## The WAGER Vol. 5(41) - Gambling Mortality

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In the 18 years since pathological gambling became an ICD-9 disease code (1980-1997) in the United States, no death certificate has listed gambling as the underlying cause of death. A search of the Compressed Mortality dataset, which is maintained by the Centers for Disease Control on their CDC Wonder site, found 0 deaths for 312.3, the ICD-9 code for impulse-control disorder, which includes pathological gambling (312.31) [1]. However, there have been many attempts in the literature to establish gambling as an indirect cause of death. Two notable attempts have been discussed in previous WAGERs, "Measuring Suicide: Methodology Matters", and "Gambling and Suicide: A Study of 44 Cases". These two articles linked gambling to suicide. The WAGERs concluded that neither article had successfully established that gambling had caused the deaths in question. The difficulties associated with determining necessary and sufficient causes and identifying partial causes has plagued this area of investigation. In addition, the comorbidity often evident among pathological gamblers has contributed to these assessments of causality.

The press, as well as anti-gambling forces, have strived to connect gambling to deaths. For example, the following "Casino Deaths" were found at the CitizenLink website. As you review these accounts, note that additional causes (e.g., drinking, anger, criminality, aging) loom as possible alternative explanations of death, or at least partial causes of death.

"After a night of drinking at a Kenner (La.) casino Saturday night, a Ponchatoula man apparently shot himself to death in his car outside the gambling boat, police said." ([New Orleans] Times-Picayune, 11/8/99)

"One man was shot to death and another critically injured following an argument outside the Mohegan Sun casino (Montville, Conn.), police said." (Las Vegas Sun, 11/8/99)

"A man shot his ex-girlfriend Wednesday morning as she dealt blackjack at a downtown (Las Vegas) casino, then chased her through the casino, firing shots until she collapsed, police said." (Associated Press, 11/10/99)

"Police are probing the death of the son of cult founder the Rev. Sun Myung Moon. Young Jin Moon, 21, fell to his death from a 17th-floor hotel window. His body was found on the roof of a ground-floor canopy at Harrah's hotel in the gambling resort of Reno, Nevada, last week." (Scottish Daily Record, 11/6/99)

"The heart-stopping action in Manitoba's casinos is about to be halted. Heart attacks have become so frequent among agitated and excited patrons, Manitoba Lotteries is putting money down on some high-tech medical equipment to stem the casualties.... At least every other day emergency crews are called to a casino, said Inspector Stan Stone, with ambulance services in Winnipeg. 'It's mostly cardiac-related stuff,' Stone said." (Toronto Star, 11/1/99)

A study done ten years ago by Donald R. Jason, Chief Medical Examiner, County of Atlantic, New Jersey and his colleagues, examined casino-related deaths in Atlantic City from 1982-1986, four years after the first legalized casino opened (Jason, Taff, & Boglioli, 1990). The authors concluded, "Our results indicate that gambling-related activities can be hazardous to one's health, especially among elderly cardiac patients." They found that there were 398 casino-related deaths, of which, 83% were sudden cardiac deaths of elderly white retired men. They maintained that their findings were consistent with another study, which had found, "mortality and morbidity appeared to be greater among stricken gamblers than among others with similar cardiac attacks [not in casinos] because surrounding patrons were preoccupied with their pursuit of profit, and therefore failed to summon medical assistance" (Jason et al., 1990, p.116).

Without any comparison groups, it is impossible to determine the rate of casinorelated deaths. For example, maybe more people die after eating tainted lemon
meringue pie at church suppers. Similarly, we cannot interpret whether 330
sudden cardiac deaths of elderly white men at or around the casinos within a five
year period constitutes a special public health problem since heart disease has
been the leading cause of death in the United States for more than fifty years [2].
Is the death rate among these men similar or different from the rate associated
with a comparable group of men who gather elsewhere? Jason et al. recommend
that casinos be mandated to provide emergency health care services for their
patrons. According to the quote from the Manitoba Star above, new portable
defibrillators have been placed in casinos, so perhaps most casino deaths are
behind us.

The gambling-related death articles described above have not scientifically demonstrated that gambling causes people to die. Further, if gambling is considered toxic, this research also has not established a dose-response relationship between gambling and death. That is, the research has not shown that more time spent gambling, or higher stakes gambling, causes an increased frequency of deaths. Studies have not established that death rates differ between problem gamblers and non-problem gamblers. There are many important public health problems associated with gambling that require careful research. Mortality issues deserve careful scientific scrutiny. However, absent this research it is not yet possible to conclude that there is a relationship between gambling and death. In their review of the National Research Council and the National Gambling Impact Study Commission findings, the General Accounting Office arrived at the same conclusion. Hunting for gambling deaths should not obscure the very real public health issues that accompany gambling [3].

## **Notes**

- [1] The absence of pathological gambling as the underlying cause of death on the death certificate does not mean that no one has died of pathological gambling. Medical examiners, who must identify the immediate cause of death and contributing causes of death, may, for any number of reasons, be unwilling to list pathological gambling as a cause of death.
- [2] Murphy, S.L. (2000). Death: Final Data for 1998. (National Vital Statistics Rep. Vol. 48, No. 1). Hyattsville, Maryland: National Center for Health Statistics.
- [3] For a serious discussion of the public health issues of gambling, see, Korn, D., & Shaffer, H. J. (1999). Gambling and the health of the public: adopting a public health perspective. Journal of Gambling Studies, 15(4), 289-365.

## References

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