The Impact of Gambling Disorder on Physical Health

Timothy W. Fong MD
UCLA Gambling Studies Program
13th Annual Midwest Conference on Problem Gambling and Substance Abuse
June 2016
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Overview

- Physical health overview
- Gambling’s impact on physical health
- Office-based techniques to improve health in gambling disorder
Components of Health
Components of Health

- Physical Activity
- Nutrition and Diet
- Alcohol and Drugs
- Medical Self Care
- Rest and Sleep
Overview of Health in California
Physical Health and Exercise

• DATA 2010 (census)
  – 36% adults aged 18 years and older reported engaging in regular vigorous physical activity in 2005.
  – 23% percent of adults aged 18 years and older reported having no leisure-time physical activity in 2006.
Obesity

• Obesity = Body Mass Index > 30

• DATA2010 for California adults aged 20 years and older
  – 23.6% of Californians are obese.
  – 26.3% of Connecticut (2014)
  – 10.4% of Connecticut (1990)
Alcohol Use

• Binge drinking prevalence rates among California’s adult population 18 years and older
  – 15.4% in 2001
  – 17.6% in 2005
  – 13.3% in 2008
Tobacco Use

• DATA 2010 show that California’s adult cigarette smoking prevalence rates declined significantly from:
  – 16.9 percent in 2000
  – 14.5 percent in 2004
  – 14.6 percent in 2006

• In Connecticut (16%) – current smokers
Access to Health Care

• 28.1 million Californians under age 65 (85.4 percent) had some kind of health insurance coverage in 2007

• 87.8 percent of Californians had a usual source of ongoing care in 2005
Sleep

• According to data from the National Health Interview Survey,
  ~30% of adults reported an average of \( \leq 6 \) hours of sleep per day
• In 2009, 31% of high school students reported getting at least 8 hours of sleep on an average school night.
Gambling Disorder and Health
Gambling Disorder and Health (Pre-2000)

- Published reports showing association of gambling disorder with poorer overall health
- Not enough to impact policies, legislation or practice
  - (Petry, Volberg, National Commission)
Health Problems and Medical Utilization Associated with GD

• NESARC Data review (43,093)
• PG more likely than low-risk individuals to have
  – tachycardia
  – angina
  – Cirrhosis / other liver disease

Health Problems and Medical Utilization Associated with GD

Gambling severity associated with higher rates of medical utilization

PG more likely than low-risk individuals to have been treated in the emergency room in the year

Psychosom Med. 2006 Nov-Dec;68(6):976-84.
Gambling and Health: Primary Care Setting

- 574 adults presenting to an urban primary care medical clinic
  - 10.6% pathological gambling
  - 5.1% were classified as problem gamblers.

- Any GD reported more health-related concerns on indices of physical functioning.

- Recreational gambling was not associated with better health.

- BJ Morasco, KA vom Eigen, NM Petry - General hospital psychiatry, 2006
Gambling Disorder and Health

- Canadian Community Health Survey, n=10,056 women
- Past 12-month problem gambling associated with:
  - higher probability of self-report “lower general health”
  - bronchitis, fibromyalgia, migraines,

PG increases CV Disease

- Review of NESARC Data
  - Focus on older adults (55+)
- PG status was associated with elevated odds for incident arteriosclerosis and heart conditions.
  - Increased risk beyond established risk factors

PG Relation to Obesity, Medical Conditions, Lifestyle

- Random survey of 95 PG vs. 91 controls
- PG had more medical and mental health conditions than controls
- More likely to avoid regular exercise, smoke ≥1 pack/day, drink ≥5 servings of caffeine daily, and television ≥20 hours/week.

- Compr Psychiatry. 2013 Feb;54(2):97-104
PG Relation to Obesity, Medical Conditions, Lifestyle

• PG had:
  – more emergency department visits for physical and mental health conditions
  – more likely to have been psychiatrically hospitalized in the past year
  – more likely to take psychotropic medication

  – Compr Psychiatry. 2013 Feb;54(2):97-104
PG Relation to Obesity, Medical Conditions, Lifestyle

• PG
  – less likely to have had regular dental visits
  – more likely to put off medical care due to financial problems.
  – higher BMI than controls and were more likely to be obese

  – Compr Psychiatry. 2013 Feb;54(2):97-104
Pathological gamblers reported impaired physical and emotional role functioning, but also bodily pain, impaired social functioning, and low vitality.

– *Compr Psychiatry*. 2013 Feb;54(2):97-104
Gambling and Intimate Partner Violence

- Meta-analysis of 14 studies
- 1/3 of PG are victims of IPV or are perpetrators of IPV (physical)
- PG Prevalence in IPV perpetrators is 11%
- IPV driven by underemployment, anger, impulsivity, SUD

[Trauma Violence Abuse.](https://www.tvahealth.com) 2014 Dec 3
California Gambling Education and Treatment Services (CALGETS)

problemgambling.ca.gov
CALGETS Data On Health
(Review and Discussion)
General Health

- Ave age ~ 48; 60% male
- Nearly 35% of population unemployed
- Nearly 30% did not have health insurance of any kind
- Nearly 35% did not have a PCP
ETOH Usage

- IOP and RTC have higher mean number of drinks per week and more likely to report heavy drinking episodes
- AIs do not report heavy drinking episodes
Health Ratings

- Across all treatment components:
- Gamblers:
  > 30% rated health as “fair or poor”
- Affected Individuals
  ∼22% rated health as “fair or poor”
Gambling and Smoking
Smoking and Casinos

- Smoke-Free in Card Clubs, Racetracks
- **Not** Smoke-Free in Tribal Casinos

- Impact
  - Second-hand smoke (up 9x higher than outside)
  - Most casino patrons don’t smoke
  - Negligible impact on revenue
Increased Smoking Rates in PG

- 62% of treatment seeking gamblers in Connecticut
- 69% in Minnesota smoked
  - much higher than general population 25%
- (Petry & Oricken 2002, Stinchfield and Winters 1996)
Smoking and Gambling

- Gamblers who smoked daily gambled more days and spent more money than non-daily smokers.
- They craved gambling more and had lower perceived control over gambling (Petry & Oricken 2002)
Smoking and Gambling: Severity

- Daily tobacco use was reported in 244 (63.4%) subjects.
- Tobacco users presented with significantly more severe gambling and mental health symptoms at treatment intake.
- Similar rates of treatment completion and treatment outcomes as nonusers.
- (Odlaug 2013)
## CALGETS 2013-14

<table>
<thead>
<tr>
<th>Current Smoker</th>
<th>Yes</th>
<th>No</th>
<th>Mean Cigarettes per Day</th>
<th>Mean Number of minutes waited after waking before smoking</th>
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<tbody>
<tr>
<td>PGTI (English/Spanish)</td>
<td>47 (30.9)</td>
<td>105 (69.1)</td>
<td>5.5</td>
<td>8.6</td>
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<tr>
<td>PGTI (Asian Languages)*</td>
<td>2 (7.7)</td>
<td>24 (92.3)</td>
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<tr>
<td>Outpatient</td>
<td>296 (29.7)</td>
<td>699 (70.3)</td>
<td>2.9</td>
<td>9.5</td>
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<tr>
<td>IOP</td>
<td>3 (37.5)</td>
<td>5 (62.5)</td>
<td>2.5</td>
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<td>RTP</td>
<td>34 (81.0)</td>
<td>8 (19.0)</td>
<td>7.3</td>
<td>16.7</td>
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# CALGETS 13-14: Affected Individuals

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<th>Current Smoker</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Mean Cigarettes per Day</th>
<th>Mean Number of minutes waited after waking before smoking</th>
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<tr>
<td>PGTI (English/Spanish)</td>
<td>3 (15.8)</td>
<td>16 (84.2)</td>
<td>2.5</td>
<td>14.1</td>
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<td>PGTI (Asian Languages)*</td>
<td>1 (9.0)</td>
<td>10 (91.0)</td>
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<tr>
<td>Outpatient</td>
<td>55 (13.0)</td>
<td>369 (87.0)</td>
<td>0.2</td>
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Biological Explanations

- Nicotine and gambling preferentially release dopamine
- Similar brain areas impacted
- Genetic predisposition
- Priming from alcohol and sex cues associated with one another
Smoking and Gambling: How and Why

- Nicotine may raise the “hedonic” value of gambling
- Nicotine may raise the “cue reactivity” of things surrounding gambling
- Nicotine may increase attention and focus on gambling (“stay in action”)

California Smokers’ Helpline: UCSD

1-800-NO-BUTTS

– M-F 7am-9pm;
– Sat/Sun 9am-5pm
1-800-NO-BUTTS

- Self-help materials, referral to local programs, and one-on-one, telephone counseling to quit smoking.
  - 30-40 minute initial counseling
  - Up to 6 follow-up sessions
- Doubles a smoker’s chances of successfully quitting.
- 6 languages (English, Spanish, Cantonese, Mandarin, Korean, and Vietnamese)
UCLA Gambling Sleep Study - Results

• National Epidemiological Survey: (N=3412)
  – PGs were almost 3.5 times more likely to experience a sleep problem compared to individuals who did not have a gambling problem

• Community Survey: (N=120)
  – PGs experience significantly poorer sleep quality and increased daytime sleepiness relative to those that recreationally gamble.
UCLA Gambling Sleep Study

• Problematic Sleep Causes:
  – impair self-control and decision-making
  – increase impulsivity,
  – attenuate responses to losses and increase expectations of gains
  – degrade cognition in executive functioning tasks

• Become clinically aware whether client is also suffering sleep problems and include that in management
Understanding the link between gambling and health
Explaining this association

• Stress Model
  – Increased physical and emotional stress leads directly to poor overall health

• Lack of exercise
  – Gambling is sedentary

• Self-care neglect
  – impulsivity / risk-taking / lack of interest
Explaining this association

- Lack of access to care
  - Insurance, funds
- Genetics
  - Shared risk factors
- Co-occurring SUD
  - Primarily Tobacco and Alcohol
What about gambling promoting health?
Casino Openings and Childhood Weight

- Fitness testing of American Indians in California (tribes with casinos vs. tribes without a casino)
- Opening or expanding a casino was associated with increased economic resources and decreased risk of childhood overweight/obesity
- *JAMA*. 2014 Mar 5;311(9):929-36
Gambling, Health and Age

- NESARC Data
- Among older respondents, recreational gambling was associated not only with some negative measures (e.g., obesity) but also with some positive measures (e.g., better physical and mental functioning).

Case Study
Intake to CALGETS

• 43 yo female referred to CALGETS via online search
• Presents with 10 year history of gambling disorder (slots, online slots)
• Main damage -- $75K debt, diminished friends, low life satisfaction, personal development stalled
• Moderate depressive sxs
Health Overview

- Does not exercise (0)
- Does not smoke
- Drinks 10 standard drinks per week
- Has health insurance
- Works night shift, sleep not consistent and 3-5 hours blocks
- 5’2”; 185lbs
- Diet – Comfort eating; “no idea”
Techniques to Improve Health
Physical Activity

• Exercise must be prescribed
  – 3 times per week for 90 minutes
  – “10,000 Steps per day”

• Emerging use of Smartphone apps and digital trackers

• Take advantage of local fitness trends

• Partner with local trainer
Diet and Nutrition

- Start with Food Diary
- Develop local connections with cooking classes, private nutritionists and dietitians
- Weight loss goals = \( \frac{1}{2} \) lb per week (approximately 1100 calorie difference)
Alcohol and Tobacco

- SBIRT practices
- Increase Smoking Cessation Toolbox
- 1-800-NO-BUTTS
- Focus on characterizing relationship between substances, gambling and health
Medical Care

• Identify primary care provider
• Overcome treatment barriers
• Become familiar with insurance options
• Learn healthcare milestones and encourage discussion
• Create healthcare goals
Rest and Sleep

• Sleep diaries
• Sleep hygiene practices
  – Screen Time
  – Caffeine
• Scheduled Naps
• Schedule Rest Periods
**How much sleep did you get last night?**

Color in the boxes from the time you fell asleep last night until the time you woke up this morning. Count the number of boxes you colored in to figure out how many hours you slept. Write the number of hours you slept below each day.

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I slept 11 hours.
The key to good health: “Hot” off the presses
Association Between Sauna Bathing and Fatal Cardiovascular and All-Cause Mortality Events

Increased frequency of sauna bathing is associated with a reduced risk of SCD, CHD, CVD, and all-cause mortality.

Future Trends

• Integration of Smartphone tools
  – Monitoring all aspects of health
  – Building recovery communities
• Healthy living partnerships
• Provider-linked incentives for health
Contact Information
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uclagamblingprogram.org
Surf’s Up!
And so is interest in AAAP’s 26th Annual Meeting and Symposium!

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Hyatt Regency Huntington Beach Resort and Spa

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- Network with colleagues
- Bring your surfboard

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December 2-4
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