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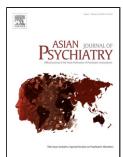
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Gambling in India: Past, present and future

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Highlights

- Gambling is and has been a popular pastime in modern, colonial and ancient India.
- Problem gambling is an important public health issue.
- The only legal forms of gambling in India are state-run lotteries (in some states), horse racing, rummy card games and casinos (in two states).
- India also has a huge illegal betting market.
- There has been only very limited research on gambling in India
- We propose a three-level, public health approach for the prevention of gambling-related problems.

Abstract

Gambling has been a popular pastime in ancient and colonial India, and continues to be in modern India. Problem gambling is an important public health issue because of its prevalence, increased risk to certain vulnerable groups and its numerous adverse consequences to the gambler, his/her family and the wider society. In this paper, we present an overview of gambling in ancient and modern India, and also suggest a public health approach aimed at reducing gambling-related harm and associated problems.

Keywords

Addiction, gambling, harm, India, legislation, public health

1. Introduction

Gambling is prevalent across most cultures; and it is and has been a popular pastime in modern, colonial and ancient India. Gambling remains a leisure activity with no resultant harm for some, but for others it can become problematic. Problem gambling refers to gambling that disrupts or damages personal, family or recreational pursuits (Lesieur & Rosenthal, 1991). It is now acknowledged (Orford, 2001) that similar to substance addictions, gambling addiction too exists on a spectrum or continuum of escalating severity and can have multiple adverse consequences. Gambling disorder refers to a condition related to excessive gambling and defined by criteria set forth in the Diagnostic and Statistical Manual of Mental Disorder 5 (2013). These are very similar to the diagnostic criteria for substance addictions such as need to gamble with increasing amounts of money in order to achieve the desired excitement, restless or irritable when attempting to cut down or stop gambling, has made repeated unsuccessful efforts to control, cut back, or stop gambling, is often preoccupied with gambling, etc. From DSM 4 to DSM 5, diagnosis of pathological gambling has seen three important changes: the name has changed to gambling disorder, the threshold for diagnosis has decreased from 5 to 4 criteria, and one diagnostic criterion ('has committed illegal acts such as forgery, fraud, theft or embezzlement to finance gambling') has been removed (Petry et al, 2014)

1.1 Public health impact

Problem gambling is an important public health issue because of its prevalence, increased risk to certain vulnerable groups and its numerous adverse consequences to the gambler, his/her family and the wider society (Roaf, 2015). In the United Kingdom (UK) 0.7% adults are problem gamblers and 7.3% of adults are 'at risk' gamblers (people who "may potentially experience varying degrees of adverse consequences from gambling "but who do not meet the

criteria for 'problem gambling') (Wardle et al 2010). Higher rates of problem gambling are found in respondents who were aged 16-35; Asian and Black; single, separated or divorced; and unemployed.

Problem gambling is associated with a range of health and social harms and adversely affects the individual, the family and society. It can negatively impact the gambler's physical (Morasco et al 2006) health, and gamblers tend to have high rates of various psychosomatic symptoms (cardiovascular, musculoskeletal, gastrointestinal and other non-specific psychosomatic symptoms) and mental health problems such as depression, anxiety, substance misuse and personality disorders (Petry et al, 2005). Problem gambling has a significant impact on the individual's financial situation, often resulting in large debts, poverty and even bankruptcy. It is also associated with criminal activities, ranging from theft and prostitution to violent crime, with obvious legal consequences. Problem gambling can also adversely affect the gambler's interpersonal relationships (Velleman et al, 2015) and can result in relationship problems, neglect of the family, domestic violence (Mulleman et al, 2002) and child abuse. Finally, costs of gambling borne by society include the cost of the crimes committed by gamblers and the various health and social care costs (Victorian Competition and Efficiency Commission 2012).

1.2 Aims

The aims of this paper are to 1) summarize gambling in ancient and modern India, and 2) suggest a public health approach aimed at reducing gambling-related harm and associated problems.

We present an overview of the following: references to gambling in ancient Indian texts, gambling legislation in India, extent of legal and illegal gambling in present - day India,

research on gambling addiction from India, and finally we propose a three-level approach for the prevention of gambling-related problems in an Indian context.

2. Gambling in India: The past

Perhaps the earliest account of gambling anywhere in the world is in a hymn from the *Rig Veda*, an ancient Indian text written between 1700 and 1100 BC, and there are few clearer descriptive accounts of gambling's phenomenology, psychopathology and adverse consequences (Bhide, 2007). Part of this hymn (from the tenth book of the Rig Veda (Singh, 1990) is given below, where a gambler addresses the dice which have destroyed his life and begs them to spare him:

2.1 THE DYUTA SUKTA: (ODE TO THE DICE)

The Gambler:

These nuts that once tossed on tall trees in the wind but now smartly roll over the board, how I love them!

As alluring as a draught of Soma on the mountain, the lively dice have captured my heart.

My faithful wife never quarrelled with me or got angry; to me and my companions she was always kind, yet I've driven her away for the sake of the ill-fated throw of a die.

Chorus:

His wife's mother loathes him, his wife rejects him,

he implores people's aid but nowhere finds pity.

A luckless gambler is no better

than an aged hack to be sold on the marketOther men make free with the wife of a man whose money and goods the eager dice have stolen.

His father and mother and brothers all say,

"He is nothing to us. Bind him, put him in jail!"

The Gambler:

I make a resolve that I will not go gaming.

So my friends depart and leave me behind.

But as soon as the brown nuts are rattled and thrown,

to meet them I run, like an amorous girl.

Chorus:

To the meeting place the gambler hastens.

Shall I win? he asks himself, hoping and trembling,

But the throws of the dice ruin his hopes,

giving the highest scores to his opponent.

Dice, believe me, are barbed: they prick and they trip,

they hurt and torment and cause grievous harm.

To the gambler they are like children's gifts, sweet as honey, but

they turn on the winner in rage and destroy him.

Abandoned, the wife of the gambler grieves.

Grieved too, is his mother as he wanders to nowhere.

Afraid and in debt, ever greedy for money,

he steals in the night to the home of another.

Gambling prevailed as a popular pastime in ancient and medieval India (Benegal, 2013) as evidenced from its depiction in the Mahabharata, an epic written in 1500BC, and various other Sanskrit and Tamil texts written in the BC era. Kathasaritasagar, written in the 11th century AD, a collection of legends and folktales, make several references to gambling (Somadeva, 1997). Gambling's popularity persisted during the medieval period (8th to 18th century AD) despite much of India being ruled by Islamic dynasties; gambling is proscribed under Islamic law (Mukhia, 1969)...During the British rule (from the 17th century until 1947), passion for gambling among the Indian public persisted. Particularly popular was a form of gambling called Satta or numbers gambling; examples included betting on opium, gold and cotton prices, or on the amount of rainfall (Hardgrove, 2002). .It was to restrict and regulate gambling practices in India that the Imperial Legislative Council enacted The Pubic Gambling Act of India (http://www.sangrurpolice.in/wpin 1867 content/themes/intrepidity/images/actrule/publicGamblingAct1867.pdf).

2.2 Gambling legislation in India:

Public Gambling Act 1867

This law, the Public Gambling Act of 1867, remains the only law that regulates gambling in India. It was passed in 1867 with a view to regulate and discourage gambling on games of chance. It restricted most forms of gambling and also discriminated games of pure chance such as Satta (which it made illegal) from games of skill and not just mere chance such as horse

racing (which it made legal). Its aim was to provide for the punishment of public gambling and the keeping of common gaming houses in certain parts of British-ruled India (the United Provinces, East Punjab, Delhi and the Central Provinces). In this Act, "common gaming house" means any house, walled enclosure, room or place in which cards, dice, tables or other instruments of gaming are kept or used for the profit or gain of the person owning, occupying, using or keeping such house, enclosure, room or place, whether by way of charge for the use of the instruments of gaming, or of the house, enclosure, room or place or otherwise howsoever" (http://www.sangrurpolice.in/wpcontent/themes/intrepidity/images/actrule/publicGamblingAct1867.pdf). This Act has 18 sections. The current position across India is that the Centre has devolved exclusive powers to individual states to deem what types of gambling are legal or illegal. Although there can be no specific reference to online gambling in an Act passed in 1867, such gambling does come under its the regulatory remit and further regulation came with the Information Technology Act, 2000 (also known as ITA-2000, or the IT Act) (http://deity.gov.in/content/view-it-act-2000) , which makes all forms of online gambling illegal (although this Act was originally put in place to regulate cyber crime). Lotteries in India are regulated by The lotteries (Regulation) Act 1998 (http://mha.nic.in/hindi/sites/upload_files/mhahindi/files/pdf/Noti-LotteryRules-2010.pdf). Here individual state governments have been vested with powers to make lotteries legal or illegal within their states, and they do this by making State-specific amendments to the 1867 Public Gambling Act.

3. Gambling in India: The present

Currently, the only legal forms of gambling in India are state-run lotteries (in some states only), horse racing, rummy card games and casinos (in two states). Lotteries are legal in 12 states and 5 Union territories but banned in 17 states. Many Indians also gamble at festival fairs, as they

offer a range of legal and illegal gambling opportunities, collectively referred to as 'festival gambling' (Benegal, 2013).

Anecdotally, India has a huge illegal betting market and betting on sports such as cricket is extremely popular. As it is illegal, figures are always unverifiable. It was claimed recently that nearly Rs 2500 crore [nearly \$375 million] was bet on an India vs. West Indies cricket match and that Rs 30,000 crore [nearly \$4.4 billion] was bet on the 2016 T 20 Cricket World Cup (The Economic Times, 2016).

Although accurate figures on the amount of money spent on gambling are lacking, estimates from 1997 suggest that India's gambling market was worth approximately \$60 billion dollars per year, of which about half was illegal (Benegal, 2013).

3.1 Gambling in Goa

We use Goa as an illustrative example to discuss gambling in one Indian state, where both state-run lotteries and privately—run casinos are legal. Goa, located along the South Western coastline of India, is the smallest Indian state by area and has a population of only 1.45 million. The government department responsible for organizing, conducting and promoting its state lotteries is the Directorate of Small Savings and Lotteries (http://goastatelotteries.gov.in/). It was set up in 2006, prior to which the directorate went by the name Directorate of Lotteries, set up in 1995. Information given on the directorate's website states that it uses income from lotteries to help run various social welfare schemes for the poor and under-privileged, old age homes, asylums and a special school.

Goa is only one of two Indian states which permits gambling in casinos. It is estimated that there are 10 casinos in Goa, of which four are land-based and the other six are offshore/floating casinos. Legislation in Goa (The Goa, Daman and Diu Public Gambling Act, 1976) (http://www.daman.nic.in/acts-

rules%5CPolicedepartment%5Cdocuments/Public%20Gambling%20Act.pdf) only allows casinos to be set up in five star hotels or offshore, that too only with prior approval from the government. Apparently the Goan government received Rs. 135 crores [\$20 million] as revenue from its casinos in 2013 (The Economic Times, 2013). It is being planned, and may soon become law, to ban Goans from entering casinos in the state. Those in favour of this proposal argue that such a move will protect local people from gambling-related harm. Critics say such legislation condones casino gambling, and that strict implementation will be difficult.

3.2 An overview of gambling research from India

To the best of our knowledge, there have only been three studies of gambling from India: one was a survey of psychiatrists' 'exposure' to gamblers in their practice, their attitudes towards gamblers and their awareness of problem gambling, second was a study of college students' gambling habits, and the third was a study of school students' gambling behaviours.. Key findings from these three studies are briefly discussed below:

George et al (2014) surveyed 121 psychiatrists working in India and found that 79% (96/121) saw gamblers in their routine clinical practice, and 62% (75/121) said they also saw those affected by someone else's gambling. 89 of the 121 (74%) psychiatrists admitted that they had never received any training in the management of gambling addiction and 77% (93/121) said that they would like to receive more training in the management of gambling addiction.

Nevertheless, 105 out of 121 psychiatrists considered it feasible to treat gambling addicts within their mainstream psychiatric practice. What clearly emerged from this survey was that most psychiatrists routinely see patients with gambling problems in their practice; however they had very little training in this field. Encouragingly, most psychiatrists wanted further training to be able to manage these patients better.

George et al (2016) surveyed 5580 college students in Kerala, India and of those 19.5% reported to have ever gambled and 7.4% reported problem gambling. Lotteries were the most popular form of gambling. Problem gamblers in comparison to non-gamblers were significantly more likely to be male, have a part-time job, greater academic failures, higher substance use, and higher scores on psychological distress, suicidality and ADHD symptoms. Although this study found relatively low rates of gambling participation in college students (as compared to their Western counterparts) the rates of problem gambling among those who did gamble were high (38%). Correlates of gambling were generally similar to those noted in other countries.

In a study of 4989high school students from 73 schools in Kerala, South India, Jaisoorya et al (personal communication) (unpublished) 27.9% reported to have ever gambled and 7.1% were problem gamblers. In line with the findings of the above study of college students, of those school students who had ever gambled, 25.2% were problem gamblers. Sports betting (betting on cricket and football) was the most popular form of gambling followed by the lottery. Problem gamblers when compared with non-problem gamblers were significantly more likely to be male, have higher academic failures, and have higher rates of lifetime alcohol and tobacco use, and higher scores on psychological distress, suicidality, sexual abuse and ADHD.

In both the above studies, which were methodologically very similar, school and college students participated less in gambling as compared to their Western counterparts but of those who did, a substantial proportion had a gambling problem (1 in 3 college students and 1 in 4 school students). The correlates of problem gambling were similar between studies and to those form the West.

4. Gambling in India: the future

4.1 A public health approach to reducing gambling-related harm

We propose a three-level approach for the prevention of gambling-related problems, consisting of primary, secondary and tertiary levels of prevention.

1, Primary prevention measures aim to prevent gambling from becoming a problem; they target all gamblers and non-gamblers. They focus on social, psychological and legal strategies and for them to be effective, such strategies need to be socially and culturally sensitive

Examples of primary prevention strategies include awareness-raising campaigns and social marketing programmes about various aspects of gambling, its potential for harm, signs and symptoms, how to seek help, etc. Feasibility and cost effectiveness are increased if gambling awareness-raising campaigns and social marketing programmes are 'piggy-backed' onto existing school- and college-based intervention measures/programmes for substance addictions and mental health issues. Other crucial primary prevention strategies examine the regulatory and legislative aspects of gambling, including banning and enforcing thereof (in both print and online media) of gambling advertisements and promotions, and the increasing in-counter-advertising; and limiting the availability of gambling opportunities (such as lotteries, legal and illegal sports betting, casinos and online). Addressing risk factors for gambling, where possible, such as young age, low income, unemployment, mental health problems, etc. also constitute primary prevention strategies.

2. Secondary prevention measures aim at early diagnosis and treatment, and theytarget at-risk and problem gamblers. Secondary prevention strategies are crucial because problem gamblers are very reluctant help/treatment seekers and even when they do, their presentations are non-gambling related or 'indirect', such as physical/medical symptoms, and/or psychiatric symptoms (depression, anxiety, substance misuse, etc.). Such non-specific presentations combined with reluctance of patients to talk about gambling and lack of health care professionals' awareness of gambling—related problems result in problem gamblers often going undiagnosed and untreated.

Examples of secondary prevention measures include those aimed at increasing the identification of and help available to at-risk and problem gamblers, and those aimed at reducing the risks associated with gambling. Examples of the former include providing training to staff at gambling venues (casinos and lottery shops) to enable them to recognise problem gamblers; training non-specialists (primary health care staff, mental health care staff, etc.) in early identification of individuals who experience gambling-related harm, and training them in providing brief psychological interventions for problem gamblers; and training other groups who are likely to come across gamblers (financial/debt advisors, family counsellors, school and college staff, etc.). Organisations and professionals which currently screen for substance addictions could also ask about gambling and (where resources and expertise permit) they could offer brief psychological interventions or sign-post them to the appropriate treatment/support agency. Examples of strategies aimed at reducing risk associated with the gambling environment include those which attempt to alter the attractiveness of gambling: the style of venues, reducing the attractiveness of gambling machines, reducing the size of the pay out, forcing time-outs, etc.).

3. Tertiary prevention strategies target individuals experiencing harm from their own gambling or through their loved one's gambling. It includes specialist and intense psychological and psychiatric interventions for problem gamblers and support for their families. Tertiary prevention strategies include provision of a range of appropriate treatments (psychological and pharmacological) for problem gamblers and those affected by someone else's gambling (Bowden-Jones & George, 2015). Psychological treatments are the mainstay of treating problem gamblers and cognitive behaviour therapy is most commonly used. Psychological interventions are delivered in 1:1 or group settings and face to face or online. Another popular treatment for gamblers is Gamblers Anonymous, a 12-step fellowship modelled on Alcoholics Anonymous. Treatment/support should also be offered to carers of gamblers such as family and close friends: there as structured, evidence-based treatments for those affected by someone else's gambling (George & Bowden-Jones, 2015) and Gamblers Anonymous also runs support groups for families and friends called Gam-Anon.

It is beyond the scope of this paper to go into the specifics but we propose a tiered model for delivery of treatment services for problem gamblers (George & Copello, 2011), ranging from non-specialist/generic services that provide information, screening and onward referral, to specialist services that offer brief interventions, CBT, pharmacotherapy and residential treatment and rehabilitation services. It is crucial for the cost effectiveness and sustainability of such a model that it is integrated into existing addiction or mental health service delivery structures, rather than being standalone gambling addiction treatment centres. Despite the infrastructure and personnel cost efficiencies in terms of not needing separate set up and running costs we do foresee some additional investment requirements primarily in terms of

staff training and support to ensure their skill set broadens enough to include gambling treatment interventions. The experience of working with other mental health problems in India (Patel et al, 2010; Chatterjee, 2014) suggests that much of this work could be undertaken by well-trained and well-supervised Lay Counsellors of Lay Health Workers.

4.2 Regulation and legislation of gambling in India: The future

The Public Gambling Act, 1867 is archaic and needs revisiting. The gambling landscape in India has changed immensely since 1867, particularly the types and modes of gambling, and hence there is need for law that is fit for purpose. Some criticisms of the Act are: when it was enacted, it was meant to stop only card and dice games; punishments for breaking the law are very mild and not detracting enough: For example, punishment for being found in a gaming house is a fine of 100 rupees [\$1.5] or imprisonment for not more than a month and punishment for owning a gaming house is 200 rupees [\$3] or jail sentence for a period not exceeding 3 months; it is liable to conflicting interpretations by different courts and states within India; it excludes 'games of mere skill' with betting on horse racing being deemed a game of skill; and the Act's remit does not include online gambling.

There needs to be an immediate debate around where gambling in India should sit between the two ends of the spectrum: gambling being totally illegal at one end of the spectrum, and gambling being fully legalized at the other end of the spectrum. Other in- between options include banning certain types of gambling while permitting others, banning or legalising certain gambling venues such as casinos, deregulating gambling, opening more betting shops that are tightly regulated and taxed, etc. We suggest maintaining status quo for now, while more

research (especially population-based public health research) is funded and undertaken to help

formulate evidence-based policies.

4.3 Barriers to implementation

Some potential obstacles to taking these plans forward could include: reluctance or active

resistance from the gambling industry; inertia of policy makers to accept gambling as an

important public health issue; resource and funding limitations; lack of awareness of the

general public; and the general feasibility of our proposed interventions in a resource poor

setting like India.. These are not necessarily insurmountable, provided a group of concerned

and committed experts come together and are driven by a shared objective of reducing

gambling-related harm.

5. Conclusion: The way forward

Having reviewed the scant scientific literature on gambling in India, it clearly emerges that

gambling is a public health issue that warrants immediate and further attention, both in terms

of more research and evidence-based, public health-orientated policy making. An immediate

next step should be the constitution of a group of experts from the fields of public health, policy

making, addictions, research and law, independent of the government and the gambling

industry, with an aim to reduce/prevent gambling-related harm.

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