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Gender differences in association of parental and offspring help-seeking for alcohol problems and in effects of early adversity on abstinence

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Background

- **There is ample evidence for associations of parental alcohol problems with increased risk for early adversity and for alcohol problems in offspring. There has been little exploration, however, of associations of parental attempts at recovery from alcohol problems with adult offspring attempts at recovery. The current study examines these associations in data from a high risk family study of alcohol dependence.**

Anda et al, 2002; Lieb et al, 2002; Nelson et. al, 2002

Aims

1. Examine adult offspring adversity, help-seeking, and treatment by parental alcohol problem and help-seeking and treatment status
2. Test associations between offspring and parental help-seeking and treatment
3. Test association of offspring treatment type with longest continuous abstinence (lifetime)
4. Test moderation of treatment-abstinence association by early adversity

High-Risk Sample: COGA

- **Data are from the Collaborative Study on the Genetics of Alcoholism (COGA), a high risk family study of alcohol dependence. Probands were recruited from treatment settings and were required to meet DSM-III-R and Feighner criteria for alcohol dependence and to have first-degree family members available for interview. All subjects participated in a diagnostic interview, the Semi-Structured Assessment for the Genetics of Alcoholism (SSAGA), which assessed alcohol and drug dependence and psychiatric disorders.**

Bucholz et al, 1994; Nurnberger et al, 2004

Study Sample

- N=1103 (561 M, 542 F) siblings of probands from 591 case families who met lifetime criteria for 2 or more DSM-III-R alcohol dependence symptoms and who participated in the phase 2 interview, which included questions about childhood abuse and early home environment.
- Of these individuals, 962 had data on parental alcohol problems and help-seeking from direct interviews with parents. This subset was used to examine associations between parental and offspring help-seeking. 56% had at least one parent with 2 or more lifetime AD symptoms.

Predictor Variables

- **Parental help-seeking and treatment (Aims 1,2)**
- **Early adversity (Aim 4): Because childhood physical and sexual abuse were assessed at only 2 sites, we created an adversity variable based on abuse *or* poor relationship with parents. Childhood abuse and poor parental relationship were highly correlated (r = .68).**
- **Treatment type (Aims 3,4) was categorized into three groups: no treatment, self-help (AA) treatment only, and professional treatment (comprising inpatient and outpatient alcohol programs, with or without AA participation)**

Outcome Variables and Methods

- Offspring help-seeking and treatment were based on the questions “Have you ever brought up any problem you might have had with drinking with any professional?” and “Have you ever been treated for a drinking problem?”
  - Age at offspring first help-seeking and treatment were the dependent variables in Cox regressions testing associations of offspring and parental help-seeking and treatment (Aim 2)
- Abstinence is based on longest period, in months, without drinking since age at regular drinking (defined as once a month for at least 6 months)
  - Linear regression was used to test associations of treatment type with abstinence, and of moderation by history of early adversity (Aims 3,4)

Offspring Help-Seeking, Treatment, and Adversity, by Gender

	Men (N=561)	Women (N=542)
Help-seeking	42.3	37.1
Any treatment	48.3	34.3 **
Professional treatment	36.9	24.0 **
Self-help treatment only	11.2	10.3
Early Adversity	19.1	26.0 **

** p ≤ .01 gender difference

Offspring Demographics
by Parental Alcohol Problems and Help-Seeking

	Parental Alcohol Problems		
	No	Yes	
		Parental Help-Seeking	
		No	Yes
	(N=418)	(N=340)	(N=204)
Age, M (sd)	42.0 (7.7)	39.4 (7.6)	37.8 (6.9)
Ethnicity, %			
Caucasian	68.7	75.3	87.7
African American	22.7	15.9	10.8
Hispanic	6.0	5.0	1.5
Education, %			
Less than high school	14.6	10.9	9.3
College/Grad school	43.3	53.5	50.5
Marital status, %			
Married	47.8	49.1	48.5
Separated/Divorced	27.5	22.9	25.5
Hsehold Income < 20K, %	29.7	23.5	19.1

Offspring Early Adversity, Help-Seeking and Treatment
by Gender and Parental Alcohol Problems and Help-Seeking

		Parental Alcohol Problems	
	No Parent Alc.	No Help-Seeking	Help-Seeking
Early Adversity			
Male, %	**17.4**	**24.7**	**13.5**
Female, %	**25.4**	**31.4**	**20.4**
Help-Seeking			
Male, %	**43.3**	**43.3**	**43.4**
Female, %	**32.6**	**32.7**	**49.0**
Treatment			
Male, %	**46.8**	**52.2**	**48.0**
Female, %	**30.7**	**31.5**	**39.4**

Associations of Offspring and Parental Help-Seeking Differed by Gender

	HR (95% CI)
No Parental Alcohol Problems	1.00
Parental Alcohol Problems	
Parental Help-Seeking	
Male	**1.7 (0.9 - 3.1)**
Female	**3.1 (1.6 - 6.0) ****
No Parental Help-Seeking	1.4 (0.9 - 2.0)
# Offspring AD symptoms	1.4 (1.4 - 1.5) **
MDD (lifetime)	1.7 (1.3 - 2.1) **
Male gender	1.3 (1.0 - 1.6) *

* p ≤ .05, ** p ≤ .01, only significant covariates shown, MDD=major depressive disorder

Also adjusted for parent AD symptoms, early adversity, panic disorder, PTSD, antisocial personality

Parental and Offspring Treatment were Associated only in the Absence of Early Adversity

	HR (95% CI)
No Parental Alcohol Problems	1.00
Parental Alcohol Problems	
Parental Treatment	
Offspring Adversity	**0.9 (0.5 – 1.9)**
No Offspring Adversity	**2.0 (1.1 – 3.8) ****
No Parental Treatment	1.3 (0.9 – 2.0)
# Offspring AD symptoms	1.4 (1.4 - 1.5) **
MDD (lifetime)	1.3 (1.1 – 1.6) **
ASPD (lifetime)	1.4 (1.1 – 1.7) **
Male gender	1.3 (1.0 - 1.6) *

* p ≤ .05, ** p ≤ .01, only significant covariates shown, MDD=major depressive disorder, ASPD=antisocial personality disorder

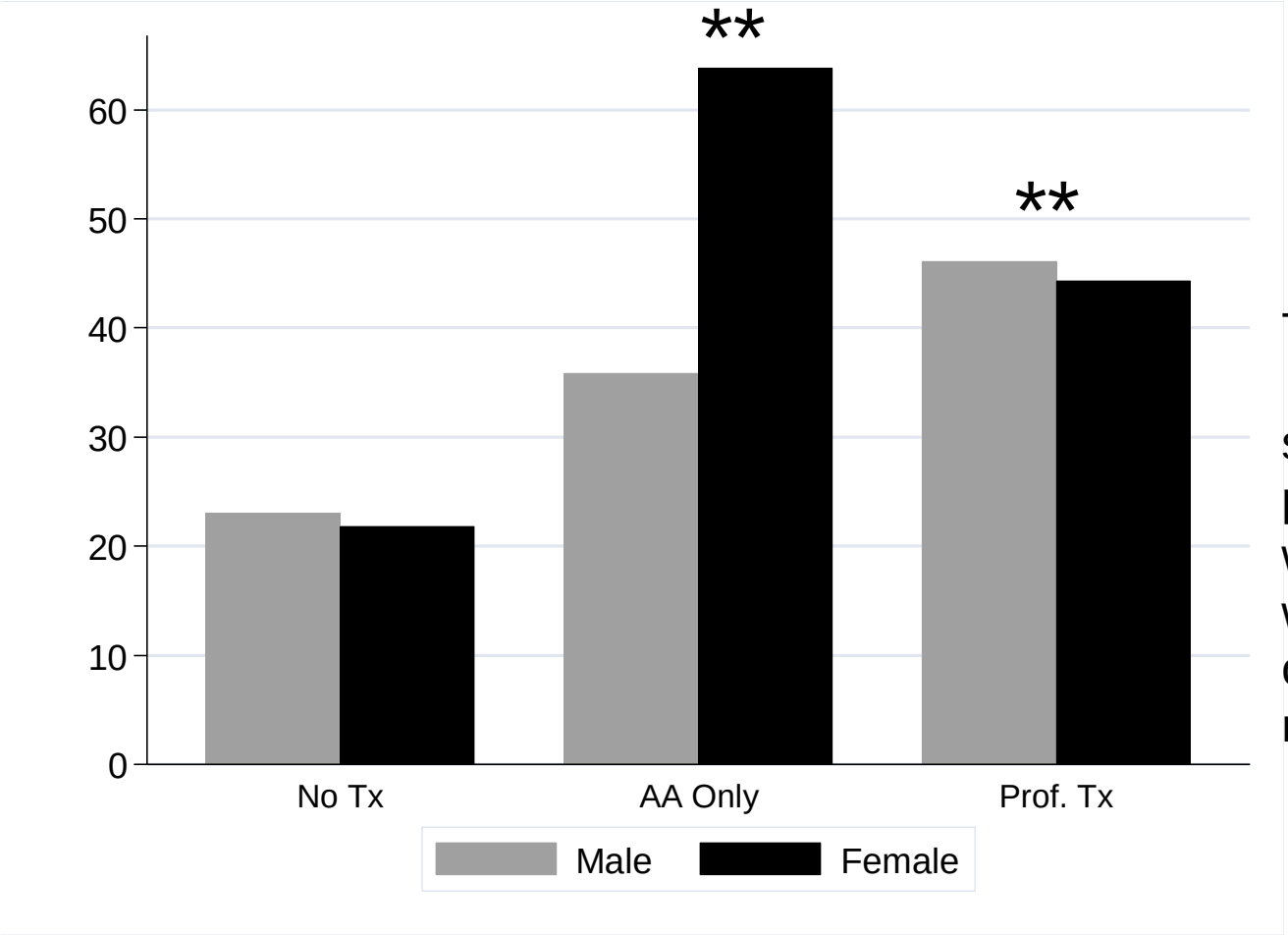
Also adjusted for parent AD symptoms, early adversity, panic disorder, PTSD, antisocial personality

Offspring Characteristics
by Gender and Alcohol Treatment Type

	Treatment Type		
	None	Self-help only	Professional
MEN	(n = 291)	(n = 63)	(n = 207)
Early adversity, %	14.9	18.0	25.5
MDD, lifetime, %	32.6	33.3	55.6
ASPD, lifetime, %	17.2	26.2	44.9
Inpatient psychiatric tx, %	11.4	14.3	83.6
Drug tx, %	7.9	11.1	47.1
WOMEN	(n = 356)	(n = 56)	(n = 130)
Early adversity, %	19.9	34.5	39.2
MDD, lifetime %	54.4	78.6	80.8
ASPD, lifetime, %	7.3	21.4	21.5
Inpatient psychiatric tx, %	15.7	28.6	76.1
Drug tx, %	4.8	25.0	40.0

MDD = major depressive disorder; ASPD = antisocial personality disorder

Maximum Continuous Abstinence by Treatment Type

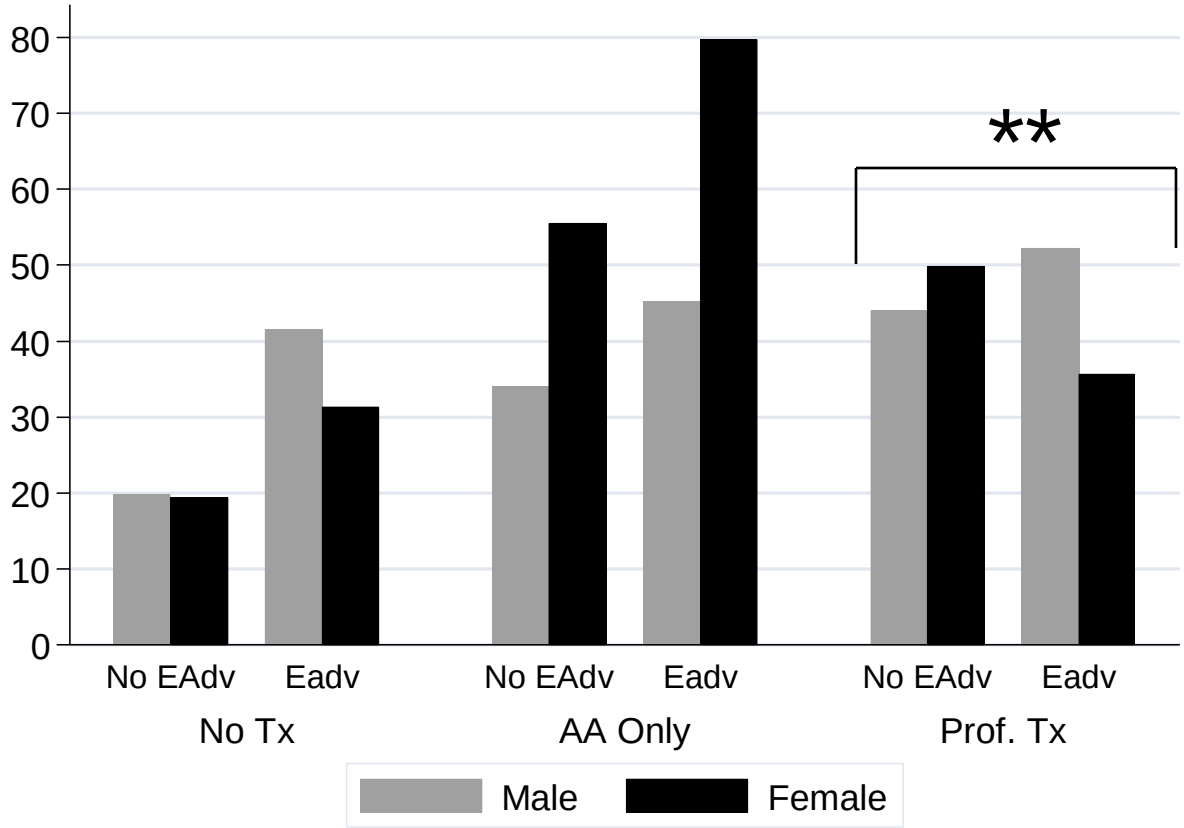


Treatment, whether in a professional setting or self-help participation only, was associated with longer periods of abstinence for men and women.

** p ≤ .01 for men and women combined, relative to no treatment group

Adjusted for severity, early adversity, depression, panic disorder, PTSD, antisocial personality, age, gender

Maximum Continuous Abstinence by Treatment Type and Early Adversity



EAdv=Early Adversity

Early adversity moderated the association of professional treatment with length of abstinence for women but not for men.

** b=-.75, 95 % CI = (-1.1, -.37)

Adjusted for severity, early adversity, depression, panic disorder, PTSD, antisocial personality, age, gender

Summary

- Parental help-seeking was associated with help-seeking among female offspring only.
- Parental treatment was associated with greater likelihood of offspring treatment only in the absence of early adversity.
- Professional and self-help treatment were associated with longer periods of abstinence for both men and women.
- Early adversity moderated the association of professional treatment with abstinence in women only.

Implications

- **Although women have lower rates of treatment than men, they may be more likely to seek help if a parent seeks help for his or her own alcohol problems.**
- **Men appear to have greater treatment access than women even in these data from a sample of individuals at high-risk for alcohol dependence with a family history of treatment. Given evidence that alcohol dependence is increasing among women in younger cohorts, this warrants improvement of treatment referral and access for women.**
- **The moderating effect of early adversity on the association between professional treatment and abstinence for adult women only deserves further investigation. Differential response by gender may be due to developmental differences and/or differences in the type, timing, or severity of early adversity.**

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