



Project Success

testing the efficacy of a dual focus
transtheoretical model-based
motivational enhancement intervention +
jail-to-community transition assistance
to prevent alcohol-exposed pregnancy
after a jail term

National Institute on Drug Abuse Conference: Children of Parents in the Criminal
Justice System: Children at Risk. Bethesda, Nov. 6, 2006

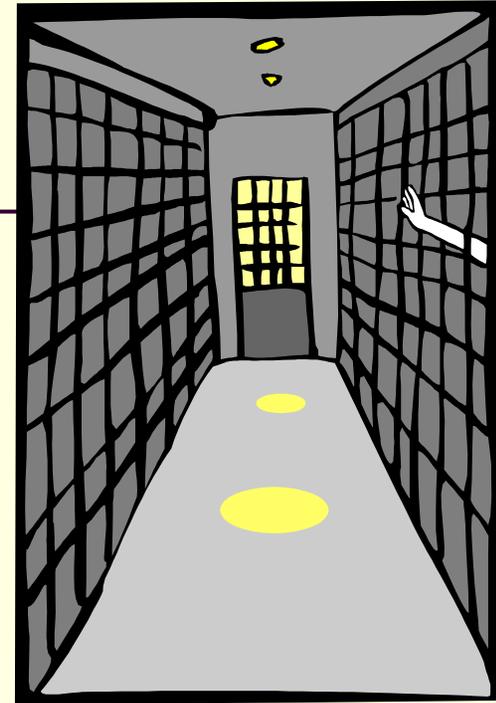
Acknowledgements

- Mary Marden Velasquez, Co-PI
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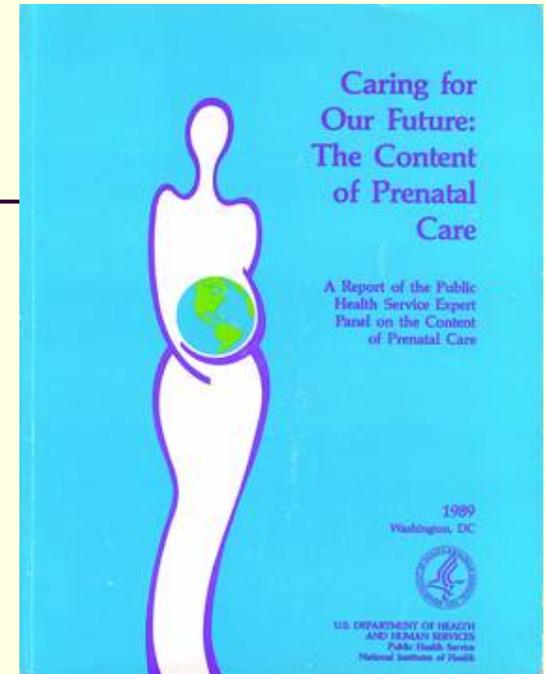
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Harris County, Plane State, Brazoria County,
Ft. Bend County, and Montgomery County jails



Background

- Half of U.S. pregnancies are unplanned (49%); women with an unplanned pregnancy report more binge drinking (*Naimi^{et al} 03*)
- Women who stop drinking when they notice they are pregnant may still have exposure of ≥ 6 wks or more (*Floyd^{et al} 99*); 50% of pregnant woman reported drinking in the 3 mos before recognizing the pregnancy (*Floyd & Sidhu, 04*)
- “Preconception planning” was introduced by the Expert Panel on the Content of Prenatal Care (89) and adopted by FAS-prevention scientists at CDC 9 yrs ago when they initiated Project **CHOICES** a cooperative research project focused on non-pregnant women *at risk* of an alcohol-exposed pregnancy (AEP)



Project **CHOICES**

- **Epidemiology study** in 6 settings: highest prevalence of AEP—20% among jail inmates (and alcohol and drug treatment center residents) in Houston
- 5x higher than low income primary care clinics (Virginia & Florida); 11x higher than U.S. females aged 18-44
- **Feasibility study** in the jail: 100% consent among at risk inmates
- High participation for in jail sessions; lower for free world (with incentives) – see table
- 6 months after release, 33% reported less drinking + increased birth control; 13% reduced drinking only; 23% increased birth control only

Treatment Time before/after release from jail	\$	%
Session 1 2 wks before	\$10	100
Session 2 1 wk before	\$10	100
Session 3 ≤3 wks <u>after</u>	\$20	41
Session 4 ≤6 wks <u>after</u>	\$30	35
Planned Parenthood 1-4 wks <u>after</u>	\$20	41

Objective

- To reduce the risk of an alcohol-exposed pregnancy—AEP—after a jail term among previously at risk jail inmates
- The criterion variable is

Risk of Alcohol Exposed Pregnancy

		Risk Drinking		Yes = ≥ 1 occurrence of ≥ 5 drinks in a day or ≥ 7 drinks in a week
		Yes	No	
Unsafe Sex	Yes	At Risk	Not at Risk	
	No	Not at Risk	Not at Risk	

Yes = ≥ 1 occurrence of vaginal sex without effective birth control

TimeLine Follow-Back

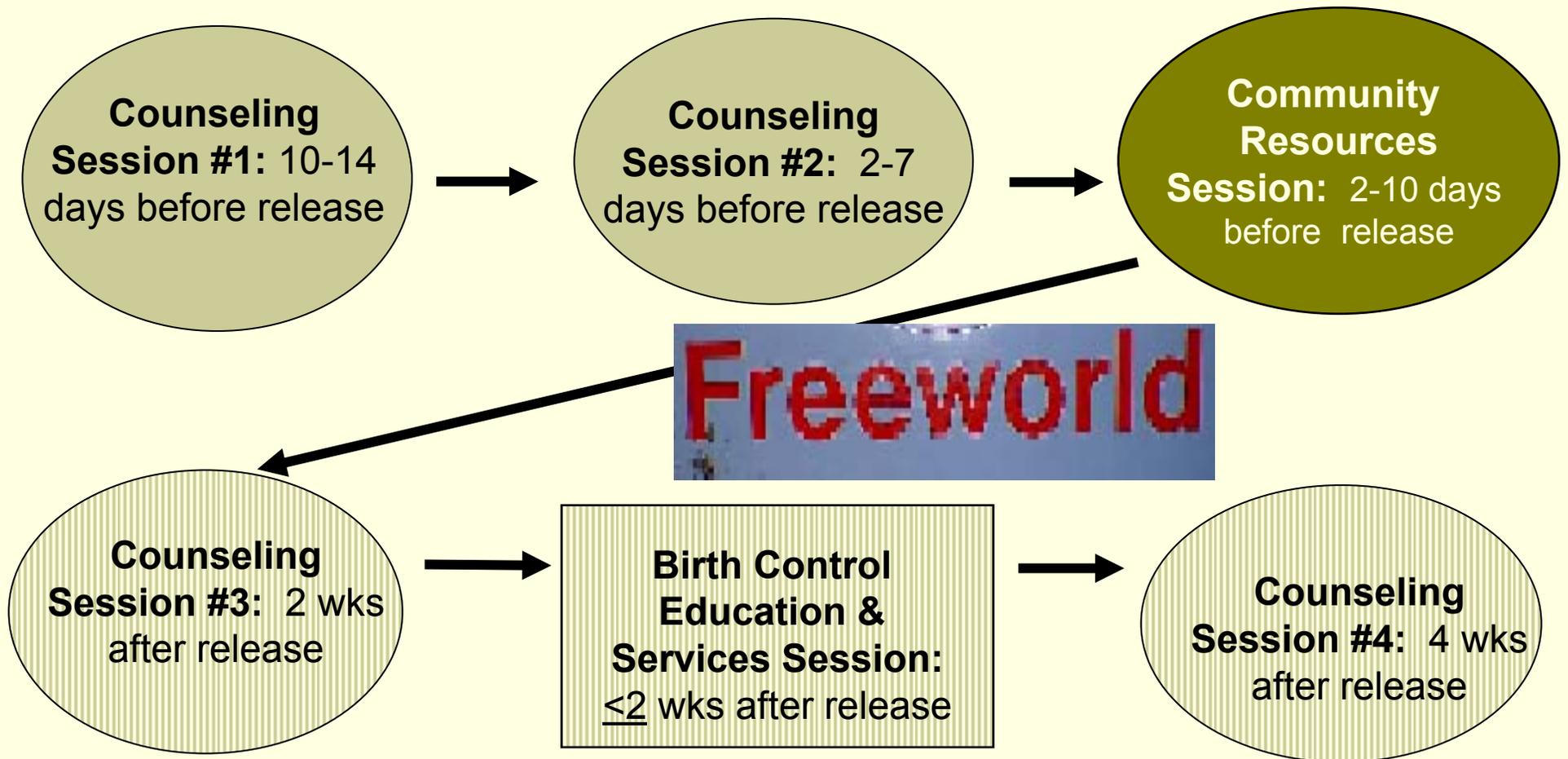
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
ETOH____ M#__BC__ O#__BC__						
8	9	10	11	12	13	14
ETOH____ M#__BC__ O#__BC__						

If not in the community, circle the date and code as follows: **I**: Incarcerated, **H**: Hospital, **R**: Residential Tx, or **DT**: Detox; Drinking (**ETOH**) Write beverage, quantity (Vaginal) sex - **M**: Main Partner **O**: Other partners **BC**: Birth Control – Fill in as follows: **C**: Condoms **P**: Pills **D**: Diaphragm **I**: IUD **S**: Spermicide **N**: Norplant **DP**: Depo-Provera **0**: None **EC**: Emergency contraception Other: (write in method)

Method

- Study Design: RCT with all consenting, eligible women from 5 Houston area jails
- Follow-up: Personal interviews 3- and 6-months after release from jail
- Data collectors blinded to study assignment
- Cash reimbursement for time and expenses:
 - free world intervention sessions (\$30 each)
 - follow-up interviews (\$35 and \$50)

Project SUCCESS Intervention



Motivational Enhancement Counseling Sessions

Motivational Interviewing Principles

- ▶ **Express empathy**
- ▶ **Develop discrepancy**
- ▶ **Avoid argumentation**
- ▶ **Roll with resistance**
- ▶ **Support self-efficacy**

Counseling Sessions

Session 1:

- Introduced ME approach and rationale
- Administered Readiness, Importance and Confidence rulers for alcohol, birth control to elicit “change talk”
- Discussed release - encouraged thinking about any changes she might want to make in her life, including alcohol and birth control practices
- Discussed alcohol use prior to jail; explored how drinking affected her work, family, social relationships, etc.

Session 1...

- ❏ Explored her thoughts and feelings about future pregnancies using Seriousness and Susceptibility rulers
- ❏ Discussed the idea of a “promise to self “ to postpone pregnancy for ≥ 6 months or until she is in a position to make a longer-term decision about a baby

Session 2:

- ❏ Presented “Daily Journal” and taught to self-monitoring of drinking, sex, and birth control use
- ❏ Presented and discussed her personalized feedback report -alcohol use, pregnancy risk, health risks before coming to jail
- ❏ Discussed contraceptive methods currently available and provided printed materials on each method
- ❏ Discussed the family planning visit and problem-solved any barriers to attendance
- ❏ Reviewed scaling rulers completed in Session 1

Jail-to-Community Transition Assistance

- “One Woman’s Release Story”
- Counseling session #2 emphasized planning for release, taxi voucher
- Release folder: taxi voucher, copies of materials, reminder cards for free world sessions

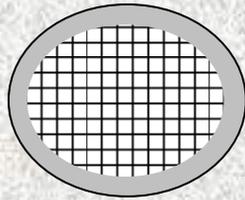
+

(all study participants)

bus tokens, coins for ‘phone, condoms, information on domestic violence and emergency contraception, condoms, appt cards for follow-up interviews, the study toll free number, and donated personal items



One Woman's Release Story



EXIT
To Freeworld
Take Stairs
Down

- Written with inmates
- Describes temptations, ease of slipping into the “old life”
- Emphasizes the importance of making a plan

“Calm down Monica, and try to get some sleep” my friend Gina said. That was easy for her to say. I felt both nervous and excited all at the same time. I only had 26 hours to go, and then I'd be free.

I only had 26 hours to go, and then I'd be free.

I lay there in the dark and thought about my plans for the future. Since I'd been locked up, I had plenty of time to think about my past mistakes.

Gina said I should write my plans down on paper so they would seem more real to me. I thought it would be a good idea to make more than one plan in case the first one doesn't work. I found some old scraps of paper and made a diary that I still have today. I wrote about how I was going to turn my life around.

Pre-release Community Resources Group Session with an MSW

Recommendations individualized - based on requests and needs, e.g.

- *ID*
- *GED*
- *job training*
- *housing*
- *CHIPS, "Goldcard"*
- *Dental*
- *Clothing*

Multiple basic needs referred to "case management"

INFORMATION AND REFERRAL
SESSION I/D DOCUMENTATION

Client Name _____ Date 27 Feb 02

ID # _____

Type of Resources:	Referral Agencies:
<u>Transportation</u>	<u>Project Rio, Compass, Career of Recovery</u>
<u>AA</u>	<u>St. Joseph's</u>
<u>Employment</u>	<u>Labor World; Project Rio; TRC;</u>
	<u>Compass, Career of Recovery; Goodwill</u>
<u>ID</u>	<u>Compass; First Pres Church</u>
<u>Washing</u>	<u>Main Street; VOA</u>
<u>Education</u>	<u>applying for fin aid, wanting to go</u>
	<u>to a technical school. Needs</u>
	<u>catalogue</u>
<u>Vision</u>	<u>Good Neighbor, UT Vision, ^{TX Comm} for the blind</u>
<u>Dental</u>	<u>UT</u>

Comments:
Will live temporarily 2 parents off Homestead.
Horticulture ⁴⁵² Housekeeping, cashier, volunteer work are his
job skills. 5th felony conviction. Has a
GED.

Cathy Crouch, LMSW-ACP 27 Feb 02
Signature Date

Session 3:

- Elicited woman's feelings about her progress now that she has been released
- Checked in family planning visit (Did she attend? What was the outcome of the visit? Birth control choice? If she did not attend, what are the barriers? Explored possible ways to overcome any barriers)

Session 3...

- ❏ Reviewed Daily Journal for both behaviors. Discussed attempts to change and any barriers encountered since the last session. Explored and debriefed risky situations (i.e., did she have unprotected sex? Had she been drinking heavily?)
- ❏ Focused primarily on the target behavior that was not discussed as thoroughly in Session 2. (Here, in particular, used ME skills to increase motivation as appropriate)
- ❏ Revisited and revised scaling rulers, goal statements and change plans based on the woman's experiences since the in-jail sessions

Birth Control Education & Services Session

Appointment _____



Planned Parenthood
3601 Fannin

Gloria
713-831-6564

- Individualized birth control education
- Well-woman exam (Pap smear, clinical breast exam)
- STD testing
- HIV testing
- Birth control services for 6 months

Session 4:

- ❑ Reviewed and summarized the previous sessions
- ❑ Reviewed goals and change plans
- ❑ Problem solved, reinforced goals, revisited temptation and confidence graphs, worked toward strengthening commitment to change
- ❑ Discussed plans for the future

Inclusion Criteria

- Intervention-related:
 - Release to the community in ≥ 2 weeks, ≤ 6 weeks
 - Staying around Houston (intervention period)
 - Not in protective custody or the jail mental health unit
- Risk-related
 - Age < 44 years (> 18)
 - Fertile
 - ≤ 3 months before jail
 - vaginal sex without birth control
 - drank alcohol ≥ 5 drinks per day or ≥ 7 drinks per week
 - Not pregnant or planning a pregnancy < 6 months after release
- Research-related
 - Staying around Houston (follow-up period)
 - Could provide ≥ 2 locators

Enrollment (Eligibility and Recruitment)

Assessed for eligibility after prescreening for release date, age 18-44 n=3546

Group screening n=3276

Not interested
n=270

No risk last 3
mos in free
world:

- **No alcohol**
n=1217
- **No sex** n=548

Post-re-
lease plan:

- **Moving**
n=697
- Holds,
etc. n=329

No
English
n=188

Pregnancy:

- **Pregnant
now** n=137
- **Planning a
baby ≤6
mos,** n=398

Protected
now:

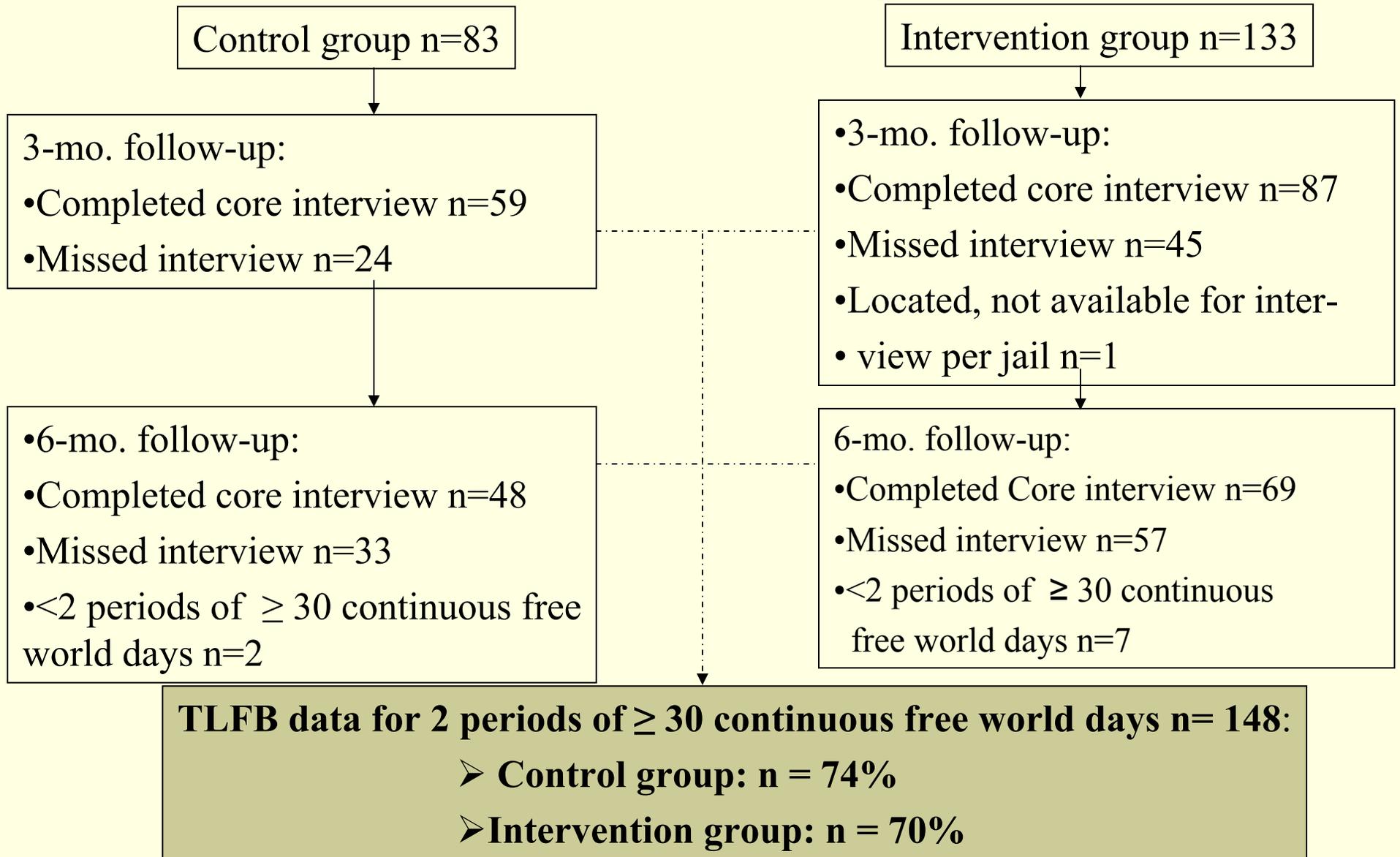
- **Tubal
ligation**
n=984
- Depo
n=127
- IUD,
Norplant
n=69

Infertile:

- Doctor told her
she isn't fertile
n=246
- Hysterectomy
n=239
- Menopause
n=158
- No ovaries
n=94

Eligible for individual screening n=441

Follow-up



Participant Socio-demographic Profile (n=216)

- Average age 31 years (SD=7)
- 47% <12th grade, no GED
- 42% Black, 12% Hispanic, 47% White
- 51% married, living with a partner
- 43% <\$20,000 annual income

Participant Risk Profile

■ Lifetime

- Physically abused = 60%
- Median number of months incarcerated = 9 mo.
- Inpatient drug treatment = 50%
- Inpatient mental health treatment = 15%

■ Year before jail

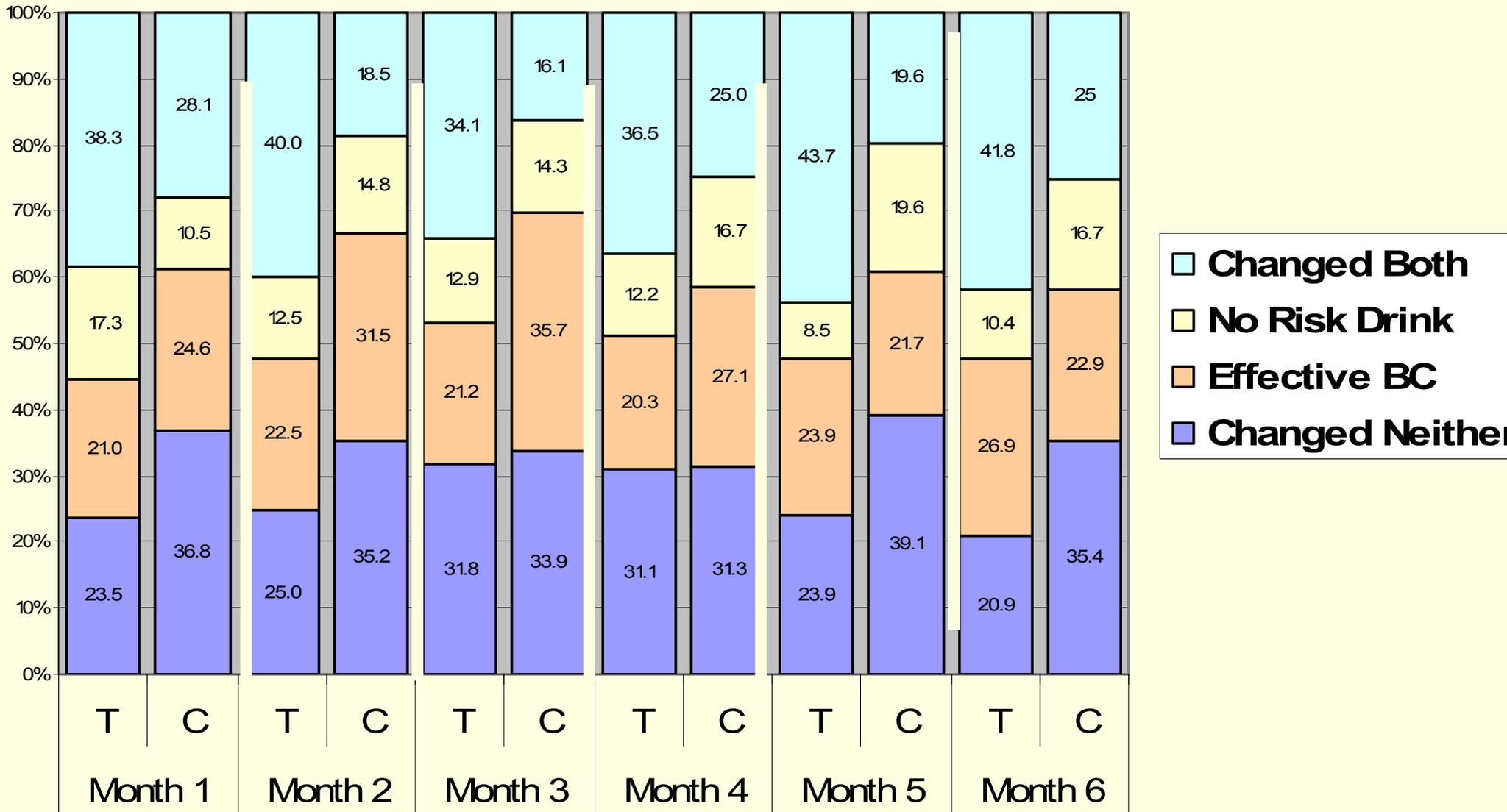
- Homeless ≥ 2 days = 34%
- Met drug dependence criteria = 80%
- Treated for a sexually transmitted infection = 26%

Intervention Exposure

Jail	
Session 1	99 %
Session 2	92 %
Release Folder	94 %
Taxi Voucher	36 %
Community Resources Session	79 %
Free world	
Session 3	39 %
Birth Control Education & Services Session	40 %
Session 4	31 %



Proportions in 4 Outcome Categories by Condition and Time from Release

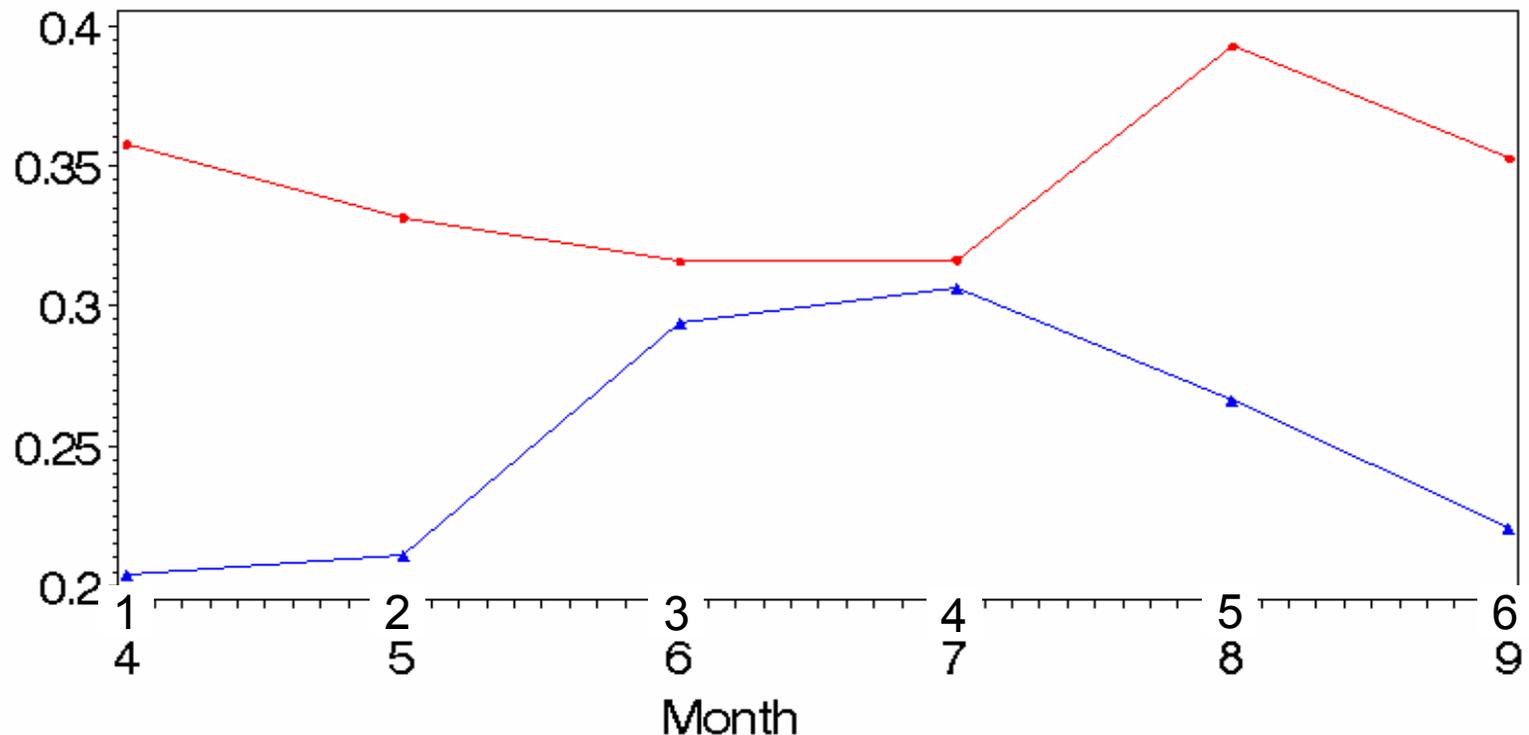


Logistic Regression - Generalized Estimating Equation Approach

Risk of Alcohol Exposed Pregnancy

Modeling $p(\text{Alcohol Exposed Pregnancy})$

Probability



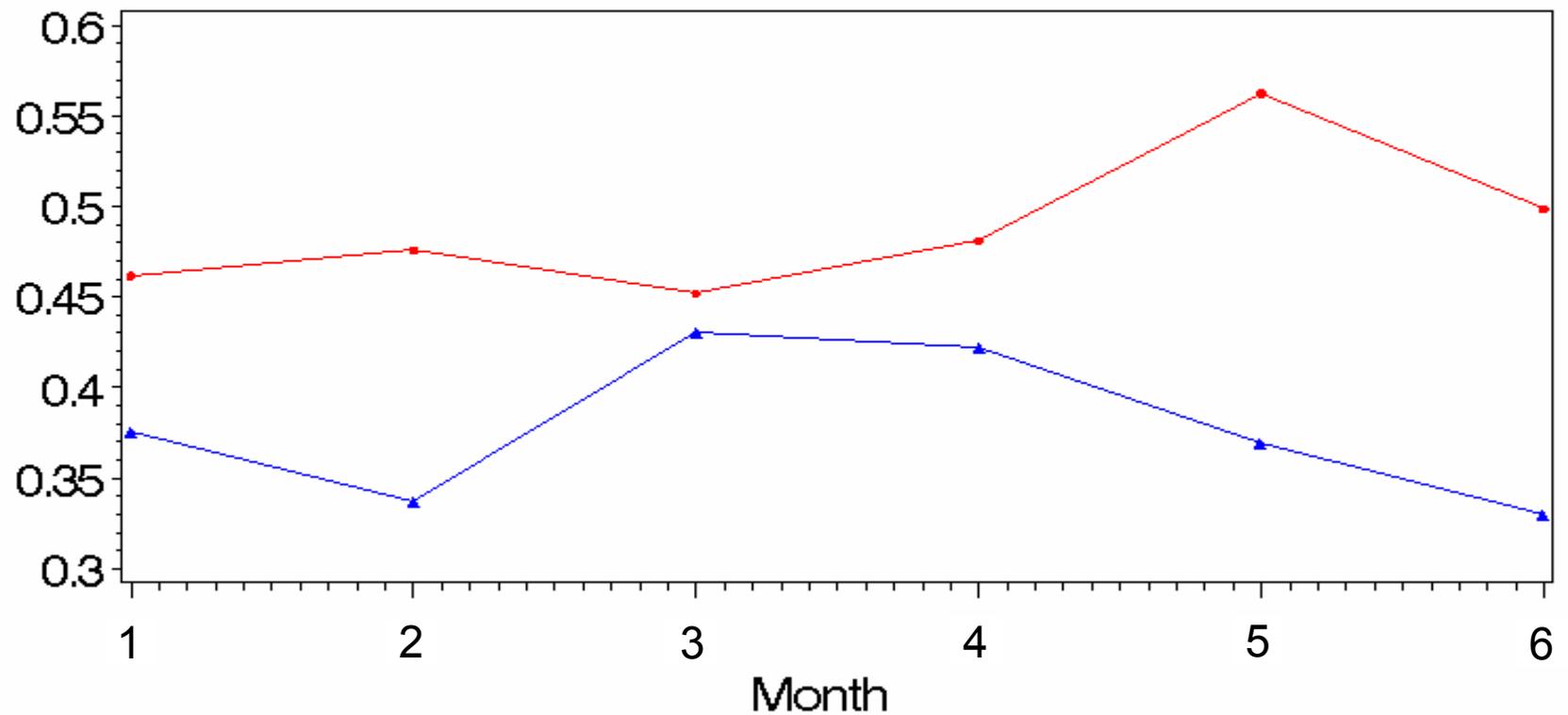
Condition ●●● Control

▲▲▲ Treatment

Unsafe Sex

Modeling $p(\text{Unsafe Sex})$

Probability



Condition



Control

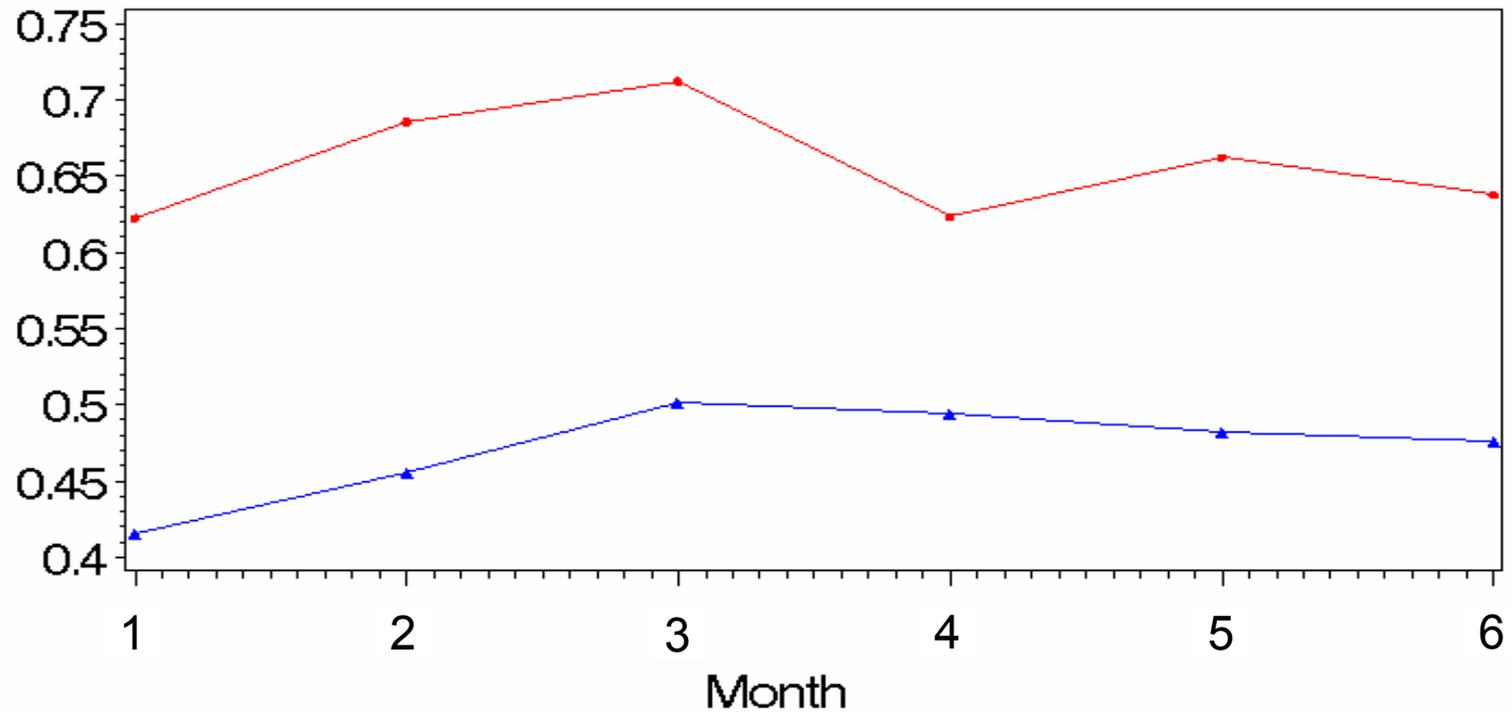


Treatment

Risk Drinking

Modeling $p(\text{Risk Drinking})$

Probability



Condition



Control



Treatment

Risk Drinking

≤4 drinks in a day and ≤7 drinks in any one week

Wald Statistics For Type 3 GEE Analysis

Source	DF	Chi-Square	Pr > ChiSq
CONDITION	1	7.31	0.0069
TIME	5	9.99	0.0754
CONDITION*TIME	5	2.08	0.8386

Contrast Estimate Results

Label	Estimate	Standard Error	α	Confidence Limits		Chi Square	Pr > ChiSq
Condition	0.8381	0.3100	0.05	0.2306	1.4457	7.31	0.0069
Exp(Con- dition)	2.3121	0.7167	0.05	1.2594	4.2447		

Some Conclusions

- There is need for intervention programs—
 - drugs *and* alcohol
 - STI/HIV prevention *and* contraception
 - 10% planning to get pregnant
- Jail release conditions may almost assure failure
- Women receptive to release planning; ME style welcome
- Overconfidence important challenge for treatment under restrained conditions; groups are natural next step
- Need to reach more women—upcoming release too restrictive in the chaos of jail
- Mandated tx programs-better conditions for intervention/evaluation; but, some groups, eg, Af American women excluded

Risk of Alcohol-Exposed Pregnancy

Wald Statistics For Type 3 GEE Analysis

Source	DF	Chi-Square	Pr > ChiSq
CONDITION	1	2.56	0.1099
TIME	5	5.01	0.4143
CONDITION*TIME	5	5.09	0.4045

Contrast Estimate Results

Label	Estimate	Std Error	α	Confidence Limits		Chi Square	Pr > ChiSq
Condition	0.4957	0.3101	0.05	-0.1121	1.1036	2.56	0.1099
Exp (Condition)	1.6417	0.5091	0.05	0.8940	3.0149		

Unsafe Sex

≥1 occurrences of vaginal sex without birth control

Wald Statistics For Type 3 GEE Analysis

Source	DF	Chi-Square	Pr > ChiSq
CONDITION	1	1.92	0.1654
TIME	5	3.18	0.6719
CONDITION*TIME	5	7.48	0.1872

Contrast Estimate Results

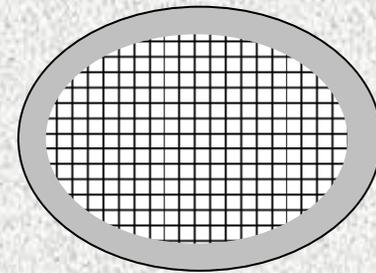
Label	Estimate	Standard Error	α	Confidence Limits		Chi-Square	Pr > ChiSq
Condition	-0.3984	0.2872	0.05	-0.9614	0.1645	1.92	0.1654
Exp (Condition)	0.6714	0.1928	0.05	0.3824	1.1788		



Preventing an Alcohol-exposed Pregnancy after a Jail Term

- Written with inmates
- Describes temptations, ease of slipping into the “old life”
- Emphasizes the importance of making a plan

One Woman's Release Story



EXIT

To Freeworld Take
Stairs Down

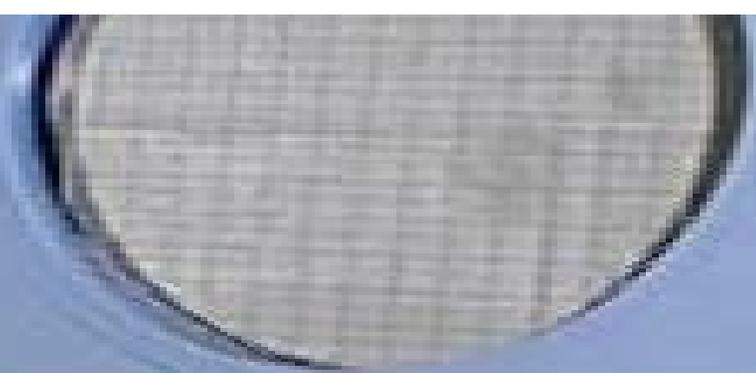
Jail-to-Community Transition Assistance



- “One Woman’s Release Story”
- Pre-release community resources group session with an MSW + resources list
- Counseling session 2 emphasized planning for release, taxi voucher
- Release folder: # taxi voucher, copies of materials, reminder cards for post-release sessions

+

(all) bus tokens, coins for phone, info on domestic violence & emergency contraception; appt cards for interviews; study toll free number, donated personal items



EXIT

To Freeworld Tall
Stairs Down



Background

- Over half of U.S. pregnancies are unplanned; among women who drink alcohol at risky levels the rate is higher--???
- Women who stop drinking when they recognize the pregnancy, exposure is still xx-xx weeks; if they wait until they start prenatal care, exposure is xx-xx
- *Preconception planning*, emphasized by the Expert Panel on the Content of Prenatal Care, was adopted by CDC FAS prevention scientists x years ago when they planned Project CHOICES, a feasibility study of intervention for women *at risk of* an alcohol-exposed pregnancy



Session 2... Discussed Temptation and Confidence profiles for both behaviors

