KNOW THE STAKES
ALCOHOL, SUBSTANCE ABUSE AND GAMBLING
KNOW THE STAKES
ALCOHOL, SUBSTANCE ABUSE AND GAMBLING

STEVEN KIPNIS, MD, FACP, FASAM
MEDICAL DIRECTOR

JOY DAVIDOFF, MPA
ADDICTION MEDICINE UNIT

BARRY DULBERG, MS (Ed.), MA
PREVENTION SERVICES
NYS OFFICE OF ALCOHOLISM AND SUBSTANCE ABUSE SERVICES
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMPULSE CONTROL DISORDER</td>
<td>4 – 9</td>
</tr>
<tr>
<td>ICD AND SUBSTANCE ABUSE (TABLE)</td>
<td>10</td>
</tr>
<tr>
<td>DEFINITION</td>
<td>11</td>
</tr>
<tr>
<td>HISTORY OF GAMBLING</td>
<td>12 – 14</td>
</tr>
<tr>
<td>TYPES OF GAMBLING</td>
<td>15 – 20</td>
</tr>
<tr>
<td>ODDS OF WINNING</td>
<td>21</td>
</tr>
<tr>
<td>GAMBLING AND THE STATES</td>
<td>22</td>
</tr>
<tr>
<td>EPIDEMIOLOGY</td>
<td>23 – 25</td>
</tr>
<tr>
<td>PERCEPTIONS OF GAMBLING</td>
<td>26</td>
</tr>
<tr>
<td>TYPES OF GAMBLERS</td>
<td>27 – 31</td>
</tr>
<tr>
<td>PATHOLOGICAL GAMBLING(PG)</td>
<td>32 – 33</td>
</tr>
<tr>
<td>SCIENCE AND GAMBLING</td>
<td>34 – 35</td>
</tr>
<tr>
<td>WHO IS AFFECTED?</td>
<td>36 – 43</td>
</tr>
<tr>
<td>PHASES OF PATH. GAMBLING</td>
<td>44 – 50</td>
</tr>
<tr>
<td>WITHDRAWAL</td>
<td>51</td>
</tr>
<tr>
<td>UNIQUE ASPECTS OF PG</td>
<td>52 – 56</td>
</tr>
<tr>
<td>PG AND SUBSTANCE ABUSE</td>
<td>57 - 64</td>
</tr>
<tr>
<td>ASSOCIATED PROBLEMS</td>
<td>65 – 66</td>
</tr>
<tr>
<td>DIAGNOSIS SCREENING</td>
<td>67 – 75</td>
</tr>
<tr>
<td>TREATMENT</td>
<td>76 – 92</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>93</td>
</tr>
</tbody>
</table>
• IMPULSE CONTROL DISORDERS (ICD’S)
  – PATHOLOGICAL GAMBLING??
IMPULSE CONTROL DISORDER

• HISTORY
  – 1838 ESQUIROL INTRODUCED TERM “MONOMANIA”
  • A CONDITION IN WHICH AN INDIVIDUAL, ACTING ON AN IRRESISTIBLE IMPULSE, ENGAGES IN ACTS HE OR SHE DEPLORES AND DOES NOT WANT TO DO
    – HE CITED ARSON, ALCOHOLISM, IMPULSIVE HOMOCIDE AND KLEPTOMANIA
IMPULSE CONTROL DISORDER

• HISTORY
  – 1900 THE TERM IS CHANGED TO “PATHOLOGICAL IMPULSES” OR “REACTIVE IMPULSES”
  • PYROMANIA, KLEPTOMANIA, ONIOMANIA (BUYING/SHOPPING MANIA)
IMPULSE CONTROL DISORDER

• HISTORY
  – 1954 FROSCH AND WORTIS
    • DEFINED IMPULSE AS “THE SUDDEN UNPREMEDITATED WELLING UP OF A DRIVE TOWARD SOME ACTION, WHICH USUALLY HAS THE QUALITY OF HASTINESS AND A LACK OF DELIBERATION”
  – 1980 IMPULSE CONTROL DISORDERS NOT INCLUDED IN THE DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS 3RD EDITION (DSM – 3)
IMPULSE CONTROL DISORDER

• HISTORY
  – AT PRESENT PATHOLOGICAL GAMBLING IS ONE OF THE ICD’S
    • IN GENERAL ICD’S OTHER THAN GAMBLING ARE RARE (0.6% - 1% OF THE US POPULATION)
    • THERE ARE GENDER DIFFERENCES:
      – MALES: INTERMITTENT EXPLOSIVE DISORDER, PATHOLOGICAL GAMBLING, PYROMANIA
      – FEMALES: KLEPTOMANIA, COMPULSIVE SHOPPING, SELF – MUTILATION, TRICHOTILLOMANIA (HAIR PULLING)
IMPULSE CONTROL DISORDER

- ICD’S ARE RELATED TO SUBSTANCE USE DISORDERS:
  - IRRESISTIBLE IMPULSE OF ICD RESEMBLES CRAVINGS
    - ALCOHOL/DRUG CRAVINGS ASSOCIATED WITH TENSION, ANXIETY AND AROUSAL LIKE ICD’S
  - PLEASURE, HIGH, THRILL, RUSH SEEN WITH BOTH = INTOXICATION
  - NEUROBIOLOGY OF ICD’S RELATIVELY UNSTUDIED, THOUGH THOUGHT TO BE ABERRANT FUNCTIONING OF THE MOTIVATIONAL – REWARD SYSTEM
## PREVALENCE

<table>
<thead>
<tr>
<th>ICD POPULATION</th>
<th>N</th>
<th>% WITH SUBSTANCE USE DISORDER</th>
<th>AUTHORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATHOLOGIC GAMBLING</td>
<td>140</td>
<td>47% SUBSTANCE ABUSE</td>
<td>LINDEN ET AL, 1986 RAMEZ ET AL, 1983 SPECKER ET AL, 1996</td>
</tr>
<tr>
<td>IMPULSIVE, VIOLENT OFFENDERS</td>
<td>24</td>
<td>100% ALCOHOL ABUSE</td>
<td>LINNOILA ET AL, 1983</td>
</tr>
<tr>
<td>IMPULSIVE ARSONIST</td>
<td>22</td>
<td>91% ALCOHOL ABUSE</td>
<td>VIRKKUNEN ET AL, 1989</td>
</tr>
<tr>
<td>INTERMITTENT EXPLOSIVE DISORDER</td>
<td>14</td>
<td>57% SUBSTANCE ABUSE</td>
<td>SALOMEN ET AL, 1994</td>
</tr>
<tr>
<td>INTERMITTENT EXPLOSIVE DISORDER</td>
<td>27</td>
<td>48% SUBSTANCE ABUSE</td>
<td>McELROY ET AL, 1998</td>
</tr>
<tr>
<td>COMPULSIVE BUYING</td>
<td>90</td>
<td>37% SUBSTANCE ABUSE</td>
<td>CHRISTENSON ET AL, 1994 McELROY ET AL, 1994 SCHLOSSER ET AL, 1994</td>
</tr>
<tr>
<td>KLEPTOMANIA</td>
<td>20</td>
<td>50% SUBSTANCE ABUSE</td>
<td>McELROY ET AL, 1991</td>
</tr>
<tr>
<td>TRICHOTILLOMANIA</td>
<td>74</td>
<td>23% SUBSTANCE ABUSE</td>
<td>CHRISTENSON ET AL, 1991 SWEDO ET AL, 1989</td>
</tr>
</tbody>
</table>
GAMBLING DEFINITION

• WEBSTER SAYS:
  – TO STAKE OR RISK MONEY OR ANYTHING OF VALUE ON THE OUTCOME OF SOMETHING INVOLVING CHANCE.
  – ANY MATTER OR THING INVOLVING RISK
HISTORY OF GAMBLING

• DICE DATE BACK TO ANCIENT BABYLONIA
  – 3000 BC
HISTORY OF GAMBLING

• LOTTERY
  – EARLY BIBLICAL MENTION OF CASTING LOTS (LOTTERY) TO DIVIDE LAND
  – FIRST STATE LOTTERY IN 1566 BY QUEEN ELIZABETH I
HISTORY OF GAMBLING

• LOTTERY
  – AS EARLY AS 1612, THE VIRGINIA COMPANY OF JAMESTOWN PETITIONED THE KING OF ENGLAND FOR PERMISSION TO CONDUCT A LOTTERY TO FINANCE THE STRUGGLING COLONY
  – IVY LEAGUE COLLEGES STARTED AND FINANCED BY LOTTERIES
TYPES OF GAMBLING

• GAMES OF SKILL
  – CARDS

• LOTTERY
  – INSTANT SCRATCH TICKETS
  – DAILY NUMBERS
  – LOTTO
  – QUICK DRAW
TYPES OF GAMBLING

• SPORTS
  – HORSE RACING AT TRACKS
  – OTB
  – OFFICE POOLS/BOXES
    • FOOTBALL
    • WORLD SERIES
    • NCAA BASKETBALL PLAYOFFS
TYPES OF GAMBLING

• CASINOS
  – LAND - BASED
  – FLOATING CRUISES
    • CRUISES TO NOWHERE
  – SLOT MACHINES AND POKER MACHINES NOT AT A CASINO
TYPES OF GAMBLING

• MISCELLANEOUS
  – BINGO
  – PULL TABS
  – STOCK OR COMMODITIES MARKET
  – DICE
  – RAFFLES
  – NUMBERS
TYPES OF GAMBLING

• INTERNET
  – CASINOS
    • PLAY FOR MONEY
    • PLAY FOR POINTS WITH NO MONETARY PAYOUT OR RISK
  – CARDS
  – STOCKS
TYPES OF GAMBLING

• INTERNET
  – EARLY STAGES OF DEVELOPMENT WITH LESS THAN 1% OF TOTAL GAMBLING ACTIVITY
ODDS OF WINNING

- MEGA MILLION LOTTERY JACKPOT
  - 1 IN 76,275,360
- LOTTO JACKPOT
  - 1 IN 45,075,474
- PICK 10 JACKPOT
  - 1 IN 8,911,711
- WIN 4 LIFE SCRATCH OFF JACKPOT
  - 1 IN 5,292,000
WHERE IS GAMBLING?

• IN 1978, ONLY 2 STATES LEGALIZED GAMBLING

• IN 2001, ONLY 3 STATES HAD NOT LEGALIZED GAMBLING
  – 38 STATES HAVE LOTTERIES
  – 35 STATES HAVE OFF – TRACK BETTING
EPIDEMIOLOGY OF GAMBLING

86% OF AMERICANS GAMBLE

IT IS IMPORTANT TO NOTE THAT MOST PEOPLE WHO GAMBLE, JUST LIKE MOST PEOPLE WHO DRINK, DO SO SAFELY AND WITHOUT ADDICTION
EPIDEMIOLOGY OF GAMBLING

- 86% OF AMERICANS GAMBLE
  - $500 TO $800 BILLION WAGED ANNUALLY IN THE U.S.
    - $2200 PER PERSON WAGERED PER YEAR IN THE US
  - PROBLEM GAMBLING IS HIGHER IN JURISDICTIONS WHERE LEGALIZED GAMBLING HAS BEEN AVAILABLE FOR LONG PERIODS OF TIME
- A SURVEY FROM LOUISIANA AND IOWA SUGGESTS THAT INCREASED AVAILABILITY ADD SUBSTANTIALLY TO AN UNDERLYING PREVALENCE RATE OF PROBLEM GAMBLING IN THE GENERAL PUBLIC
EPIDEMIOLOGY OF GAMBLING

• UP TO 5 MILLION AMERICANS MAY HAVE A SIGNIFICANT GAMBLING PROBLEM
  – 2 MILLION MAY BE PATHOLOGICAL GAMBLERS
  – 3 MILLION MAY BE PROBLEM GAMBLERS
• 10 MILLION ARE AT RISK OF BECOMING PROBLEM GAMBLERS
• COST OF PATHOLOGICAL AND PROBLEM GAMBLING HAS SOARED TO NEARLY HALF THE ANNUAL COST OF DRUG ABUSE IN THE US
  (E.GRINOLS “GAMBLING IN AMERICA: COSTS AND BENEFITS”)

* SEE PAGE 27 FOR DEFINITIONS
PERCEPTIONS OF GAMBLING

• CULTURAL
• SOCIAL ACTIVITY
  – NOT RECOGNIZED AS A POTENTIAL ADDICTION
• EASY MONEY
  – ADVERTISING SLOGANS
5 TYPES OF GAMBLERS

- SOCIAL GAMBLER
- PROBLEM GAMBLER
- PATHOLOGICAL (COMPULSIVE) GAMBLER
- ORGANIZED CRIME GAMBLER
- PROFESSIONAL GAMBLER
5 TYPES OF GAMBLERS

• SOCIAL GAMBLER
  – GAMBLES FOR ENTERTAINMENT AND A LITTLE EXCITEMENT
  – DEDICATES ONLY A SMALL AMOUNT OF LEISURE TIME
  – GAMBLING IS NOT GIVEN EXCESSIVE EMPHASIS
5 TYPES OF GAMBLERS

• PROBLEM GAMBLER
  – DEDICATES MORE TIME, THOUGHTS AND MONEY TOWARDS GAMBLING

• PATHOLOGICAL GAMBLER
  – UNCONTROLLABLE PREOCCUPATION AND URGES TO GAMBLE
  – GAMBLING IS THE MOST IMPORTANT THING IN THEIR LIVES
5 TYPES OF GAMBLERS

• ORGANIZED CRIME GAMBLER
  – LAUNDERS ILLEGAL GAMBLING REVENUE AT RACE TRACKS, CASINOS AND THROUGH LOTTERY WAGERING

• PROFESSIONAL GAMBLER
  – MAKES LIVING THROUGH GAMBLING
  – BETS IN A CONTROLLED WAY
  – HANDLES LOSSES WELL
  – DOES NOT LET GAMBLING INTERFERE WITH NORMAL ACTIVITIES
GAMBLING TYPES

• ACTION GAMBLING
  – PRIMARILY AT GAMES OF PERCEIVED “SKILL”
  – BELIEVE THEY CAN “BEAT THE HOUSE” OR OTHER INDIVIDUALS BY DEVELOPING A SYSTEM
  – PREFERRED GAMES
    • POKER
    • DICE
    • CARDS
    • HORSE/DOG RACING
    • SPORTS BETTING

• ESCAPE GAMBLING
  – PRIMARILY AS A WAY TO ESCAPE LIFE’S CHALLENGES
  – OFTEN IN A HYPNOTIC STATE WHILE GAMBLING
  – DOES NOT GAMBLE TO BEAT THE HOUSE OR OTHERS
  – PREFERRED GAMES
    • BINGO
    • SLOT MACHINES
    • VIDEO POKER
    • LOTTERY
    • SCRATCH-OFFS
PATHOLOGICAL GAMBLING

• DEFINITION
  – A PROGRESSIVE DISEASE
  – AN INDIVIDUAL WHO HAS A PSYCHOLOGICALLY UNCONTROLLABLE PREOCCUPATION WITH AN URGE TO GAMBLE
    • RESULTING IN DAMAGE TO VOCATIONAL, FAMILY AND SOCIAL INTERESTS
  – CHARACTERIZED BY A CHRONIC AND PROGRESSIVE INABILITY TO RESIST THE IMPULSE TO GAMBLE
  – AN IMPULSE CONTROL DISORDER IN THE DSM
  – TYPICALLY A MALE 21 – 55 YEARS OLD
PATHOLOGICAL GAMBLING DIAGNOSIS
IN THE DSM
(MUST MEET 5 OUT OF 10 CRITERIA)

1. INCREASE BETS TO SUSTAIN THRILL
2. EXHIBITS AGITATION WHEN CUTTING BACK
3. CHASES LOSSES
4. LIES TO CONCEAL ACTIVITY
5. FINANCES BETS THROUGH ILLEGAL ACTS
6. JEOPARDIZES SIGNIFICANT RELATIONSHIPS
7. RELIES ON FINANCIAL BAILOUT
8. FAILS IN EFFORT TO CONTROL OR STOP
9. THINKS CONSTANTLY ABOUT GAMBLING
10. PREOCCUPIED WITH GAMBLING
THE SCIENCE

• PATHOLOGICAL GAMBLING IS THOUGHT TO BE AS A RESULT OF THE DYSFUNCTION OF THE SEROTONIN, NORADRENERGIC AND DOPAMINERGIC SYSTEMS
  – NOREPINEPHRINE (AROUSAL)
    • NOREPINEPHRINE IS INCREASED IN THE BRAIN OF PATHOLOGICAL GAMBLERS
  – DOPAMINE (REWARD)
    • DYSREGULATED DOPAMINE NEUROTRANSMISSION (STROJANOV ET AL. *BIOL PSYCH* 2003)
  – SEROTONIN (COMPULSIVITY)
THE SCIENCE

• NO SPECIFIC GENE IS ASSOCIATED WITH PATHOLOGICAL GAMBLING (PG)

• PG SUBJECTS DISPLAY A DECREASED ACTIVITY IN THE FRONTAL AND ORBITOFRONTAL CORTEX, BASAL GANGLIA AND THALAMUS (POTENZA ET AL ARCH GEN PSYCH 2003)

• SIMILAR NEUROPATHOLOGY AS SEEN IN OBSESSIVE COMPULSIVES AND ADDICTIVE DISORDERS (CAVEDINI ET AL BIOL PSYCH 2002)
GENDER DIFFERENCES

• POTENZA ET AL AM J PSYCH
  – MALES
    • YOUNGER
    • CARDS
    • SPORTS
    • LOANS AND BOOKIES
  – FEMALES
    • OLDER
    • LOTTERY AND SLOTS
    • CREDIT CARD DEBT
NYS PREVALENCE RATES

• 1996 STUDY
  – 7.3% OF NEW YORKERS ARE IDENTIFIED AS HAVING A LIFETIME PREVALENCE OF PROBLEM GAMBLING
    • IN 1996, THIS WAS THE HIGHEST RATE IN THE NATION
  – 3.6% OF NEW YORKERS ARE IDENTIFIED AS HAVING CURRENT PROBLEM GAMBLING
    • IN 1996, THIS WAS THE SECOND HIGHEST RATE IN THE NATION
NATIONAL ADOLESCENT REVIEW

• GAMBLING BEGINS AT AGE 12
• 1.5% OF TEENS AGE 16-17 CAN BE CLASSIFIED AS “PROBLEM OR PATHOLOGICAL GAMBLERS”
• 2% CAN BE CLASSIFIED AS “AT - RISK”
• MANY FAMILIES OF PATHOLOGICAL GAMBLERS SUFFER FROM A VARIETY OF FINANCIAL, PHYSICAL, AND EMOTIONAL PROBLEMS
  – DIVORCE
  – DOMESTIC VIOLENCE
  – CHILD ABUSE OR NEGLECT
NATIONAL ADOLESCENT REVIEW

• CHILDREN OF PATHOLOGICAL GAMBLERS ARE MORE LIKELY TO ENGAGE IN DELINQUENT BEHAVIORS
  – SMOKING
  – DRINKING
  – USING DRUGS

• CHILDREN OF PATHOLOGICAL GAMBLERS ARE AT INCREASED RISK OF DEVELOPING PROBLEM OR PATHOLOGICAL GAMBLING
1997 NYS SURVEY

• AGE 12 – 17
  – 86% SAID THEY HAD GAMBLED LIFETIME
  – 15% SAID THEY HAD GAMBLED ON A WEEKLY BASIS
  – DESPITE LEGAL RESTRICTIONS

ADOLESCENTS WHO HAD GAMBED REPORTED:
  • 1/3 OF ADOLESCENTS PURCHASED LOTTERY TICKETS
  • 9% WAGERED AT DOG/HORSE TRACKS
  • 6% HAD PLAYED QUICK DRAW
  • 5% HAD WAGERED AT A CASINO
OLDER ADULTS

• MCNEILLY ET AL
  – BINGO IS THE MOST COMMON ON–SITE SOCIAL ACTIVITY IN SENIOR RESIDENCES
  – TRIPS TO A CASINO WERE MOST COMMON DAY TRIP
  – 16% OF SENIORS TOOK PART IN CASINO DAY TRIPS AT LEAST ONCE PER MONTH
IN PRIMARY CARE SETTINGS

- 6.2% of patients meet the criteria of problem or pathological gamblers.
- These patients have an increased incidence of:
  - Insomnia
  - Irritable bowel syndrome
  - Peptic ulcer disease
  - Hypertension
  - Migraines
THREE PHASES OF PATHOLOGICAL GAMBLING

• WINNING PHASE
• LOSING PHASE
• DESPERATION PHASE
THREE PHASES OF PATHOLOGICAL GAMBLING

- WINNING PHASE
  - THE SEARCH FOR ACTION
    - WINS ENHANCE SELF-ESTEEM AND EGO
    - LOSSES ARE RATIONALIZED AS BAD LUCK OR POOR ADVICE
    - THE GAMBLER WILL FREQUENTLY DESCRIBE “THE BIG WIN”
THREE PHASES OF PATHOLOGICAL GAMBLING

• WINNING PHASE
  – OCCASIONAL GAMBLING
  – FREQUENT WINNING
  – EXCITEMENT PRIOR TO AND WITH GAMBLING
  – INCREASED AMOUNTS OF BETS
  – FANTASIES ABOUT WINNING
  – “THE BIG WIN”
  – UNREASONABLE OPTIMISM
THREE PHASES OF PATHOLOGICAL GAMBLING

• LOSING PHASE
  – THE CHASE
    • LOSSES BECOME MORE FREQUENT
    • SELF ESTEEM IS JEOPARDIZED
    • GAMBLER BORROWS MONEY TO “GET EVEN”
    • HIDES LOSSES AND LIES ABOUT WHERE THE MONEY WENT
THREE PHASES OF PATHOLOGICAL GAMBLING

• LOSING PHASE
  – GAMBLING ALONE
  – THINKING ONLY OF GAMBLING
  – CAN’T STOP BORROWING MONEY
    • LEGAL/ILLEGAL
  – CARELESS WITH SPOUSE/FAMILY
  – DELAY IN PAYING DEBTS
  – UNHAPPY HOME LIFE
  – UNABLE TO PAY DEBTS
  – BRAGGING ABOUT WINS
  – PROLONGED EPISODES OF LOSING
  – LOSING TIME FROM WORK
  – PERSONALITY CHANGES
  – BAILOUTS
THREE PHASES OF PATHOLOGICAL GAMBLING

• DESPERATION PHASE
  – HITTING BOTTOM
  • BECOMES OBSESSED WITH GETTING EVEN
  • WITHDRAWALS FROM FAMILY BANK ACCOUNTS
  • SECRET LOANS
  • PANICS AT THE THOUGHT THAT THE GAMBLING ACTION WILL END IF THE CREDIT OR BAILOUTS STOP
  • ILLEGAL ACTIVITIES TO SUPPORT GAMBLING
    – ARRESTS
THREE PHASES OF PATHOLOGICAL GAMBLING

• DESPERATION PHASE
  – HITTING BOTTOM
    • SEVERE MOOD SWINGS
    • REMORSE
    • BLAMING OTHERS
  – ROCK BOTTOM
    • HOPELESSNESS
    • SUICIDAL IDEATIONS OR ATTEMPTS
    • ARRESTS
    • DIVORCE
    • ALCOHOL/DRUG INVOLVEMENT
    • EMOTIONAL BREAKDOWN
    • WITHDRAWAL SYMPTOMS
WITHDRAWAL SYMPTOMS IN PATHOLOGICAL GAMBLERS

- CRAVING  91%
- RESTLESS/IRRITABLE  87%
- INSOMNIA  50%
- HEADACHE  36%
- DIGESTIVE PROBLEMS  34%
- WEAKNESS  27%
- PALPITATIONS  26%
- SHAKES  19%
- MUSCLE ACHES  17%
- BREATHING DIFFICULTY  13%
- SWEATS  12%
- CHILL/FEVER  6%
UNIQUE CHARACTERISTICS OF PATHOLOGICAL GAMBLING

- GAMBLING IS A “HIDDEN” ADDICTION
- AS LONG AS THERE IS MONEY, OVERDOSE IS NOT POSSIBLE
- GAMBLING IS NOT USUALLY PERCEIVED AS A DISORDER
- FEW RESOURCES AVAILABLE FOR THOSE AFFECTED
UNIQUE CHARACTERISTICS OF PATHOLOGICAL GAMBLING

- GAMBLING CAUSES TREMENDOUS FINANCIAL PROBLEMS
- PATHOLOGICAL GAMBLERS CAN USUALLY FUNCTION AT WORK
- GAMBLING PREVENTION MESSAGE IS NOT AS EASILY ACCEPTED AS A DRUG PREVENTION MESSAGE
PATHOLOGICAL GAMBLING

• OFTEN OCCURS IN CONJUNCTION WITH OTHER BEHAVIORAL PROBLEMS
  – SUBSTANCE ABUSE
  – MOOD DISORDERS
  – PERSONALITY DISORDERS

*NATIONAL GAMBLING IMPACT STUDY & 1999 NATIONAL PREVALENCE STUDY
PATHOLOGICAL GAMBLING

• 76% OF PATHOLOGICAL GAMBLERS HAD A MAJOR DEPRESSIVE DISORDER WITH RECURRENT EPISODES IN 28%

• SUICIDE RISK IS HIGH (17-24%)
PATHOLOGICAL GAMBLERS

• MORE LIKELY THAN NON-PATHOLOGICAL GAMBLERS TO REPORT THAT THEIR PARENTS WERE PATHOLOGICAL GAMBLERS

• RESEARCH SUGGESTS THAT THE EARLIER A PERSON BEGINS TO GAMBLE, THE MORE LIKELY HE/SHE IS TO BECOME A PATHOLOGICAL GAMBLER

*NATIONAL GAMBLING IMPACT STUDY & 1999 NATIONAL PREVALENCE STUDY
PATHOLOGICAL GAMBLING AND SUBSTANCE ABUSE

• ESTIMATES SHOW THAT BETWEEN 30% AND 50% OF CLIENTS SEEKING TREATMENT FOR PROBLEM GAMBLING HAVE A CO-EXISTING ALCOHOL AND/OR SUBSTANCE ABUSE DISORDER
PATHOLOGICAL GAMBLING AND SUBSTANCE ABUSE

• NYS COUNCIL ON PROBLEM GAMBLING SURVEY 1986 – 1996
  – MALE PROBLEM GAMBLERS ARE MORE LIKELY THAN FEMALE PROBLEM GAMBLERS TO USE ALCOHOL ON A WEEKLY BASIS AND TO HAVE USED ILLICIT DRUGS IN THE PAST YEAR
PATHOLOGICAL GAMBLING AND SUBSTANCE ABUSE

• NYS COUNCIL ON PROBLEM GAMBLING SURVEY 1986 – 1996
  – PROBLEM GAMBLERS AGE 21 – 29 WERE MORE LIKELY THAN OLDER PROBLEM GAMBLERS TO USE ALCOHOL ON A WEEKLY BASIS
  – PROBLEM GAMBLERS AGE 18 – 20 WERE MORE LIKELY THAN OLDER PROBLEM GAMBLERS TO USE MARIJUANA ON A WEEKLY BASIS
PATHOLOGICAL GAMBLING AND SUBSTANCE ABUSE

• MANY CLIENTS NOTE THAT THE REASON THEY ARE ABLE TO MAINTAIN ABSTINENCE FROM THEIR ALCOHOL/DRUG PROBLEM IS BECAUSE THEY HAVE REPLACED IT WITH GAMBLING

• CLIENTS REPORT THAT WHILE IN TREATMENT FOR THEIR ALCOHOL/DRUG PROBLEM, NO ONE SCREENED THEM OR ASKED THEM IF THEY GAMBLED OR FELT THEY HAD A PROBLEM WITH THEIR GAMBLING
PATHOLOGICAL GAMBLING AND SUBSTANCE ABUSE

• HALL ET AL
  – 84% RATE OF UNEMPLOYMENT IF SUBSTANCE ABUSE AND GAMBLING PROBLEM
  – 49% RATE OF UNEMPLOYMENT WITH ONLY A SUBSTANCE ABUSE PROBLEM
  – 62% HISTORY OF INCARCERATION IF SUBSTANCE ABUSE AND GAMBLING PROBLEM
  – 34% HISTORY OF INCARCERATION WITH ONLY SUBSTANCE ABUSE PROBLEM
PATHOLOGICAL GAMBLING AND SUBSTANCE ABUSE

• RESEARCH INSTITUTE ON ADDICTIONS (RIA 2003)
  – IF CURRENT ALCOHOL DEPENDENCE DIAGNOSIS 16.3 TIMES MORE LIKELY TO HAVE CURRENT GAMBLING PROBLEM
PATHOLOGICAL GAMBLING AND SUBSTANCE ABUSE

• 84% OF PATIENTS WHO ARE SUBSTANCE USERS AND PATHOLOGICAL GAMBLERS HAVE A DIAGNOSIS OF NICOTINE DEPENDENCE
• ONSET OF PATHOLOGICAL GAMBLING PRECEDED ONSET OF COCAINE DEPENDENCE IN 72% OF PATIENTS
• ONSET OF PATHOLOGICAL GAMBLING PRECEDED ONSET OF OPIATE DEPENDENCE IN 44% OF PATIENTS
• LEDGERWOOD AND DOWNEY IN ADDICT BEHAVIOR 2002 FOUND THAT PATH. GAMBLERS IN NTP’S WERE MORE LIKELY TO USE COCAINE THROUGHOUT TREATMENT AND DROP OUT AT A HIGHER RATE THAN NON-GAMBLERS
DIFFERENCES BETWEEN SUBSTANCE ABUSE AND PATHOLOGICAL GAMBLING

• NO SATURATION POINT FOR A PATHOLOGICAL GAMBLER
• NO URINE SCREEN/BREATHALYZER FOR A PATHOLOGICAL GAMBLER
• BAILOUTS – EASY ACCESS TO MONEY
• CHASING LOSSES
• NO DIFFERENTIAL BETWEEN ABUSE AND DEPENDENCE IN THE GAMBLING DIAGNOSIS
• WARNING SIGNS ARE HIDDEN AND THE PATHOLOGICAL GAMBLER OFTEN ENTERS TREATMENT MUCH LATER IN THEIR PROGRESSION
ASSOCIATED PROBLEMS

• PATHOLOGICAL GAMBLERS MAY ALSO HAVE:
  – HISTORY OF SUICIDAL IDEATIONS/ATTEMPTS
  – FELONY CONVICTIONS
  – SPOUSE AND CHILD ABUSE
  – UNEMPLOYMENT

MUCH LIKE MANY OF THE SUBSTANCE USING PATIENTS
THE PATHOLOGICAL GAMBLER’S SPOUSE

• PROFILE
  – POOR SELF IMAGE
  – UNREALISTIC EXPECTATIONS
  – CARETAKER
  – FAMILY HISTORY OF GAMBLING AND/OR SUBSTANCE ABUSE
  – ANGRY, RESENTFUL, DEPRESSED
  – OVERACHIEVER
  – OFTEN THE PRIMARY PERSON WHO BAILS THE GAMBLER OUT
  – WORKS MANY JOBS TO MAKE ENDS MEET
DIAGNOSIS

• NO BLOOD TEST AVAILABLE
• NO URINE TEST AVAILABLE
• NO BREATH TEST AVAILABLE
• NO SALIVA TEST AVAILABLE
• NO GENETIC MARKERS TO DATE
DIAGNOSIS

• SEVERAL SCREENING TESTS ARE AVAILABLE
  – LIE/BET QUESTIONNAIRE
  – SOUTH OAKS GAMBLING SCREEN (SOGS)
  – WARNING SIGNS IN ADOLESCENTS
LIE/BET QUESTIONNAIRE

• Have you ever had to lie to people important to you about how much you gambled?
• Have you ever felt a need to bet more money?

*Yes to either indicates a pathological gambling tendency.
1. Indicate which of the following types of gambling you have done in your lifetime. For each type, select one of the answers provided (Not at all; Less than once a week; Once a week or more)

A. Played cards for money
B. Bet on horses, dogs or other animals
C. Bet on sports
D. Played dice games for money
E. Went to the casino (legal or otherwise)
F. Played the numbers or bet on lottery.
G. Played bingo
H. Played the stock, options, and/or commodities market
I. Played slot machines, poker machines, etc
J. Bowled, shot pool, played golf or some other game of skill for money.
K. Pull tabs or “paper” games other than lotteries
L. Some form of gambling not listed above (please specify) __________

2. What is the largest amount you have ever gambled in any one day?
   ___Have never gambled  ____$1 or less  ____More than $1, less than 10
   ___More than $10 up to $100  ____Between $100 and $1000
   ___Between $1,000 and $10,000  ____More than $10,000
3. **Check which of the following people in your life has(or had) a gambling problem?**
   - Father
   - Mother
   - A brother or sister
   - A grandparent
   - My spouse or partner
   - My child(ren)
   - Another relative
   - A friend or someone else important in my life

4. **When you gamble, how often do you go back another day to win back money you lost?**
   - Never
   - Some of the time (less than half the time) I lost
   - Most of the time I lost
   - Every time I lost

5. **Have you ever claimed to be winning money gambling but weren’t really? In fact you lost.**
   - Never
   - Yes, less than half the time I lost
   - Yes, most of the time

6. **Do you feel you have ever had a problem with gambling?**
   - No
   - Yes, in the past, but not now
   - Yes

7. **Did you ever gamble more than you intended to?**
   - Yes
   - No

8. **Have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?**
   - Yes
   - No
SOUTH OAKS GAMBLING SCREEN

9. Have you ever felt guilty about the way you gamble or what happens when you gamble? ___Yes ___No
10. Have you ever felt like you would like to stop gambling but didn’t think you could? ___Yes ___No
11. Have you ever hidden betting slips, lottery tickets, gambling money, or other signs of gambling from your spouse, children, or other important people in your life? ___Yes ___No
12. Have you ever argued with people you like over how you handle money? ___Yes ___No
13. (If you answered ‘yes’ to question 12): Have money arguments ever centered on your gambling? ___Yes ___No
14. Have you ever borrowed from someone and not paid them back as a result? ___Yes ___No
15. Have you ever lost time from work (or school) due to gambling? ___Yes ___No
16. If you borrowed money to gamble or to pay gambling debts, where did you borrow from? (check ‘Yes’ or ‘No’ for each)
A. from household money
B. from your spouse/significant other
C. from other relatives
D. from banks, loan companies or credit unions
E. from credit cards
F. from loan sharks
G. you cashed in stocks, bonds, etc
H. you sold personal or family property
I. you wrote bad checks.
J. you have (had) a credit line with a bookie
K. you have (had) a credit line with a casino
SOUTH OAKS GAMBLING SCREEN

SCORING

• ADD UP THE NUMBER OF QUESTIONS WHICH SHOW AN “AT RISK” RESPONSE
  – Question 1, 2 and 3 not counted
  – Question 4 Most of the time I lose, OR, Every time I lose = 1 point
  – Question 5 Yes, less than half the time I lost, OR, Yes, most of the time = 1 point
  – Question 6 Yes, in the past but not now, OR Yes = 1 point
  – Question 7 Yes = 1 point
  – Question 8 Yes = 1 point
  – Question 9 Yes = 1 point
  – Question 10 Yes = 1 point
  – Question 11 Yes = 1 point
  – Question 12 Does not count
  – Question 13 Yes = 1 point
  – Question 14 Yes = 1 point
  – Question 15 Yes = 1 point
  – Question 16(a) Yes 16(b) Yes 16(c) Yes 16(d) Yes 16(e) Yes 16(f) Yes 16(g) Yes 16(h) Yes 16(i) Yes = 1 point for each yes (question j and k not counted)

• Total number of boxes checked ______
• 1 to 4= potential pathological gambler/problem gambler
• 5 or more= probably pathological gambler
GAMBLING WARNING SIGNS IN ADOLESCENTS
NJ COUNCIL ON COMPULSIVE GAMBLING

• UNEXPECTED ABSENCES FROM SCHOOL
• SUDDEN DROP IN GRADES
• CHANGE IN PERSONALITY (IRRITABILITY, IMPATIENCE, SARCASM)
• CARRIES A LOT OF MONEY
• EXAGGERATED DISPLAY OF MONEY OR OTHER MATERIAL POSSESSIONS
• AN UNUSUAL INTEREST IN PUBLICATIONS HAVING TO DO WITH SPORTS, HORSE RACING, LOTTERIES
• INTENSE INTEREST IN GAMBLING CONVERSIONS
• GAMBLING LANGUAGE IN HIS/HER CONVERSATIONS (BET, POINT SPREAD)
• SPORTS GAMBLING TICKETS AND OR LOTTERY TICKETS IN THEIR POSSESSION
• PLAYING OF GAMBLING TYPE GAMES ON THE INTERNET

* SOME OR ALL OF THE ABOVE COULD BE INDICATIVE OF OTHER PROBLEMS OR NO PROBLEM AT ALL
TREATMENT

• PAUCITY OF EVIDENCE FOR EFFECTIVE TREATMENT
  – ONLY 4 RANDOMIZED CONTROLLED TRIALS
TREATMENT

• SEVERAL MODALITIES HAVE BEEN TRIED
  – INPATIENT UNITS
    • 9 MONTH RESIDENTIAL PROGRAM IN ENGLAND (GORDON HOUSE ASSOC.)
  – SELF HELP FELLOWSHIP PROGRAMS (GAMBLERS ANONYMOUS)
  – COGNITIVE BEHAVIORAL METHODS
  – PHARMACOLOGIC INTERVENTIONS
TREATMENT

• ADDICTION MODEL INCLUDES
  – STRUCTURED INTERVENTION
  – EXTERNAL MOTIVATION INITIALLY
  – PSYCHOEDUCATION
  – EARLY ABSTINENCE
  – LONG-TERM SUSTAINED ABSTINENCE
  – 12-STEP SELF-HELP GROUPS
  – RELAPSE PREVENTION
  – BEHAVIORAL CHANGE MODALITIES
TREATMENT

• GAMBLERS ANONYMOUS
  – FOUNDED IN 1957 BY JIM W.
  – OPEN AND CLOSED MEETINGS
    • NOT MANY OPEN MEETINGS SECONDARY TO LEGAL CONCERNS
  – PRESSURE GROUP
    • NOT FOUND IN AA
    • GAMBLER AND SPOUSE MEET WITH OLDTIMERS AND BRING IN INCOME AND DEBT INFORMATION
      – THE GROUP WORKS OUT A BUDGET TO REPAY THOSE OWED MONEY
  – 12 STEPS
    • SIMILAR TO AA
1. We admitted we were powerless over gambling - that our lives had become unmanageable.

2. Came to believe that a Power greater than ourselves could restore us to a normal way of thinking and living.

3. Made a decision to turn our will and our lives over to the care of this Power of our own understanding.

4. Made a searching and fearless moral and financial inventory of ourselves.
5. Admitted to ourselves and to another human being the exact nature of our wrongs.
6. Were entirely ready to have these defects of character removed.
7. Humbly asked God (of our understanding) to remove our shortcomings.
8. Made a list of all persons we had harmed and became willing to make amends to them all.
9. Make direct amends to such people wherever possible, except when to do so would injure them or others.
10. Continued to take personal inventory and when we were wrong, promptly admitted it.

11. Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.

12. Having made an effort to practice these principles in all our affairs, we tried to carry this message to other compulsive gamblers.
TREATMENT

• PSYCHOTHERAPEUTIC APPROACHES
  – EMPHASIZE THE REASONS FOR GAMBLING AND CONFRONT THOSE REASONS TO END THE BEHAVIOR
• COGNITIVE TREATMENT FOCUSES ON CHALLENGING AND CORRECTING THE PATIENT’S ERRORS IN THINKING
  – FOR EXAMPLE, EXPLORING AND UNDERSTANDING THE ILLUSION OF CONTROL OVER CHANCE EVENTS
• BEHAVIORAL THERAPY CONSIDERS PG TO BE A LEARNED BEHAVIOR AND RELIES ON TECHNIQUES SUCH AS SYSTEMIC EXPOSURE OR DESENSITIZATION AND SKILL DEVELOPMENT
  – RELAXATION TECHNIQUES IS AN EXAMPLE
TREATMENT

• PSYCHOTHERAPEUTIC APPROACHES
  – COGNITIVE BEHAVIORAL THERAPY COMBINES ELEMENTS FROM BOTH APPROACHES
  • IN A UNIVERSITY OF MINNESOTA STUDY, ALMOST HALF OF THE PATHOLOGICAL GAMBLERS SAID THAT ADVERTISEMENTS ON TV, RADIO AND BILLBOARDS COULD TRIGGER THE DESIRE TO GAMBLE AND THAT IDENTIFYING AND ADDRESSING THESE TRIGGERS IS ONE KEY TO SUCCESSFUL RECOVERY
TREATMENT

• PHARMACOTHERAPY
  – RELATIVELY NEW CONCEPT FOR GAMBLING TREATMENT
  – FEW CONTROLLED STUDIES EXIST
TREATMENT

• PHARMACOTHERAPY
  – NALTREXONE
    • INHIBITS DOPAMINE IN THE REWARD AREA (VENTRAL TEGMENTAL AREA, BASAL BRAIN REGION)
  – NALTREXONE TRIAL (GRANT JE, KIM SW ANN CLIN PSYCH 2002)
    • 50 PATIENTS
    • 90.9% RESPONDED TO MEDICATION
    • A QUESTION WAS RAISED - COULD BETTER RESULTS BE OBTAINED WITH SSRI’S AND NALTREXONE IN COMBINATION

NOTE: RESTRICT USE OF OVER THE COUNTER ANALGESICS AS THE COMBINATION OF CAN CAUSE AN ELEVATION IN LIVER FUNCTIONS
TREATMENT

• PHARMACOTHERAPY
  – NEFAZODONE TRIAL
    • SEROTONIN ANTAGONIST
      – HYPOTHESIS IS ABNORMAL SEROTONIN FUNCTION IS THE PATHOPHYSIOLOGY OF POOR IMPULSE CONTROL
    • STARTED AT 50MG/D IN 14 SUBJECTS AND INCREASED TO A MAXIMUM OF 500 MG/D
      – 12 FINISHED THE STUDY
        » 75% IMPROVED ON SEVERAL SCALES (OBSESSIVE, DEPRESSION, ANXIETY)

(PALLANTI S ET AL. J CLIN PSYCH 2002)
TREATMENT

• PHARMACOTHERAPY
  – CITALOPRAM TRIAL
    • GIVEN TO 15 SUBJECTS
    • PATIENTS REPORTED IMPROVEMENT IN ALL GAMBLING AREAS (13 OF 15 MUCH IMPROVED)
      – NUMBER OF DAYS SPENT GAMBLING
      – AMOUNT OF MONEY LOST GAMBLING
      – PREOCCUPATION WITH GAMBLING
      – URGES TO GAMBLE

(ZIMMERMAN ET AL. J CLIN PSYCH 2002)
TREATMENT

• PHARMACOTHERAPY
  – PAROXETINE TRIAL
    • RANDOMIZED, DOUBLE BLIND PLACEBO CONTROLLED
    • UP TO 60 MG/D
    • STATISTICALLY GREATER RESPONSE (DECREASE IN GAMBLING ACTIVITY) IN PAROXETINE GROUP
(KIM ET AL J CLIN PSYCH 2002)
TREATMENT

• PHARMACOTHERAPY
  – LITHIUM AND VALPROATE
    • 42 NON BIPOLAR PATH. GAMBLERS
    • NOT DOUBLE BLIND PLACEBO CONTROLLED
    • 60% RESPONDED IN EACH MEDICATION GROUP
  (PALLANTI ET AL J CLIN PSYCH 2002)
TREATMENT

• WHICH PATH WILL GAMBLERS COMPLETE TREATMENT?
  – IT WAS FOUND THAT A HIGHER LEVEL OF IMPULSIVITY AT INTAKE WAS ASSOCIATED WITH A HIGHER DROP OUT RATE

(LEBLOND ET AL. BR J CLINICAL PSYCHOL 2003)
SPECIAL CASE

• PATIENTS TAKING PRAMIPEXOLE, AN ANTI-PARKINSON MEDICATION DEVELOPED GAMBLING PROBLEMS
  – VERY SMALL NUMBER (9 OUT OF 529)
  – NOT SURE OF THE ETIOLOGY
ADDITIONAL INFORMATION AND REFERENCES

• IN ADDITION TO REFERENCES IN THE WORKBOOK:
  – NATIONAL COUNCIL ON PROBLEM GAMBLING
    (www.ncpgambling.org)
  – NY COUNCIL ON PROBLEM GAMBLING
    (www.nyproblemgambling.org)