Stress, Risk Taking, Alcohol/Drugs, and Parents as Partners
What Every CU Parent Should Know

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Let’s Talk About Me!

- **Role**
  - Assistant Vice Chancellor for Health and Wellness
  - Director, Wardenburg Health Center
- **Training**
  - Internist and Psychiatrist
- **Family**
  - One son just graduated from college
- **Particular Interests**
  - Alcohol and other drug abuse
  - Prescription stimulant abuse
  - Marijuana
  - Sexual assault
  - Intersection between alcohol and sexual behavior among college students
An Ambitious Agenda

- Health and wellness
- College stressors
- Risk taking and setbacks
- Parents as partners
- Alcohol and other drugs
- Take home points
Health and Wellness Team

- Medical
- Psychological
- Psychiatric
- Alcohol and other drugs
  - Harm reduction
- Smoking
- Nutrition
- Sexual assault

- Health is more than simply the absence of illness
  - Help students develop positive life skills and lifestyles
    - Positive coping mechanisms
    - Healthy relationships
    - Recreation/sports
      - Sports medicine
      - Fitness
Stress at College
Optimal Stress Curve

Performance vs. Stress (Emotional Arousal)

Maximum Performance

Muscle Analogy:
No use = Atrophy
Overuse = Tear

Low    Moderate    High
Optimal Stress Curve

- **Good Stress**
  - Under Involvement
  - Boredom
  - Frustration
  - Rust-Out
  - Effective
  - Creative
  - Decisive
  - Alert
  - Stimulated

- **Distress**
  - Reduced Efficiency
  - Reduced Alertness
  - Overload
  - Difficulty Concentrating
  - Indecisive
  - Irritable
  - Anxious, Confused
  - Fatigue
  - Exhaustion
  - Burn-Out

**Performance**

- **High**
- **Low**

**Stress (Emotional Arousal)**
Stress and College

- Academics
- Financial
- Social environment
- Relationships
- Health
## CU Student Overall Stress Level (Past 12 Months)  
### 2011 ACHA NCHA Survey

<table>
<thead>
<tr>
<th>Stress Level</th>
<th>CU Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>No stress</td>
<td>0.6%</td>
</tr>
<tr>
<td>Less than average stress</td>
<td>6.3%</td>
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<tr>
<td>Average stress</td>
<td>37.2%</td>
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<tr>
<td>More than average stress</td>
<td>45.5%</td>
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<tr>
<td>Tremendous stress</td>
<td>10.5%</td>
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Risk Taking and Normal Development
Experimentation/Risk Taking

• Natural (and mostly healthy) developmental stage

• Frontal part of brain not fully developed
  
  • Thinking, problem solving, decision making, judgment, impulse control

• Poor decision making

• May lead to overly dangerous risk taking behavior
Taking Risks

- College students should stretch and challenge themselves, experiment, and take risks
  - Developmentally appropriate and healthy when not taken to extremes (e.g., seriously future-foreclosing behavior)
Importance of Setbacks, Disappointments, and Failure

- Failure is inevitable and represents a great learning opportunity
  - Hard to truly grow without setbacks or disappointments
  - Learning how to cope with failure is critical to preparing for life
    - Problem solving skills, poise and grace under fire, stress management, resilience
    - Development of true self-esteem through real competence, achievement, and earned self-confidence
Important Influences on College Students
Peers

- The desperate need to fit in
  - Direct peer pressure
  - Indirect peer pressure
    - Perceptions (right or wrong) of what other students are doing
In adolescents and young adults, shift to increasing influence of peers and friends is normal and healthy, but ...

Parents, for many college students, come in at no less than #2 in terms of influence
Your Changing Relationship with Your Son or Daughter
Your role as parents is still important, but your tactics and tools will likely need to change

- Carrots and sticks
  - Praise and encouragement
    - Pride in your child
  - Anger and disappointment
Communication with Your Son or Daughter

- Parent Handbook
  - Provides suggestions about how to
    - Initiate and cultivate a real dialogue
    - Deal with communication challenges
    - React effectively to what you hear from your son or daughter
    - Nurture your changing relationship
    - Talk about alcohol and other difficult topics
Incoming college freshmen whose parents implemented Parent Handbook interventions had fewer
don't know if this is a word error or not and drinking tendencies can't be as a separate bullet point

- Drinking tendencies
- Drunkenness tendencies
- Binge drinking
- Drinking consequences

Incoming college freshmen women whose parents implemented Parent Handbook interventions were

- Less likely to transition from nondrinker to drinker
- Less growth in drinking over the freshman year

Parents Matter!

- When first semester college freshmen spent more than 30 minutes communicating with their parents on Thursdays, Fridays, or Saturdays, they ...
  - Consumed fewer (20% less) drinks
  - Were 32% less likely to engage in heavy drinking
  - Had a reduction in BAC of 0.02%

  - Small, Morgan, Abar, Maggs: Protective effect of parent-college student communication during the first semester of college. JACH 59(6):547-553, 2011
Direct effect
- Parents express their concern about excessive drinking or suggest harm reduction strategies

Indirect effect
- Parents may remind students of shared values, internalized norms, or importance of longer-term goals vs. short-term gratification
The DARK Side!!
The Good News

- Many CU students do not drink alcohol, smoke marijuana, or use other drugs; many CU students are not sexually active
  - CU students can be successful, make friends, and have fun without engaging in such behaviors
  - Most important advice to your child: “Be who you are, not who you think others want you to be.”
    - Be authentic and find your authentic micro-culture
  - Will explore the “Dark Side” but also try to be sensitive to different students and different communities at CU
“Do you talk to our sons and daughters about these issues?”
- Yes and no
- Repeatedly
Alcohol abuse is the single most dangerous health hazard on campus ... Period!!!
Nothing causes or is associated with more death or physical injury (to self and others), accidents, physical assault, sexual assault, unwanted/unprotected sex, academic failure, impaired relationships, damaged reputations, legal difficulties, property damage, or aggravation of town-gown relations!
Alcohol and Academic Success

- As a general rule, the more a college student drinks, the lower his or her GPA

- Important caveat:
  - Correlation does not prove causation!!
    - Drinking in itself does not necessarily cause poor academic performance
    - Other factors may underlie both behaviors
Alcohol and Sexual Assault

- Alcohol—not Rohypnol, GHB, Ketamine, or others—is the number one date rape drug!
- The majority of college men who perpetrate sexual assault and the majority of college women who are sexually assaulted have been drinking and many are intoxicated
  - Excess alcohol consumption increases the risk of sexual assault perpetration and victimization.
Alcohol and Sexual Assault

- College men and women need to be aware of the risks of sexual assault associated with alcohol consumption
  - BUT ... sexual assault is the responsibility of the perpetrator, not the victim
    - Victims are not “at fault” and must not be blamed for being sexual assaulted
    - If a woman does not give consent, it does not matter where she is, what she is wearing, what she is doing, or whether she has been drinking
Alcohol and “Opportunity Costs”

- Abuse of alcohol retards or prevents healthy psychological development
  - More adaptive coping mechanisms for stress, social anxiety, and failure
  - More appropriate avenues for having fun
The “College Effect”

- There is an increase in drinking behavior during the fall semester of the first year of college
- The course varies thereafter
Alcohol Use in College
What’s Changed?

- Percentage of college students who drink has **not** changed significantly over the past 50 years

- What has changed:
  - Not just “if,” and “how often,” but ...
    - How much
    - For what reason(s)
    - Concomitant consumption of other substances
    - Who
    - Degree of impairment of life activities and tasks
Extreme drinking

- Less beer; more hard liquor
  - Get drunk faster
  - Limit weight gain
  - Easier to hide

- Chugging and shots

- Pre-gaming or pre-partying
  - Especially before alcohol-free events (e.g., football games or going to bars when underage)

- Drinking to get “wasted” or “obliterated”
Alcohol with other substances

- Blood alcohol concentrations (BAC) required for fatal overdoses are lower when alcohol is combined with prescription drugs
  - Median postmortem BAC for alcohol overdose alone was 0.33%
  - Median postmortem BAC for combination of alcohol and Rx drug overdose was ~0.15%
    - ~4-5 drinks for a 130 pound woman
    - ~7 drinks for a 180 pound man
Alcohol Use in College
What’s Changed?

- Alcohol with other substances
  - Opioid pain relievers
  - Antianxiety and sleeping medications
  - Stimulant medication and energy drinks
    - Better “high”?
    - Enable consumption of large amounts of alcohol
Co-consumption of alcohol and energy drinks

- Canadian study
  - Drinking sessions without energy drinks: 4.7 drinks
  - Drinking sessions with energy drinks: 8.6 drinks (83% increase)
Co-consumption of alcohol and energy drinks

- Wake Forest study
  - Increased heavy episodic drinking in past 30 days: 3.8 vs. 6.4
  - Weekly drunkenness: 0.73 days/week vs. 1.4 days/week
  - Significantly higher prevalence of alcohol-related consequences including
    - Being taken advantage of sexually
    - Taking advantage of another sexually
    - Riding with an intoxicated driver
    - Being physically hurt or injured
    - Requiring medical treatment
Drinking by women
Percentage of college students who meet DSM criteria for alcohol abuse/dependence
Where Do Underage Students Get Alcohol?

- Fake IDs
- Borrowed legal IDs
- Of-age friends and acquaintances
CU has prevention, intervention, and treatment programs

- Education/prevention
- Harm reduction
- CAPS/PHP

Collaboration with:
- Offices of Student Conduct and Residence Life
- Boulder City and County
Talk regularly with your sons and daughters about ...
- Alcohol abuse
- Expectations, values, and long-term goals

Encourage them to ...
- Find themselves and be authentic
- Cultivate true friendships

Engage in pro-social activities
- Academics
- Community service
- Politics
- Sports
Marijuana Abuse
The Dope on Dope
A Potpourri of Pot
The World of Weed
Marijuana

- Second most abused substance after alcohol
- Utilization is high in Colorado, and especially Boulder County, with medical marijuana laws
  - Medical marijuana may not be used on campus
How dangerous is marijuana?

- Overall, it’s less dangerous than alcohol, but ...
- It’s not as benign as most students would like to believe
- Regular marijuana users are not getting their money’s worth at college
Marijuana
Short-Term Effects

- Distorted perception (e.g., time and space)
- Loss of coordination
- Memory and learning problems
- Trouble with thinking and problem-solving
- Occasional anxiety, fear, distrust, or panic
- Hallucinations and delusions
- Acute psychotic reactions
- Contamination (other drugs, fungi and other microorganisms, paraquat)
Marijuana
Long-Term Effects

- Same respiratory problems as tobacco smokers
  - Cough, lung infections, obstructed airways
- Immune dysfunction
- Sex hormone changes
  - Decreased testosterone leading to testicular shrinkage, loss of interest in sex, erectile dysfunction, loss of muscle mass, breast enlargement
- May increase risk of testicular cancer
- Association shown between chronic use and anxiety, depression, suicidal ideation, and schizophrenia
  - Not clear if marijuana causes, exacerbates, or used to self-medicate
- Possible prenatal effects
Marijuana Effects on Driving

- Preponderance of data suggests that marijuana consumption increases the risk of automobile accidents
  - Combination of alcohol and marijuana is even worse
    - Marijuana primarily affects highly automated behaviors (e.g., road tracking control)
    - Alcohol primarily affects more complex driving tasks requiring conscious control
Marijuana

Long-Term Effects

- Effects on daily life
  - Heavy use may impair physical and mental health, cognitive abilities, social life, and career status
  - Adverse impact on learning/memory can last for days or weeks after acute effects wear off
    - Daily marijuana use may result in suboptimal intellectual functioning all of the time
- Can be addictive
  - Withdrawal effects: irritability, sleeplessness, decreased appetite, anxiety, and drug craving
Prescription Drug Abuse
The abuse of prescription drugs, including pain killers, stimulants, sedatives, and tranquilizers now exceeds the abuse levels of practically all illicit drugs, with the exception of cannabis.”

- College student hierarchy of substance abuse
  - Alcohol
  - Marijuana
  - Prescription drugs
  - Everything else (including cocaine, ecstasy, heroin, LSD)
Most frequently misused

- Opioid pain relievers (OxyContin, Vicodin, Percocet)
- Anxiety relievers (Xanax, Ativan, Valium, Klonopin)
- Psychostimulants (Adderall and Ritalin) for ADHD
  ▪ Among college students, now #1 or #2 most abused

Sleep Medications

- Older: Halcion, Restoril, Dalmane, Pro-Som
- Newer: Ambien, Sonata, Lunesta
  ▪ Reduced risk of abuse and addiction
Prescription Medications
Sources and Diversion

- Begins with healthcare providers rather than manufacture, theft, online, or street dealer
- Friends/family are the primary proximate sources
- Many students are approached by peers to share, sell, or trade their legitimate Rx medications
  - Diversion of prescription medications is illegal and potentially dangerous
Prescription Medications

Risks

- Similarities between:
  - OxyContin/Vicodin and heroin
  - Adderall/Ritalin and cocaine
- Usage alone or in combination with alcohol or other substances
- A medication safe for one person may not be safe for another
  - Underlying medical/psychiatric conditions or pregnancy
  - Unknown use of other medications
CU’s Approach to Alcohol and Other Drugs

- Our approach is harm reduction
  - Education and prevention programs
  - Intervention and treatment
  - Student initiatives
  - Campus social and recreational activities
  - IMPACT Coalition
  - AACT: Campus-Community Coalition on AOD Abuse

- Parents are partners in education and prevention
  - Talk to your son or daughter!
    - Often!
    - Parent Handbook
Take Home Points
Take Home Points

- College students should and will stretch, experiment, challenge themselves, take risks
- Disappointment and failure are inevitable and, often, great learning experiences
- Encourage your son or daughter to ...
  - Find him/herself and be authentic
  - Find the right friends (don’t panic if it takes a while)
  - Engage in prosocial activities
- Parents matter—be appropriately involved