

PROBLEM GAMBLING AND PUBLIC HEALTH

EXECUTIVE SUMMARY

Recommendations

The AMA recommends that:

1. A specific hypothecated amount of revenue from gambling taxes be directed to nationally coordinated programmes aimed at specific high risk groups to fund:
 - primary prevention measures,
 - community education campaigns,
 - effective community-based support resources, and
 - public health research and education devoted to gambling-related health problems.
2. Public health research and education on problem gambling needs to target particularly vulnerable groups.

Summary of Evidence

Empirical evidence from Australia and overseas suggests that problem gambling is an issue of public health. A summary of the evidence discussed in this submission indicates:

- Gambling expenditure, or the net amount lost on gambling, has increased per capita over the past 25 years from \$308.60 to \$736.32. The expenditure as a percentage of household disposable income increased from 1.55% to 3.03% over the same time period (Tasmanian Gaming Commission 1997);
- Approximately 0.5% of the Australian adult population is described as having severe gambling problems while a further 0.6% are described as 'at risk' for gambling problems;
- Moderate to high levels of depression and anxiety have been found in problem gamblers;
- Substance abuse and dependency is known to co-exist with problem gambling;
- The majority of known problem gamblers are men, but the number of women who are known to be problem gamblers is escalating;
- Males and females have different preferences for the type of gambling in which they participate. In general, males prefer to bet on sporting events and games of skill while women prefer to bet on games of chance such as lottery tickets and electronic gaming machines;
- Females report boredom and loneliness as their primary reasons for gambling while males report non-emotional motivators or positive emotional motivators such as excitement as their primary reasons for gambling;
- Problem gambling is often frequently found in individuals from a lower socio-economic spectrum including the unemployed and retired people;
- Problem gamblers have been known to turn to illegal activities, particularly white collar crime, to alleviate their gambling-related financial burdens;
- Problem gambling is associated with marital disruption, family breakdown, and domestic violence;
- Problem gamblers often have one or both parents who are also problem gamblers, suggesting a familial association with problem gambling behaviour;
- A high proportion of children gamble illegally with evidence showing that 90% of adult problem gamblers started to gamble before the age of 14 years (Volberg 1994);
- Problem gambling is estimated to cost Queensland \$12 million a year and New South Wales \$48 million a year (Australian Institute for Gambling Research 1996a, 1996b);

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- Problem gambling is associated with accessibility and availability of gambling venues; and
- Internet gambling allows anyone with a personal computer and a modem an unlimited number of gambling opportunities.

INTRODUCTION

The Australian Medical Association (AMA) recognises that problem gambling is a public health issue that is likely to affect an increasing percentage of Australians as the number of gambling venues grows throughout the country. The AMA held a Policy Discussion Group on *The Effects of Gambling on Health* as part of the AMA National Conference 1998, and the AMA's Ethics and Public Health Committee (EPHC) is currently developing a Position Statement on the Health Effects of Problem Gambling.

AUSTRALIAN GAMBLING STATISTICS, 1996/1997

According to the Tasmanian Gaming Commission (1997), gambling is defined as the lawful placement of a wager or bet on the outcome of a future uncertain event. This includes both gaming and racing.

The Tasmanian Gaming Commission's *Australian Gambling Statistics, 1996/1997* provides empirical evidence that gambling is an extremely lucrative industry in Australia.

The gambling turnover, or amount wagered, in Australia during 1996/1997 was just under \$80 billion with an average per capita turnover of \$5,868.10. The total profit, or the gambler's losses, from this turnover was just over \$10 billion and the Government revenue was just under \$3.5 billion.

Longitudinal data indicates that the per capita gambling expenditure, or the net amount lost, is on the rise. In 1972/1973, the total real per capita expenditure (after removing the effects of inflation) on gambling averaged \$308.60 compared to that of 1996/1997 which averaged \$736.32.

The total gambling expenditure increased from 1.55% of household disposable income (HDI) in 1972/1973 to 3.03% in 1996/1997.

The total real Government revenue from gambling increased from just under \$992 million in 1972/1973 to just under \$3.5 billion in 1996/1997.

The change in gambling turnover between 1995/1996 to 1996/1997 was up by 10.56%. All States and Territories experienced an increase in gambling turnover except the ACT and Western Australia. The Northern Territory had the smallest increase in gambling turnover at 3.28% while Victoria had the highest increase of 22.52%.

THE PROBLEM GAMBLER

For most individuals, gambling is seen as an exciting and highly social form of recreation. There are some individuals, however, who cannot keep their own gambling activities under control. For these individuals, gambling becomes a serious problem which deleteriously affects their lives and the lives of those around them.

The definition of problem gambling:

Approximately 80-90% of Australian adults have participated in some form of gambling in the past year, and approximately 0.5% of the adult population are described as having severe gambling problems while a further 0.6% are described as being 'at risk' for gambling problems (AIGR 1996b).

The Australian Institute for Gambling Research (AIGR) (1997) has defined 'problem gambling' as:

The situation when a person's gambling activity gives rise to harm to the individual player, and/or to his or her family, and may extend into the community.

By this definition, problem gambling is an issue of public health; therefore, it is an issue of concern not only for the individual problem gambler, but also for the Government, the gambling industry, and the general community.

The profile of the problem gambler:

The American Psychiatric Association (APA) has outlined several common characteristic features associated with individuals who have severe gambling problems, referred to as pathological gambling by the APA, in their *Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV)*. These include:

- being preoccupied with gambling;
- increasing the amount wagered to produce the desired excitement level;
- continuing to gamble despite efforts to reduce gambling;
- 'chasing losses' (continuing gambling to make up for losses);
- lying to family, friends, employers, and others about their gambling behaviour;
- resorting to anti-social behaviour such as forgery, fraud, theft, or embezzlement to obtain
- money; and
- turning to family, friends, and others to 'bail them out' of their gambling-related financial difficulties.

Mood disorders

In many studies, problem gambling has been associated with moderate to high levels of depression and/or anxiety (AIGR 1996b; Becoña *et al.* 1996; Blaszczyński and McConaghy 1989; Brown and Coventry 1997; Crockford and el-Guebaly 1998; Cusack *et al.* 1993; Decaria *et al.* 1996; Lesieur *et al.* 1986; Lesieur and Blume 1990; Linden *et al.* 1986; McCormick *et al.* 1984; Phillips *et al.* 1997; Ramirez *et al.* 1983).

There is no clear cause-and-effect relationship between mood disorders and problem gambling. Problem gambling can either be a result of a mood disorder, such as those who gamble to avoid depression or loneliness, or can result in a mood disorder, such as those who become depressed over money losses, family problems, and employment problems related to their gambling activities (as reviewed by Crockford and el-Guebaly 1998).

This same principle can also be applied to the association between suicide and problem gambling. Guilt, physical and mental distress, and overwhelming financial burdens associated with gambling activities add to the sense of grief and despair experienced by the problem gambler. This can be compounded by family or relationship breakdown and a disconnection from possible sources of support. Suicide may then be seen as an option to escape these overpowering stressors.

The American Psychiatric Association (1995) declared that 20% of individuals in treatment for severe problem gambling, referred to by the APA as pathological gambling, have attempted suicide. The APA has concluded that individuals with severe gambling problems may express suicidal tendencies (see also Decaria *et al.* 1996; Frank *et al.* 1991; McCormick *et al.* 1984; Pohlman 1997).

The AIGR (1996b) study

The Australian Institute for Gambling Research (AIGR) (1996b) found that 0.5% of the adult population of New South Wales could be defined as problem gambling 'cases'. They found that problem gambling was related to many factors including age, marital status, sex, income, and employment status. The highest risk individuals were young, single, male, had an income less than the \$20,000 per year, and were retired or unemployed.

The AIGR's survey indicated that 30% of those individuals who reported having gambling-related problems were in a negative mood preceding their gambling sessions and 30% were in a negative mood following their gambling sessions. This also supports the premise that a mood disorder can either result in problem gambling behaviour or can result from problem gambling behaviour.

The Brown and Coventry (1997) study

Brown and Coventry (1997) conducted a “Queen of Hearts” survey of female problem gamblers in Victoria. They received 144 calls and found that the financial stress associated with gambling activities adversely affected the health of the women. The women reported an inability to pay for health services such as dental treatment and they developed poor nutritional habits. A total of 56% of these women experienced depression, stress, anxiety, lethargy, insomnia, suicidal thoughts, confusion, panic, and ulcers as a result of their problem gambling.

It is particularly important to emphasise Brown and Coventry’s findings regarding the inability of some problem gamblers to pay for health services or adequate food. It is the financial burden of gambling expenditure which directly affects the ability to afford health care, buy proper food, pay bills, and even buy clothes. The inability or reluctance to pay bills, buy nutritious food, or visit a medical practitioner and buy medication can result in people experiencing even more physical stress which in turn can exacerbate the mental stress of depression and anxiety; thus, resulting in greater distress for the problem gambler.

The Ohtsuka et al. (1997) study

Ohtsuka *et al.* (1997) interviewed 104 adult respondents from gaming venues in Melbourne, Victoria. They used the South Oaks Gambling Screen (Lesieur and Blume 1987), a questionnaire often used to identify problem or ‘pathological’ gamblers, to identify those problem gamblers who prefer to use gaming machines.

The respondents were asked to rate themselves according to three mood states - Happiness, Propensity for Boredom, and Loneliness - to determine the association between mood states and gambling-related problems.

Ohtsuka *et al.*’s (1997) results showed that females had a significantly higher propensity for boredom than males, but there was no significant difference between the two sexes for Happiness or Loneliness. A low score for Happiness in conjunction with a high score for both Propensity for Boredom and Loneliness was significantly correlated with a high score on the South Oaks Gambling Screen. Unhappiness also scored as a significant independent predictor of South Oaks scores. This supports the premise that gambling-related problems are associated with unhappiness, boredom, and loneliness. A total of 36.4% of males and 46.7% of females also reported having guilty feelings over their gambling.

Substance abuse

Substance abuse and dependency is known to often co-exist with problem gambling (AIGR 1996a; American Psychiatric Association 1995; Blume 1991; Crockford and el-Guebaly 1998; Decaria *et al.* 1996; Feigelman *et al.* 1998; Lesieur and Blume 1990, 1991; Lesieur *et al.* 1986, 1991; Lesieur and Heineman 1988; Murray 1993; Pasternak 1997; Proimos *et al.* 1998; Ramirez *et al.* 1983).

For example, Lesieur *et al.* (1986) examined patients in an alcoholism and drug dependency treatment centre in the United States to determine how many substance abusers were also problem gamblers. They found 9% of their 458 patients had severe gambling difficulties while a further 10% had moderate gambling problems. Five percent of the alcohol abusers, 12% of alcohol and drug abusers, and 18% of drug abusers were described as having severe gambling difficulties.

Feigelman *et al.* (1998) conducted a survey in the United States and found that individuals who had both substance abuse problems and gambling problems experienced greater dysfunctional behaviour than those who had either substance abuse or gambling problems.

It is important to realise that many gambling venues, such as casinos and clubs, are also drinking establishments; therefore, these particular settings increase the likelihood of gambling and consuming

alcohol. The intoxication with alcohol may disrupt the gambler's efforts to limit their gambling activities and give a false sense of confidence in their gambling abilities.

Substance abuse and/or dependence will also contribute to the problem gambler's deteriorating physical and mental states.

Gender

The majority of individuals who are known to have gambling-related problems are male (Ladoceur *et al.* 1994; Volberg 1994; Volberg and Abbott 1994; Cusack *et al.* 1993; Lesieur *et al.* 1991; Lesieur *et al.* 1986; Pasternak 1997), but there is a progressive rise in the number of females known to be problem gamblers (Brown and Coventry 1997; Legge 1996).

It has been suggested that historically females who experienced gambling-related problems may not have reported such problems because of the stigma associated with it (American Psychiatric Association 1995; Volberg 1994). Problem gambling is becoming a recognisable public health issue and the reduction in stigma attached to gambling difficulties is probably a contributing factor to the increase in the number of known female problem gamblers. The other contributing factor to an increase in known female problem gamblers is the increase in the number of gambling venues throughout Australia.

The AIGR studies

Several studies indicate that males and females gamble for different reasons (Brown and Coventry 1997; Pohlman 1997) and have different preferences for the types of gambling in which they participate (AIGR 1994, 1995, 1997b; Brown and Coventry 1997; Lesieur and Blume 1991).

The AIGR (1994) found that women's gambling expenditure in Tasmania was less than males across all forms of gambling except bingo. They also found that 37% of females living in the city were considered to be regular gamblers compared with 45% of females living in rural areas.

In a follow-up to their 1994 Baseline study on the extent and impact of gambling in Tasmania, the AIGR (1997b) found that 11% of Tasmanians declared they did not gamble in the past year in 1996 compared with 28% in 1994. In 1996, 36% of Tasmanians stated they played tattsлото at least regularly each month while 27% reported the same for the lottery, and 18% reported the same for scratch 'n' win. A rather interesting result showed that 48% of Tasmanians felt gambling was an important leisure activity in 1996 compared to 43% in 1994.

The AIGR (1997b) found that females had a greater participation in the most popular forms of gambling including tattsлото, raffles, and scratch 'n' win compared to males who preferred off-course TAB and beer tickets. The gambling expenditure of males was greater than that of females for all forms of gambling other than bingo, raffles, and electronic gaming machines (EGMs).

An examination of the social and economic impact of gaming machines in Queensland by the AIGR (1995) showed that 30% of problem gamblers who reported to Queensland's BreakEven problem gambling service preferred EGMs. Of these, 16% were males and 68% were females.

The Brown and Coventry (1997) study

Brown and Coventry (1997) conducted a large study between October 1996 and June 1997 of Victorian females with gambling problems. They found that females gambled for several reasons. Women who enjoyed gambling stated that:

- it is an inexpensive means of entertainment;
- it provides a social outlet from home where a woman can be with other females in a safe environment;
- it provides women with an opportunity for decision-making that they may be denied at home; and
- it helps them to escape boredom.

They found that over a six month period, 3,610 individuals called G-Line which is a help line for those with gambling problems. Of the G-Line callers, approximately 46% were females. In accord with the AIGR studies, their results showed a difference between males and females for preferred gambling type. Females constituted the highest percentage of those who played EGMs (57%) whereas almost 12% of the male callers gambled at a casino compared to only 3% of the female callers.

The reasons for calling G-Line were similar for males and females with 30% of males and 29% of females citing expenditure as the reason they called the help-line. Loss of control was reported by 22% of both sexes while 13% of the males and 11% of the females declared they had relationship crises associated with their gambling activities.

The reasons for gambling were somewhat different as females reported that boredom was their primary motivating factor followed by loneliness while males reported either non-emotional motivators or positive emotional motivators such as excitement and social reasons for their gambling. The female callers were more likely to confirm that anxiety and depression, as well as life events, contributed to their desire to gamble.

Brown and Coventry also examined network data from BreakEven counselling and liaison services for problem gamblers. Their study constituted 1,300 individuals who registered with Victorian BreakEven services between 1 July 1995 and 30 June 1996. Females formed 49% of the problem gamblers. Of the problem gamblers, 20% of females and 36% of males never married, and 25% of males and 9% of females were unemployed.

Brown and Coventry also conducted a "Queen of Hearts" phone in for female problem gamblers. They received 144 calls and found that 37% of the callers liked the social appeal of gambling, 61% liked the ease of access for choosing gambling venues, and 87% either gambled because of their financial problems or developed financial problems as a result of their gambling.

It is important for public health education campaigns to understand that men and women prefer to gamble for different reasons and prefer different forms of gambling. Both men and women value the social atmosphere provided by gambling activities. The men, however, enjoy the positive 'thrill' of gambling while women enjoy the opportunity to relieve boredom and loneliness in a safe, social environment.

The variation in gambling preferences and motivations makes men and women particularly susceptible to gender-orientated targeted advertising campaigns. A man may be more likely to gamble if he thinks it will provide him with a thrill or 'adrenalin rush' while a woman may be more likely to gamble if she thinks it will alleviate her boredom and loneliness. Public health education campaigns will also need to recognise gender differences in gambling if they are going to have a positive impact on both men and women.

Economic and employment status

Problem gambling is often associated with individuals in the lower economic spectrum including the unemployed and retired people (AIGR 1996b; Brown and Coventry 1997; Legge 1996; Volberg and Abbott 1994) as well as non-White ethnic minorities (American Psychiatric Association 1995; Lesieur *et al.* 1991; Pasternak 1997; Sullivan *et al.* 1997; Volberg 1994; Volberg and Abbott 1994).

Again, these are specific groups which would greatly benefit from targeted public health education campaigns. Individuals in a lower economic group are particularly susceptible to experiencing financial difficulties related to gambling expenditure. As previously mentioned, per capita expenditure on gambling has increased in real terms from \$308.60 to \$736.32 while the percentage of household disposable income (HDI) has increased from 1.55% to 3.03% over the past 25 years (*Australian Gambling Statistics, 1996/1997*). Such an increase will have the greatest effect on those with lower incomes who have minimal discretionary incomes.

Illegal activities

Problem gamblers who face serious financial difficulties have been known to turn to illegal activities to alleviate the financial burden (AIGR 1996a; Blaszczynski and McConaghy 1992, 1994; Brown 1987; Brown and Coventry 1997; Frank *et al.* 1991; Rosenthal and Lorenz 1992).

The AIGR's (1996a) report into the social and economic impact of gaming machines in Queensland examined the association between gambling activities and criminal activities. They surveyed numerous Australian and overseas studies to come up with a list of key similarities for problem gamblers who become involved in criminal activities. The individual profile is described as a 35 year old male who may come from a broad range of socio-economic backgrounds who has gambled for an average of 17 years. There is a positive relationship between the frequency of play (for gaming machines) and the potential to experience personal financial problems. The crimes are normally non-violent property crimes and there is a positive relationship between problem gambling and alcohol dependency.

As part of their Queensland study, the AIGR (1996a) examined data from BreakEven centres and found that 68.8% of male clients and 57.1% of female clients had legal problems related to their gambling behaviour. They also surveyed the Arthur Gorrie Centre to interview those with gambling problems who were already in the correctional system. They found that 31.1% had gambling-related personal or financial difficulties, 23% had spent more than they could afford on gaming machines, 5.4% had stolen money for machine playing, 5.4% had been in trouble with the police due to machine playing, and 6.8% had declared that playing poker machines had caused them to be in jail.

It is very likely that if the opportunities for gambling increases in Australia as a result of a greater number of gambling venues and longer hours of operation, the number of problem gamblers will increase as well. As the number of problem gamblers rises, so does the chance of gambling-associated criminal activities.

THE EFFECTS OF PROBLEM GAMBLING ON FAMILY MEMBERS

Problem gambling not only affects the gambler's life, but also the lives of his or her family. The gambler's preoccupation with gambling, mood swings, potential for substance abuse, potential to commit crimes, and financial difficulties place an enormous burden on their family. Domestic violence, family breakdown, and reduction of household income are associated with problem gambling.

The AIGR (1996b) study in NSW indicated that 27% of those individuals who gambled (other than just playing LOTTO) experienced criticism by family members of their gambling behaviour. A total of 20% of these individuals stated they had arguments over money with family members while 22% believed that their gambling was more important than socialising.

The spouse

A total of 4% of these stated that gambling actually led to the break-up of their relationship. Of those individuals who did not experience gambling-related difficulties, 17% were aware of gambling-related problems of family members.

When the AIGR (1996b) study examined a clinical group of problem gamblers, they found that 50% experienced significant marital dysfunction, and 40% of the gambler's partners had developed significant stress-related illness. Of this clinical group, 36% owed money to their family members, 37% owed money to major finance companies, and 28% owed gambling-related money on their credit cards (not mutually exclusive). The family impact cost is estimated to be \$0.7 million for NSW families.

Brown and Coventry (1997) found that 42% of the Victorian women who were problem gamblers reported feelings of guilt over their gambling behaviour while 26% reported their gambling adversely affected their relationships.

The children

The children of problem gamblers are affected in numerous ways by their parent's gambling behaviour. In recent times, there have been media reports about children left in carparks by their parent(s) who are inside a gambling venue, although anecdotal information confirms that this practice has been going on for a very long time in Australia.

Ironically, problem gambling has a familial association (American Psychiatric Association 1995). A number of studies have found that many adults with gambling problems also had one or both parents with gambling problems (Lesieur *et al.* 1991; Lesieur and Klein 1987; Lesieur *et al.* 1986; Pasternak 1997; Volberg 1994; Volberg and Abbott 1994).

An increasingly disturbing trend in many countries is the high proportion of underage (under 18 years) gamblers (Adebayo 1998; American Psychiatric Association 1995; Becona 1997; Blaszczyński and Silove 1996; Ladoceur *et al.* 1994; Lesieur and Klein 1987; Lesieur *et al.* 1991; Miller 1996; Proimos *et al.* 1998; Trott and Griffiths 1991; Volberg 1994; Wood and Griffiths 1998). AIGR statistics showed that amongst Australian children under the age of 18 years, 41% played Lotto, 28% played Keno, 10% played pools, 79% played scratchcards and 34% played poker machines while 70% admitted entry into a casino (which is illegal to those under 18 years of age).

A survey conducted in the United Kingdom found a very strong correlation between parental and childhood participation in the National Lottery and scratchcards (Wood and Griffiths 1998). A total of 48% of adolescents had played the National Lottery and 71% of those participants had their tickets bought for them by their parents. Similarly, 30% of adolescents had played with scratchcards and 57% of those participants had their tickets bought for them by their parents. Wood and Griffiths (1998) suggest this high rate of parents buying tickets for their children may be because parents do not perceive these activities to be true forms of gambling. They found that 6% of adolescent National Lottery players and 6% of adolescent scratchcard players were probable problem gamblers based on the APA's DSM-IV criteria for problem gambling.

A survey in the United States showed that 90% of problem gamblers started before the age of 14 years indicating that extensive childhood involvement in gambling is highly associated with gambling difficulties in adulthood (Volberg 1994).

Adebayo (1998) found a similar preference for particular types of gambling in adolescents as that found in adults with young males preferring sports betting and wagering on games of skill and young females preferring games of chance. The majority of adolescent gamblers, as well as those classified as problem gamblers, are male (Adebayo 1998; Ladoceur *et al.* 1994; Lesieur *et al.* 1991; Proimos *et al.* 1998).

Another unfortunate similarity between adolescent and adult problem gamblers is the co-existence of problem gambling behaviour with substance abuse (Lesieur *et al.* 1991; Proimos *et al.* 1998).

The results of these studies indicate that the stereotypical 'profile' of male and female problem gamblers starts at a very young age. This would emphasise that public health education programmes for problem gambling need to be introduced to primary and secondary schools, as problem gambling often begins in adolescence.

THE EFFECTS OF PROBLEM GAMBLING ON THE COMMUNITY

Problem gambling affects not only the individual and his/her family but also the general community. Family breakdown, employment problems, and the risk of illegal activities are all associated with problem gambling. This places a social and economic burden on the local community; therefore, making problem gambling a public health issue (AIGR 1996a, 1996b; Brown and Coventry 1997). The AIGR has estimated that problem gambling costs Queensland an estimated \$12 million a year (AIGR 1996a) and New South Wales an estimated \$48 million a year (AIGR 1996b).

The AIGR (1996b) study on the impact of gambling in New South Wales provides a comprehensive examination of the costs of problem gambling to the community. Among those individuals who played more than just LOTTO (referred to as the OTHER group), 7.5% reported a loss of efficiency in their employment, 6% reported that they lost time from work because of their gambling, and 3% reported that they changed jobs as a result of gambling problems. In terms of illegal activities, 4% of this group had gambling-related court appearances and 4% had misappropriated monies because of gambling.

When the AIGR (1996b) reviewed clinical cases of problem gambling, they found that 68% of the problem gamblers had reported that gambling interfered with their productivity at work while 28% reported resigning or terminating employment because of gambling. They calculated that an average loss of 1 hour of work a week for a problem gambler would result in a loss of productivity of \$20 million per annum. They estimated that the economic impact of gambling on work productivity is approximately \$27.8 million a year in NSW.

Of this same clinical group, 6.7% experienced job changes related to problem gambling while 10% had been unemployed for an average of 1 year. The cost of unemployment to the community was estimated to be \$2,707,000.

Of this clinical group, 60% had gambling-related offences with 25% of these individuals being charged and half of those receiving custodial sentences of 1-2 years. They estimated the average prison, court, and police time to be \$17.139 million per year for NSW. This was divided into \$5,570,000 for court costs, \$8,998,000 for prison costs, and \$2,571,000 for police costs.

The AIGR found that the cost of maintaining existing support services in NSW for problem gamblers is \$2.3 million (from Study 1). The AIGR (1996b) and the total impact of problem gambling in NSW is \$48 million a year.

The results of the AIGR indicate that the community 'pays for' problem gambling in a variety of ways thus, increasing the public's gambling related financial burden.

ACCESS TO GAMBLING FACILITIES

The number of people who gamble, and subsequently develop problem gambling, may be related to the accessibility and availability of gambling outlets (Brown and Coventry 1997; Lester 1994; Sullivan *et al.* 1997; Volberg 1994; Volberg and Abbot 1994). The convenience of having a gambling venue 'just around the corner' makes it extremely difficult for many people to control the urge to gamble, particularly in areas where there is little or no other form of entertainment. The increase in the number of gambling venues, their easily accessible locations in shopping centres, clubs, hotels, and longer opening hours all contribute to more gambling opportunities (Brown and Coventry 1997).

A recent survey of a national gambling hotline in New Zealand found an increase in the number of individuals reporting problem gambling from 7% in the six months prior to the opening of New Zealand's second casino in Auckland to 34% after the casino opened (Sullivan *et al.* 1997). Their evidence showed that greater use of the hotline actually coincided with the greater availability of gambling opportunities as a result of the new casino.

Volberg (1994) found a discrepancy in the United States between those states where legalised gambling has been available for less than 10 years and those where it has been available for more than 20 years. The percentage of individuals classified as possible 'pathological' gamblers was 0.5% in those states where gambling was only recently available compared to 1.5% in those states where gambling has been available for over 20 years.

Young people

In Australia, individuals under the age of 18 years are not allowed in gambling venues or the gambling areas of clubs; however, some of the most popular forms of gambling are found in non-gambling venues. The location of colourful 'scratchy' tickets, as well as lottery tickets and LOTTO, on the counter of newsagencies (often located near the lolly section) is very appealing to young people. Parents may even buy scratchcards for their children to play. As previously outlined, the AIGR found a very high percentage of young people under the age of 18 years who played LOTTO (41%), Keno (28%), pools (10%), and scratchcards (79%).

Although scratchcards, LOTTO, and lottery tickets may seem relatively harmless, they are still illegal for people under the age of 18 years. It would be beneficial for such establishments to remove the scratchcards, LOTTO, and lottery tickets from open view and inform adults that it is illegal for them to give such tickets to people under the age of 18 years.

Internet gambling

A relatively recent phenomenon in the gambling industry is internet gambling. Anyone with a computer and a modem is capable of gambling over the internet; thus, internet gambling becomes very readily accessible.

McMillen and Grabosky (1998) have compiled a list of problems which are particular to internet gamblers and digital technology gambling sites. These include:

- a gambling site on the other side of the world may or may not be legitimate;
- a service provider could simply take the gambler's money and shut down or just fail to pay on any winnings;
- a gambler has little recourse against an illegitimate or unfair gambling site because there is no protection from government licensing and regulation;
- a gambler's credit card details, necessary to play on internet gambling sites, are vulnerable to capture by others or abuse by the service provider;

- on-line facilities may be used for money laundering; and
- on-line facilities can be accessed by young people.

Internet gamblers are as susceptible to becoming problem gamblers as those who prefer more traditional forms of gambling.

IMPROVEMENTS TO THE GAMBLING VENUE

Brown and Coventry (1997) received several suggestions from women gamblers as to how gambling venues could be improved to lessen the susceptibility of letting one's gambling activities 'get out of hand'. These include:

- installing more clocks inside the gambling venues;
- ensuring that natural lighting is used as much as possible;
- installing non-gambling games;
- providing other non-gambling related forms of venue entertainment;
- altering the machine payment practices;
- establishing a warning system to prompt people to be responsible; and
- changing the location of EFTPOS machines so they are not so visible and readily accessible.

RECOMMENDATIONS TO ALLEVIATE THE NUMBER OF PROBLEM GAMBLERS IN AUSTRALIA

The Government can also assure that a certain percentage of revenue from gambling taxes is directed to nationally coordinated programmes that are aimed at primary prevention measures, community education campaigns, effective community-based support resources, and public health research and education devoted to gambling-related health problems. Public health research needs to specifically target particularly vulnerable groups such as women, young people, low income earners, and internet gamblers.

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