as each NDTRS episode relates to an episode of treatment rather than an individual, individuals may appear more than once if they return to treatment in a treatment service, or if treated in multiple services in any given year. The study population included all episodes who entered treatment for gambling in the period 2008–2019 (*n* = 2999). Gambling may have been the main reason for referral or recorded as an additional problem. Treatment episodes who reported gambling as their only problem (GO) were compared with those who reported gambling either as a main or secondary problem alongside additional problems (GA).

A combination of descriptive, exploratory statistics, and inferential analysis techniques were used to describe characteristics of episodes treated for gambling. Where data were normally distributed, mean scores and standard deviations were reported. Where data were skewed, median and interquartile ranges were reported. Data were managed and analysed in the Statistical Package for Social Sciences (SPSS), version 26.0 (IBM Corporation, 2019). For all analyses, a *p*-value (two-tailed) of less than 0.05 was considered to indicate statistical significance.

Results

Profile of episodes entering treatment

A total of 2999 episodes entered treatment for gambling during the period 2008–2019. More than half (1580 treatment episodes, 52.7%) reported gambling as their sole problem (GO), while 1419 treatment episodes (47.3%) reported problem gambling in combination with other problems (GA) (Table 1). The majority were male (93.8%). The median age entering treatment was 34 years and half of treatment episodes began gambling before they had reached their 17th birthday. The vast majority lived in stable accommodation (86.1%) and many lived with their parents/family (38.6%). One-fifth (20.9%) lived with dependent children. More than half had completed second or third level education (53.8%). One tenth (10.2%) of all treatment episodes had attained primary education only or less. Half of treatment episodes (53.3%) were unemployed, while 35.4% were in paid employment. Analysis by area of residence shows that 26.5% of all treatment episodes resided in CHO 4 (Kerry, North Cork, North Lee, South Lee, and West Cork) and 20.1% in CHO 5 (South Tipperary, Carlow/Kilkenny, Waterford and Wexford).

Table 1. Demographic profile of treatment episodes for problem gambling

Variable	Gambling only (GO) N = 1580		Gambling plus an additional problem (GA) N = 1419		Total N = 2999	
Sex						
Male	1473	93.2%	1340	94.4%	2813	93.8%
Female	104	6.6%	78	5.5%	182	6.1%
Not known	~	~	~	~	~	~
Age group						
17 years or under	~	~	~	~	8	0.3%
18–19	23	1.5%	36	2.5%	59	2.0%
20–24	201	12.7%	219	15.4%	420	14.0%
25–29	270	17.1%	278	19.6%	548	18.3%
30–34	297	18.8%	268	18.9%	565	18.8%
35–39	272	17.2%	241	17.0%	513	17.1%
40–44	189	12.0%	137	9.7%	326	10.9%
45–49	136	8.6%	104	7.3%	240	8.0%
50 years or over	185	11.7%	133	9.4%	318	10.6%
Not recorded	~	~	0	0.0%	~	~
Age commenced treatment			Median (5th, 95th percentile)			
Age (years)	34	(21, 57)	33	(21, 54)	34	(21, 56)
Education						
Primary level incomplete	10	0.6%	20	1.4%	30	1.0%
Primary level	110	7.0%	167	11.8%	277	9.2%
Junior cert	390	24.7%	500	35.2%	890	29.7%
Leaving cert	677	42.8%	533	37.6%	1210	40.3%
Third level	269	17.0%	135	9.5%	404	13.5%
Never went to school	~	~	~	~	~	~
Not known	123	7.8%	63	4.4%	186	6.2%
Age ceased education						
Before 16 years	218	13.8%	319	22.5%	537	17.9%
Employment						
In paid employment (including part-time)	648	41.0%	414	29.2%	1062	35.4%
Unemployed	720	45.6%	878	61.9%	1598	53.3%
Training course	22	1.4%	25	1.8%	47	1.6%
Student	56	3.5%	30	2.1%	86	2.9%
Housewife/husband	12	0.8%	~	~	16	0.5%
Retired/unable to work (disability)	111	7.0%	66	4.7%	177	5.9%
Not known	11	0.7%	~	~	13	0.4%
Living where						
Stable accommodation	1420	89.9%	1162	81.9%	2582	86.1%
Homeless	85	5.4%	138	9.7%	223	7.4%
Other unstable accommodation	15	0.9%	80	5.6%	95	3.2%
Prison	24	1.5%	16	1.1%	40	1.3%
Institution (residential care/halfway house)	27	1.7%	18	1.3%	45	1.5%
Not known	9	0.6%	~	~	14	0.5%
Living arrangements						
Alone	257	16.3%	262	18.5%	519	17.3%

(*Continued*)

Table 1. (Continued)

Variable	Gambling only (GO) $N = 1580$		Gambling plus an additional problem (GA) $N = 1419$		Total $N = 2999$	
Parents/family	577	36.5%	582	41.0%	1159	38.6%
Friends	28	1.8%	45	3.2%	73	2.4%
Partner (alone)	160	10.1%	108	7.6%	268	8.9%
Partner & child (ren)	366	23.2%	222	15.6%	588	19.6%
Alone with child (ren)	27	1.7%	12	0.8%	39	1.3%
Other	157	9.9%	175	12.3%	332	11.1%
Not known	8	0.5%	13	0.9%	21	0.7%
Dependent children						
Living with dependent children	393	24.9%	234	16.5%	627	20.9%

~ Cells with five episodes or fewer.

Treatment characteristics

Treatment episodes primarily attended inpatient services (56.1%) or outpatient services (38.7%) for treatment, with smaller proportions accessing treatment via low threshold (3.8%) or prison services (1.4%). The most common source of referral was self-referral (46.3%), while 20.0% of referrals were from family/ friends. Rates of treatment referrals by health professionals such as general practitioners (GPs) (6.9%) and mental health professionals (4.4%) were low. Almost half (47.3%) of all treatment episodes reported problem use of at least one drug. The most common problem drugs reported alongside gambling were alcohol (85.6%), followed by cannabis (32.3%), cocaine (28.0%) and benzodiazepines (10.9%). The median time between referral and treatment start was 6 days. A large proportion of treatment episodes (29.9%) were referred, assessed and started treatment all on the same day. The median time between first starting to gamble and commencing the current treatment episode was 14 years.

Differences between GO and GA treatment episodes

A higher proportion of GO treatment episodes lived with children ($p < 0.001$) (Table 1). Homelessness was more prevalent among GA treatment episodes (9.7%) compared to GO treatment episodes (5.4%) ($p < 0.001$). Unemployment was higher among GA treatment episodes (61.9%) than GO treatment episodes (45.6%) ($p < 0.001$). Conversely a higher proportion of GO treatment episodes (41.0%) were in paid employment compared with 29.2% of those with GA. Education attainment was higher among GO treatment episodes, 42.8% had completed the Leaving certificate and 17% had completed third level. A higher percentage of GA treatment episodes (22.5%) had left school prior to age 16 compared with GO treatment episodes (13.8%).

When compared with GO treatment episodes, GA treatment episodes were less likely to attend outpatient services (29.7%) and more likely to attended inpatient (64.4%) ($p < 0.001$) (Table 2). Referrals from GPs (8.1%) ($p = 0.006$) and from mental health professionals (5.8%) ($p < 0.001$) were higher among those presenting with GO. Those with GA were more likely to have been referred by the legal system (court/probation/police, 5.7%) ($p < 0.001$) or by another drug treatment service or outreach worker (11.6%) ($p < 0.001$) than GO treatment episodes.

Discussion

The literature indicates that little is known about gambling behaviour in Ireland (Kerr *et al.* 2021). This study is the first to report on problem gambling treatment episodes using routinely gathered national epidemiological data. Our findings indicate that episodes entering treatment for gambling are predominantly young men, who have gambled for long durations before seeking treatment, and many also reporting problem use of drugs alongside gambling. Treatment episodes had high levels of educational attainment, were living in stable accommodation, and the majority of whom attended for treatment in inpatient settings. The profile is not surprising as the most recently available Irish figures shows almost half of the population (49.0%) engage in gambling (Mongan *et al.* 2022), with a prevalence rate for problem gambling among the general population at 0.3%, indicating that there are 12,000 people with problem gambling in Ireland (Mongan *et al.* 2022).

Although in-person treatment for gambling may take place in outpatient or inpatient settings (College of Psychiatrists of Ireland, 2020), this study indicates that the majority of treatment, as reported to the NDTRS, takes place in inpatient settings (56.1%), with outpatient settings accounting for approximately one-third of treatment. NDTRS data show that treatment for gambling also occurs in both low threshold and prison settings, although this is rare. The low levels of treatment in outpatient settings in our study is surprising given that it is provided free of charge in the public health service (Kerr *et al.* 2021). The literature indicates that inpatient treatment is often sought when outpatient treatment has been unsuccessful, or the problem is too severe to be effectively managed in the community (Passetti *et al.* 2011). However, given the high levels of inpatient treatments observed in this study and that one-in-three (35.4%) treatment episodes had never previously received treatment (where treatment status was known), this may indicate the lack of availability of gambling treatment in outpatient settings and/or a preference for inpatient treatment among people who did seek treatment.

For treatment episodes reported to the NDTRS, results indicate that the demand for gambling treatment in Ireland is being met and met quickly. The median time from referral to treatment start was 6 days and therefore we can conclude that those who want treatment received it and that long waiting times are not a barrier to accessing treatment. However, it is estimated that as few as 7–12% of problem gamblers seek treatment (Slutske, 2006) and

Table 2. Treatment profile of treatment episodes for problem gambling

Variable	Gambling only (GO) $N = 1580$		Gambling plus an additional problem (GA) $N = 1419$		Total $N = 2999$	
Age first started gambling						
Mean (SD)	19.26	(7.199)	18.1	(6.31)	18.71	(6.817)
Median (5th, 95th percentile)	18	(11, 35)	17	(10, 30)	17	(11, 32)
Number where age known (%)	1119	70.8%	1001	70.5%	2120	70.7%
Service type where treated						
Outpatient	738	46.7%	422	29.7%	1160	38.7%
Inpatient	768	48.6%	914	64.4%	1682	56.1%
Low threshold	48	3.0%	67	4.7%	115	3.8%
Prison	26	1.6%	16	1.1%	42	1.4%
Source of referral						
Self	805	50.9%	584	41.2%	1389	46.3%
Family and friends	296	18.7%	305	21.5%	601	20.0%
Other drug treatment service/outreach worker	83	5.3%	164	11.6%	247	8.2%
General practitioner	128	8.1%	78	5.5%	206	6.9%
Acute hospital services including emergency dept.	27	1.7%	30	2.1%	57	1.9%
Social services/community services	80	5.1%	85	6.0%	165	5.5%
Court/probation/police	26	1.6%	81	5.7%	107	3.6%
Mental health professional	91	5.8%	42	3.0%	133	4.4%
School/college/prison/employer	29	1.8%	25	1.8%	54	1.8%
Not known	15	0.9%	25	1.8%	40	1.3%
*Problem drug use**						
Alcohol			1215	85.6%		
Cannabis			459	32.3%		
Cocaine			397	28.0%		
Benzodiazepines			154	10.9%		
Opioids			92	6.5%		
Ecstasy			88	6.2%		
Other drugs			15	1.1%		
Amphetamines			15	1.1%		
Novel psychoactive substances			15	1.1%		
Other behavioural addiction**			11	0.8%		
Z drugs			10	0.7%		
Volatile inhalants			~	~		
Treatment status (where known) for any addiction (alcohol/drug/behavioural)						
Never previously treated	284	67.3%	125	17.1%	409	35.4%
Previously treated	138	32.7%	607	82.9%	745	64.6%
Waiting times for treatment			Median (5th, 95th percentile)			
Referral to treatment start (days)	6	(0, 56)	5	(0, 56)	6	(0, 56)
Time to treatment			Median (5th, 95th percentile)			
Time to treatment start (years) – from first gambling to treatment entry	14	(2, 38)	14	(3, 35)	14	(2, 37)

*Up to five problems may be reported.
**Other behavioural addictions include eating disorder, porn, sex.
~ Cells with five episodes or fewer.

among those who do seek treatment, approximately half will leave treatment prematurely (Ronzitti *et al.* 2017; Roberts *et al.* 2020). Therefore, there may be a considerable number of people in Ireland who would benefit from gambling treatment. There is a need to better understand what barriers are preventing people with problem gambling from accessing help. Our findings support previous reports highlighting the lack of dedicated referral pathways for treatment as a barrier to treatment access (Columb *et al.* 2018). NDTRS data show that self-referrals and referrals by family or friends accounted for two-thirds of all treatment referrals, while rates of treatment referrals by health professionals including GPs and mental health professionals were extremely low, accounting for one-in-ten of all referrals. NDTRS data also show wide variations in geographical region of residence in our study which further supports earlier reports of treatment barriers due to differences or variations in the level of available service provision across healthcare regions (Columb *et al.* 2018). This highlights the need for a more coordinated approach, with dedicated referral pathways and appropriate treatment services.

Existing research shows high levels of comorbidity or co-occurring conditions whereby gambling disorder is associated with co-existing psychiatric conditions including alcohol and other substance use disorders (Dowling *et al.* 2015; Lorains *et al.* 2011; Barnes *et al.* 2015). Therefore, it is not surprising that almost half (47.3%) of all gambling treatment episodes in our study reported problem use of at least one additional substance, with alcohol, cannabis and cocaine being the most commonly reported problem drugs reported alongside gambling. International rates indicate that 21% of treatment-seeking gamblers meet criteria for current alcohol use disorder (AUD) and 7% meet criteria of a current drug use disorder (DUD) (Dowling *et al.* 2015). By comparison, Irish rates reported in this study are higher with 40.5% receiving treatment for AUD and 26.7% receiving treatment for DUD. This is not unexpected as the majority of treatment episodes in this study were treated in an inpatient setting and the literature shows that those receiving treatment in inpatient settings have more severe gambling problems and report higher rates of co-morbid conditions than those being treated in outpatient services (Ladouceur *et al.* 2006).

It is possible that the profile observed in our study may be influenced by the person's ability to acquire private health insurance and therefore access inpatient treatment, as many had a high level of educational attainment, were in employment and living in stable accommodation. The NDTRS includes data from both HSE addiction services and non-statutory service providers and is considered a comprehensive measure of treatment demand nationally (Bruton *et al.* 2021). The vast majority of services who participate in the NDTRS are public. In addition, a number of participating services (in particular inpatient services) are part-publicly funded, or places are funded through private health insurance. In which case, the NDTRS receives data for all treatments taking place in these services regardless of the funding stream. As funding stream is not recorded in the data, it is not possible to investigate the extent to which this may influence the profile of treatment entrants observed in this study.

Previous Irish legislation (Gaming and Lotteries Act 1956) allowed children aged 16 years and upwards to enter licensed gaming premises. This legislation set the legal age for purchasing lottery tickets or placing bets with a bookmaker at 18 years of age, however, there was no minimum legal age for placing Tote bets at racecourses or greyhound tracks. On 1 December 2020, the Gaming and Lotteries (Amendment) Act 2019 came into effect which standardised the minimum age for all forms of betting at 18 years. The potential impact of gambling on children is apparent in our study. Half of all treatment episodes entering treatment for problem gambling had started to gamble before they reached their 17th birthday, with 5% commencing gambling before their 11th birthday. Although a small number of children sought treatment in Ireland for problem gambling, the potential wider impact of parental gambling on children is evident with one-fifth of all treated gamblers living with dependent children. Among those with gambling as their sole problem as many as one-in-four lived lived with children. Research shows that harmful gambling among young people is also associated with co-dependencies, usually alcohol and other drugs (Kerr *et al.* 2021). Monitoring and surveillance via the NDTRS can play a key role in measuring the successful efforts to reduce the harm of gambling resulting from legislative changes.

There are hidden populations of gamblers and barriers to treatment. The proportion of gamblers who recognise that they need treatment and also take the step of seeking treatment is low (only 3–12%) (Slutske, 2006; Suurvali *et al.* 2008). Treatment seeking varies by type, setting (e.g. land based, online), and severity (Blaszczynski *et al.* 2016; Columb & O'Gara, 2018).

Barriers to treatment include lack of information about the nature and scale of the problem, the absence of specific public health approach or policies regarding gambling, along with the system or lack therefore of for dealing with referrals (Columb *et al.* 2018; Kerr *et al.* 2021). The occurrence of a crisis (such as financial, emotional and sometimes legal difficulties) commonly precedes treatment seeking (Fulton, 2019), therefore those who have not yet experienced crisis are less likely to seek treatment.

Future studies should utilise existing multi-source national level datasets and appropriate methodologies to compare gambling rates in the general population with gambling treatment seekers (for example (Mongan *et al.* 2021)). Such work would help estimate the size of the potential population that may need gambling treatment, the percentage of problem gamblers who actually access treatment and also explore whether certain subgroups are more or less likely to enter treatment. Findings will be important for policy, including the provision of treatment and targeted educational/awareness campaigns.

Strengths and Limitations

This study has a number of strengths. There is a paucity of research on gambling disorder in Ireland (College of Psychiatrists of Ireland, 2020), and this is the first analysis to describe the demand for gambling treatment over twelve years from national treatment data. Data on treated gambling episodes from the NDTRS provides valuable information which allows services and policymakers understand the extent of the problem, the personal and substance-using characteristics of episodes seeking treatment, and trends in treatment seeking over time. NDTRS data can enable health service planners to allocate appropriate resources to the treatment of problem gambling. The NDTRS is based on a standardised European treatment demand protocol, a harmonised methodology for drug treatment data collection, enabling international comparisons. Expanding such existing systems to include addictions such as gambling and other behavioural addictions, in addition to being cost effective, will inform and facilitate national and international efforts on such issues.

This study has a number of limitations which need to be considered when interpreting the findings. Population characteristics may not generalise beyond the treatment seeking population. Within the NDTRS it is possible that individuals may appear more than once if they are treated in different services or if they return to treatment in the same service within the same calendar year. In the absence of a national unique health identifier it is not possible to accurately distinguish between treatment episodes and individuals. As the NDTRS is based on the addiction treatment cohort, we cannot take into account those with non-problematic gambling, people who ceased to gamble or those who have not sought treatment. Despite high levels of service provider participation in the NDTRS (Health Research Board, 2017), not all services participate. In addition, reporting of problem gambling by service providers to the NDTRS is currently on a voluntary basis and may also explain the low numbers. Private counsellors who may provide outpatient addiction treatment do not participate in the NDTRS. There are no public health specific gambling treatment services in Ireland (Kerr et al. 2021). Nonetheless, a 2021 report by Kerr et al., identified 18 charity, voluntary and private organisations providing treatment for gambling in Ireland (Kerr et al. 2021). Twelve of these organisations fall within NDTRS remit, of which 75% returned data to the NDTRS in 2019. This indicates that although the number of NDTRS episodes for gambling may appear relatively small, coverage in the NDTRS of known service providers providing inpatient treatment for gambling in Ireland is high.

Recommendations

A number of harmful gambling practices have developed in Ireland due to the liberal attitude towards gambling and social stigma associated with problem gambling (Kerr et al. 2021). Much needed gambling legislation has yet to be enacted and population wide responses to gambling harms are scarce (Kerr et al. 2021). Therefore, improved awareness among both the public and healthcare professionals regarding the harms and consequences of gambling is important. Early intervention, screening and detection by healthcare professionals have been shown to be effective in reducing gambling related behaviours (Robson et al. 2002), however this is currently lacking in Ireland. Gambling specific expertise among health professionals is also lacking (Kerr et al. 2021) and gambling specific training is required for health professions. Strengthening of existing links between outpatient and inpatient treatment services, along with dedicated referral pathways are needed to alleviate treatment access barriers, enhanced public treatment provision and improve treatment uptake and treatment outcomes. A national coordinated approach could help minimise barriers due to regional variations in service provision.

Research into the most effective treatment environments has been previously recommended (College of Psychiatrists of Ireland, 2020). The literature states that once treatment is complete, there is no standardised means to assess treatment outcomes (Kerr et al. 2021). Routinely collected NDTRS treatment outcome data has the potential to provide much needed insights which can inform improved resource allocation and treatment service provision.

Conclusion

This study provides valuable insights into treated problem gambling. Monitoring and surveillance can play a crucial role in measuring successful efforts and help inform planning and treatment. The findings may have implications for treatment pathways.

References

Abbott M (2017). *The Epidemiology and Impact of Gambling Disorder and Other Gambling-Related Harm. Discussion Paper Developed for the WHO Forum on Alcohol, Drugs and Addictive Behaviours, 26-28 June 2017.* World Health Organization: Geneva.

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders (DSM-5).* American Psychiatric Association: Washington, DC.

Barnes GM, Welte JW, Tidwell M-CO, Hoffman JH (2015). Gambling and substance use: co-occurrence among adults in a recent general population study in the United States. *International Gambling Studies* **15**, 55–71.

Binde P (2016). Preventing and responding to gambling-related harm and crime in the workplace. *Nordic Studies on Alcohol and Drugs* **33**, 247–266.

Blaszczynski A, Russell A, Gainsbury S, Hing N (2016). Mental health and online, land-based and mixed gamblers. *Journal of Gambling Studies* **32**, 261–275.

Browne M, Bellringer M, Greer N, Kolandai-Matchett K, Langham E, Rockloff M, Du Preez K, Abbott M (2017). *Measuring the Burden of Gambling Harm in New Zealand.* Central Queensland University and Auckland University of Technology.

Browne M, Langham E, Rawat V, Greer N, Li E, Rose J, Rockloff M, Donaldson P, Thorne H, Goodwin B (2016). *Assessing Gambling-Related Harm in Victoria: A Public Health Perspective.* Victorian Responsible Gambling Foundation: Melbourne.

Bruton L, Gibney S, Hynes T, Collins D, Moran P (2021). *Spending Review 2021. Focused Policy Assessment of Reducing Harm, Supporting Recovery: An Analysis of Expenditure and Performance in the Area of Drug and Alcohol Misuse.* Government of Ireland: Dublin.

Calado F, Griffiths MD (2016). Problem gambling worldwide: an update and systematic review of empirical research (2000-2015). *Journal of Behavioral Addictions* **5**, 592–613.

Carew AM, Comiskey C (2018). Rising incidence of ageing opioid users within the EU wide treatment demand indicator; The Irish opioid epidemic from 1996 to 2014. *Drug and Alcohol Dependence* **192**, 329–337.

College of Psychiatrists of Ireland (2020). *Gambling Disorder Position Paper.* College of Psychiatrists of Ireland: Dublin.

Columb D, Griffiths MD, O'Gara C (2018). Gambling disorder treatment referrals within the Irish mental health service: a national survey using freedom of information requests. *International Journal of Mental Health and Addiction* **19**, 598–605.

Columb D, O'Gara C (2018). A national survey of online gambling behaviours. *Irish Journal of Psychological Medicine* **35**, 311–319.

Cowlishaw S, Merkouris S, Chapman A, Radermacher H (2014). Pathological and problem gambling in substance use treatment: a systematic review and meta-analysis. *Journal of Substance Abuse Treatment* **46**, 98–105.

Dąbrowska K, Moskalewicz J, Wieczorek Ł. (2017). Barriers in access to the treatment for people with gambling disorders. Are they different from those experienced by people with alcohol and/or drug dependence? *Journal of Gambling Studies* **33**, 487–503.

Dowling N, Smith D, Thomas T (2009). The family functioning of female pathological gamblers. *International Journal of Mental Health and Addiction* **7**, 29–44.

Dowling N, Suomi A, Jackson A, Lavis T, Patford J, Cockman S, Thomas S, Bellringer M, Koziol-Mclain J, Battersby M, Harvey P, Abbott M (2016). Problem gambling and intimate partner violence: a systematic review and meta-analysis. *Trauma Violence Abuse* **17**, 43–61.

Dowling NA, Cowlishaw S, Jackson AC, Merkouris SS, Francis KL, Christensen DR (2015). Prevalence of psychiatric co-morbidity in treatment-seeking problem gamblers: a systematic review and meta-analysis. *The Australian and New Zealand Journal of Psychiatry* **49**, 519–539.

Dowling NA, Rodda SN, Lubman DI, Jackson AC (2014). The impacts of problem gambling on concerned significant others accessing web-based counselling. *Addictive Behaviors* **39**, 1253–1257.

Dunne S, Flynn C, Sholdis J (2017). *2016 Northern Ireland Gambling Prevalence Survey*. Department for Communities and Northern Ireland Statistics and Research Agency: Belfast.

Fulton C (2015). *Playing Social Roulette: The Impact of Gambling on Individuals and Society in Ireland*. University College Dublin: Dublin.

Fulton C (2019). The information needs of individuals affected by harmful gambling in Ireland. *The International Journal of Information, Diversity & Inclusion (IJIDI)* **3**. DOI 10.33137/ijidi.v3i3.32962.

Gainsbury S, Hing N, Suhonen N (2014). Professional help-seeking for gambling problems: awareness, barriers and motivators for treatment. *Journal of Gambling Studies* **30**, 503–519.

Goodwin BC, Browne M, Rockloff M, Rose J (2017). A typical problem gambler affects six others. *International Gambling Studies* **17**, 276–289.

Griffiths M (2009). Internet gambling in the workplace. *Journal of Workplace Learning* **21**, 658–670.

Health Research Board (2017). *Irish National Focal Point to the European Monitoring Centre for Drugs and Drug Addiction. (2017) Focal Point Ireland: National Report for 2016*. Health Research Board: Dublin.

Hing N, Russell AM, Gainsbury SM, Nuske E (2016). The public stigma of problem gambling: its nature and relative intensity compared to other health conditions. *Journal of Gambling Studies* **32**, 847–864.

IBM Corporation (2019). *IBM SPSS Statistics for Windows. Version 26.0 ed.* IBM Corporation: Armonk, NY.

Karlsson A, Håkansson A (2018). Gambling disorder, increased mortality, suicidality, and associated comorbidity: a longitudinal nationwide register study. *Journal of Behavioral Addictions* **7**, 1091–1099.

Kelleher C, Carew AM, Lyons S (2021). *National Drug Treatment Reporting System 2014 – 2020 Drug Treatment Data*. Health Research Board: Dublin.

Kerr A, O'Brennan J, Vazquez Mendoza L (2021). *Gambling Trends, Harms and Responses: Ireland in an International Context*. Maynooth University: Maynooth.

Ladouceur R, Sylvain C, Sévigny S, Poirier L, Brisson L, Dias C, Dufour C, Pilote P (2006). Pathological gamblers: inpatients' versus outpatients' characteristics. *Journal of Gambling Studies* **22**, 443–450.

Langham E, Thorne H, Browne M, Donaldson P, Rose J, Rockloff M (2016). Understanding gambling related harm: a proposed definition, conceptual framework, and taxonomy of harms. *BMC Public Health* **16**, 80.

Lorains FK, Cowlishaw S, Thomas SA (2011). Prevalence of comorbid disorders in problem and pathological gambling: systematic review and meta-analysis of population surveys. *Addiction* **106**, 490–498.

Meyer G, Hayer T, Griffiths M (2009). In *Problem Gambling in Europe: Challenges, Prevention, and Interventions* (ed. G. Meyer, T. Hayer and M. Griffiths). Springer: New York.

Mongan D, Carew AM, O'Neill D, Millar SR, Lyons S, Galvin B, Smyth BP (2021). Comparing cannabis use disorder in the general population with cannabis treatment seekers using multi-source national datasets: who receives treatment? *European Addiction Research* **28**, 103–112.

Mongan D, Millar SR, Doyle A, Chakraboty S, Galvin B (2022). *Gambling in the Republic of Ireland. Results from the 2019–20 National Drug and Alcohol Survey*. Health Research Board: Dublin.

O'Gara C (2018). The gambling control bill: time for action. *Irish Journal of Psychological Medicine* **35**, 269–271.

Passetti F, Clark L, Davis P, Mehta MA, White S, Checinski K, King M, Abou-Saleh M (2011). Risky decision-making predicts short-term outcome of community but not residential treatment for opiate addiction. Implications for case management. *Drug and Alcohol Dependence* **118**, 12–18.

Roberts A, Landon J, Sharman S, Hakes J, Suomi A, Cowlishaw S (2018). Gambling and physical intimate partner violence: results from the national epidemiologic survey on alcohol and related conditions (NESARC). *The American Journal on Addictions* **27**, 7–14.

Roberts A, Murphy R, Turner J, Sharman S (2020). Predictors of dropout in disordered gamblers in UK residential treatment. *Journal of Gambling Studies* **36**, 373–386.

Robson E, Edwards J, Smith G, Colman I (2002). Gambling decisions: an early intervention program for problem gamblers. *Journal of Gambling Studies* **18**, 235–255.

Ronzitti S, Soldini E, Smith N, Clerici M, Bowden-Jones H (2017). Gambling disorder: exploring pre-treatment and in-treatment dropout predictors. A UK study. *Journal of Gambling Studies* **33**, 1277–1292.

Slutske WS (2006). Natural recovery and treatment-seeking in pathological gambling: results of two U.S. national surveys. *The American Journal of Psychiatry* **163**, 297–302.

Suurvali H, Hodgins D, Toneatto T, Cunningham J (2008). Treatment seeking among Ontario problem gamblers: results of a population survey. *Psychiatric Services* **59**, 1343–1346.

Wardle H, Reith G, Best D, McDaid D, Platt S (2018). *Measuring Gambling-Related Harms: A Framework for Action*. Gambling Commission: Birmingham.