Special Issues to Address in Problem Gambling Treatment

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Goal:

To identify special areas of concern related to physical or behavioral health to address during treatment for disordered gambling.
Disordered Gamblers as an At-Risk Population

**Physical and Mental Health Concerns**

- **Obesity** (Bonnaire et al 2016 (France); Algren et al 2015 (Denmark); Leppink et al 2016 (US))

- **Anxiety** (Cowlishaw and Kessler 2016 (UK))
Disordered Gamblers as an At-Risk Population

Behavioral Health Concerns

- Cigarette smoking (Algren et al 2015 (Denmark)).
- Problematic drinking (Algren et al 2015).
- Drug use (Cowlishaw and Kessler 2016 (UK), Algren et al 2015);
  - cannabis, cocaine, heroin (Bonnaire et al 2016 (France));
  - stimulants (Geisner et al 2016 (US college)).
- Sedentary leisure activity (Algren et al 2015).
- Fat and sugar intake (Chamberlain, Redden and Grant 2016 (US)).
- Poor diet (Algren et al 2015).
Health Profiles of Clients Seeking Treatment for Disordered Gambling in California

Do clients engaging with outpatient treatment for disordered gambling face similar health concerns as disordered gamblers identified in population surveys?
Data: The California Gambling Education and Treatment Services (CalGETS) Program

- Provides no-cost treatment for gambling addiction to residents of California aged 18 and above.
- Gather information about clients’ gambling, physical health, comorbid disorders, and quality of life at intake to services.
- Collect follow-up surveys at 30, 90, and 365 days after leaving treatment; ask about gambling, depression, quality of life, mobile gaming habits.
- Total N = 713, gamblers receiving outpatient treatment
Examine self-rated health, chronic health disorders, health behaviors, body mass index (BMI), life satisfaction, depression, and health care access to characterize the general health status of men and women when they first enter treatment for gambling disorder.
Variables

• Physical Health: Self-rated Health, BMI, Chronic Health Disorders Scale.

• Mental Health: Life Satisfaction, Depression, Mental Health Disorders Scale.

• Health Behaviors: 6 or More Alcoholic Drinks per Week, Smoke Cigarettes, Substance Use Scale.

• Health Care Access: Health Insurance Status, Primary Care Doctor, No Recent Health Care Visit
Physical Health

**Fair or Poor Self-Rated Health**

- Female: 41.8*%
- Male: 32.5%

* Difference in means is significant at $p < 0.05$

**Count of Substances Used in the Past Year**

- Female: 0.741†
- Male: 0.9069

† Difference in means was almost significant at $p = 0.066$
Mental Health

Depression PHQ-9

<table>
<thead>
<tr>
<th>Gender</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>9.45</td>
</tr>
<tr>
<td>Female</td>
<td>10.51</td>
</tr>
</tbody>
</table>

*significant difference
Health Behaviors

Problematic Alcohol Use

- Female: 11.2***
- Male: 21.2

*** difference in proportion is significant at $p \leq 0.001$
Health Care Access

Does Not Have Health Insurance

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>**</td>
<td>13.1**</td>
<td>21.2</td>
</tr>
</tbody>
</table>

Lacks a Primary Care Doctor

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>**</td>
<td>30.7</td>
<td>19.1</td>
</tr>
</tbody>
</table>

**difference in proportion is significant at $p \leq 0.01$  

***difference in proportion is significant at $p \leq 0.01$
Health Care Access

Last Physical Over 2 Years Ago

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>21.2</td>
<td>15.9</td>
</tr>
</tbody>
</table>

*** difference in proportions is significant at $p \leq 0.001$
Conclusions

- Similar to people with gambling disorder surveyed in population surveys, those seeking treatment for disordered gambling in California face many health concerns regarding physical and mental health, health behaviors, and health care access.

- Men and women experience these challenges differently.
So What?

While there are a lot of issues to address in treatment for gambling disorder that center around gambling triggers and behavior, disordered gamblers are an at-risk population for many health concerns and it is important to address the health issues they face.
Dataset

- Total N = 358
- CalGETS clients were presented with an additional survey about mobile gaming during regular follow-up calls.
- Clients came from outpatient, intensive outpatient, and residential populations.
- Clients were surveyed 30, 90, and 365 days after treatment. Of the clients who were surveyed more than once, their most recent interview was used.
Survey Content
Screener

While both items are asked, the second item is the actual screening criteria.

Do you own a smartphone or a tablet? *
- Yes
- No

Have you ever, including before your treatment, played a casino game on any smartphone or tablet? (for example: slots, bingo, blackjack, poker) *
- Yes
- No
### Survey Content

#### Gaming Timeline

Questions were asked about when the games were played, how frequently, and for how long.

<table>
<thead>
<tr>
<th>When did you play? *</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Before treatment</td>
</tr>
<tr>
<td>□ During treatment</td>
</tr>
<tr>
<td>□ After treatment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How frequently did you play these games? *</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Every Day</td>
</tr>
<tr>
<td>□ Every Couple Days</td>
</tr>
<tr>
<td>□ Every Week</td>
</tr>
<tr>
<td>□ Every Couple Weeks</td>
</tr>
<tr>
<td>□ Very Infrequently</td>
</tr>
</tbody>
</table>

When you played these games, how much time did you usually spend in a session? *

Your answer

In total, how long did you play the games? *

| A week to a month                          |
| A month to 6 months                       |
| 6 months to a year                        |
| Over 1 year                               |
Survey Content
Types of Games & Urges

Types of games played, urge occurrence, and intensity was recorded.

What kind of games have you played? *

Your answer

When you played on your phone or tablet, did you ever have urges afterwards to gamble in real life? How strong were the urges from 0 to 100? *

Your answer
Frequency, session duration, and lifetime duration information was collected.

How frequently did you play these games? *
- Every Day
- Every Couple Days
- Every Week
- Every Couple Weeks
- Very Infrequently

When you played these games, how much time did you usually spend in a session? *

Your answer

In total, how long did you play the games? *
- A week to a month
- A month to 6 months
- 6 months to a year
- Over 1 year
Information on money spent during gaming was collected.
Finally, we listed different reasons clients may have had to play the mobile games, and had them indicate which, if any, were motivations for them to play.
Demographics

Age

<table>
<thead>
<tr>
<th>Mean Age (SD)</th>
<th>Non-Mobile Gamblers</th>
<th>Mobile Gamblers</th>
</tr>
</thead>
<tbody>
<tr>
<td>54 (12.9)</td>
<td></td>
<td>46 (12.7)</td>
</tr>
</tbody>
</table>

Mobile gamblers were younger than non-mobile gamblers.
There were no significant gender differences between mobile and non-mobile gamblers.
89% (N = 319) reported that they own a smartphone or tablet.
Games Played

38% (N=135) said that they had used it to play casino-style games.

Less than 1% (N = 3) of clients stated that they had played a casino game on a smartphone or tablet, even though they did not personally own one.
Most gamblers said that they played before they started treatment.
Gaming Timeline

Clients were asked how often they played.

Frequency of play was very high, with almost 3 out of 4 playing either every day or every couple days.
Average Play Duration
1.7 Hours

Std Dev: 2.4 Hours
Median: 1 Hour
Mode: 1 Hour
Most clients had played for a long time; over 1 in 2 played the games for over a year.
Urge Frequency
After Playing Mobile Games

Of the 95 participants who answered this survey question, 2 out of 3 had experienced urges to gamble after they played a mobile casino game.
Average Urge Intensity

76 / 100

Std Dev: 22 / 100
Median: 80 / 100
Mode: 100 / 100
Urge Intensity After Playing Mobile Games

Histogram and Normal Distribution
Money
Spent vs Not Spent

- Spending money on mobile games often comes in the form of buying virtual currency like coins or tokens. Irregular conversions from real to virtual currency, as well as sales, may obfuscate the amount spent.

- Of the 135 clients who played games, 50.4% (N = 68) spent money on them, and 49.6% (N = 67) did not spend.
**Average Lifetime Spending**

$286

- **Std Dev:** $216
- **Median:** $200
- **Mode:** $500
Thanks and Acknowledgements

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