

BALANCE: an RCT of a Preconceptional Motivational Intervention to Reduce Drinking and Pregnancy risk among College Women



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Funded by CDC/AAMC

Presented to the First International
Conference on Prevention of FASD,
Edmonton, Alberta, CA, Sept. 24, 2013

13:30-15:00

Aims



- ❧ Conduct an epidemiological survey to determine how many college women are at risk for AEP due to risk drinking and ineffective contraception
- ❧ Conduct focus groups to learn women's own perceptions about drinking and ineffective contraception/STI risks
- ❧ Test a Motivational Interviewing plus Feedback intervention in an RCT against Information Only



Survey:

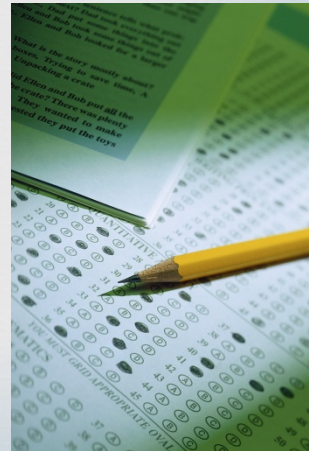
How Many College Women are At Risk?



- Female students aged 18-24, fertile
- 17 item Anonymous and voluntary survey
- Administered in person, by phone, or self-administered at student health center at Mid-Atlantic urban university

N=2012 Demographics:

- Mean age = 20.4 years
- 69% White, 24% Black
- 80% sexually active in past 90 days
- 9 seeking pregnancy/4 currently pregnant

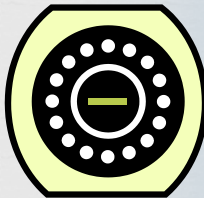


College Women's Risks in past 90 days

N=2012



- 23% (n=457) drinking 8+ /week
- 63% (n=1271) reporting a binge (5+)
- 80% (n=1603) reporting vaginal sex
- 18% (n=268) using contraception ineffectively
- 44% (n=878) ineffective/absent condom use
- 13% (n=261) at risk for pregnancy while drinking
at risk levels= AEP RISK
- 31% (N=618) at risk for STIs while drinking at risk
levels



What Relates to Pregnancy Risk?



❧ Ineffective contraception odds are **increased** by:

❧ risk drinking (OR 1.7, 1.2-2.4)

❧ barrier vs. hormonal contraception (OR 2.9, 2.1-4.1)

❧ partner deciding on contraception (OR 3.8, 1.5-9.8)

❧ Ineffective contraception odds are **decreased** by:

❧ being white (OR .51, .37-.69)

❧ using barrier AND hormonal contraception (OR .48, .32-.73)

❧ age of first contraception (OR .9, .82-.98).

STI exposure risk relates to:



- ❧ Ineffective/absent condom use odds are increased by:
 - ❧ Risk drinking (OR 1.9, 1.3-2.8)
 - ❧ Using condoms for STI prevention not contraception (OR 2.7, 1.5-5.0)
 - ❧ Partner deciding on contraception (OR 2.6, .9-7.7)



Focus Groups: What College Women Said



- They like malt liquor
- 1 drink = whatever size your drink is.
- Binge = “over your usual limit” NOT how many standard drinks
- Moderate drinking = Related to tolerance and avoiding drunkenness, not number of drinks
- Common use of birth control pills, but many missed pills
- Condoms used as backup or more often for STI protection
- More concern about pregnancy than STI’s because “most STI’s can be treated.”
- Guy should supply condom
- Not sure if sex is consensual when a woman is drunk



College Women Considerations



- Students NOT presenting for treatment but recruited for study
 - Don't see behaviors as problematic
 - Readiness for change might be low
 - Intervention must address readiness for change and motivation
- Reality: Many would terminate pregnancy, so less AEPs carried to term.
 - Prevent any negative consequence of drinking and having unprotected sex
 - Intractable binge drinking problem makes a dual-focused intervention desirable

Balance Intervention



Intervention used the Motivational Interviewing counseling style (Miller & Rollnick, 2002) with Feedback

- Explore and resolve ambivalence about changing & increase perceived discrepancy between current behaviors and overall goals by providing feedback
- Counselor Strategies: express empathy; provide norms-based feedback, manage resistance without confrontation; support self-efficacy
- Counselor Techniques (open-ended questioning; reflective listening; summarizing; affirming)

Focused on dual behaviors – Alcohol Use and Contraceptive Behaviors

Reduced to one session from 4 session CHOICES study

Balance RCT Components



- ❧ Informed Consent
- ❧ Give Assessment Battery
 - CORE Interview
 - FFI
 - OQ.45
 - BSI
- ❧ Randomization
- ❧ **CONTROL GROUP:** give brochure, answer questions
- ❧ Schedule 1 and 4M Follow-ups

INTERVENTION GROUP:

- ❧ TLFB
- ❧ Psycho-education and Decisional Balance (pros and cons for both behaviors)
- ❧ Temptation and Confidence Scales
- ❧ BREAK (compute feedback)
- ❧ Provide feedback using MI
- ❧ Complete stage rulers (importance, confidence, readiness)
- ❧ Complete MY Plan
- ❧ Give info about optional GYN appt.
- ❧ Give SEQ
- ❧ Schedule 1 and 4M Follow-ups

Balance RCT Sample

Baseline Characteristics (n=228)



	<u>Intervention</u>	<u>Information</u>
Age 1 st contraception	16.2	16.3
# of partners/90 days	1.5	1.4
Age 1 st full drink	15.7	14.9
Most drinks/day	7.9	7.4
# of binges in 30 days	4.1	4.3
Ever had Pap	92%	84%
Ever treated for STI	18%	18%
Ever Illicit drug use	82%	81%
White	67%	73%
Black/A.A.	17%	15%
Asian/Pacific Isle	10%	5%
At risk for AEP	100%	100%

no between groups differences

BALANCE Outcomes: 1M Follow-up

(N=199)



Intervention (94)

Information(105)

Drinks/week	9.5	11.4
# of Binges	2.9*	4.4
Most drinks/day	5.9*	7.1
Effective contraception	64%*	48%
Not at risk for AEP	74%*	54%

Being in control group doubled odds of 1M AEP risk

BALANCE Outcomes: 4M Follow-up

N=202



In past 3 months...

	<u>Intervention₍₉₄₎</u>	<u>Information₍₁₀₅₎</u>
Drinks/week	8.7	9.8
# of Binges (90 days)	6.5	7.7
Most drinks/day	6.0*	8.0
Effective contraception	68%	56%*
Not at risk for AEP	75%*	62%

Ceperich & Ingersoll, 2011

Balance RCT Conclusions



- High rate of risky drinking and unprotected sex in this sample of college women
- College women unaware of standard drinks, risky drinking guidelines
- A one-session motivational intervention targeting dual behaviors with brief follow-ups is feasible with college women

Balance RCT Conclusions



- Women in both conditions show decreased drinking and increased contraception at follow-ups (with significantly more in the intervention group)
- Differences between groups lessen at 4-month follow-up; rate of AEP risk is still significantly less in the Balance than the control group at 4M

Balance RCT Implications



- *Preventing AEP* may be less relevant for college women than negative impact of drinking and unprotected sex
- Binge drinking is highly entrenched in college women
- Decrease in very high rates of binge drinking is a success from a harm reduction perspective

Balance RCT Implications



- Most women motivated for and (ineffectively) using contraception-- May be easier to influence contraception improvement than drinking reduction
- One session is feasible; boosters might help maintain changes