

# Partner Support During Pregnancy and its Influence on Maternal Health Behaviors

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## **ABSTRACT**

**Introduction:** Paternal support during pregnancy is considered a predictor of positive birth outcomes. Little research has focused on partner involvement and its impact on maternal health habits such as smoking and alcohol consumption during pregnancy.

#### **Methods:**

- This was a cross sectional study
- Pregnant women (n=198) between the ages of 18 44 and their partners (n=60)
  Women who identified their partner as their main support
- Norbook Social Support Ougstiannaire (scale from 5 25
- •Norbeck Social Support Questionnaire (scale from 5 35)
- •ANOVA and Student's t-test were used to evaluate Norbeck scores and smoking/ drinking status
- •Study personnel interviewed subjects to assess reliance on a partner

**Results:** Average support score for women who smoked was 30.5 versus 32.45 for nonsmoking women (p value = 0.23). Women who reported never drinking during pregnancy had an average support score of 32.5, versus 31.3 for women who reported drinking 1-2 times/year, 31.6 for women who reported drinking 2-4 times/month, and 33.2 for women who reported drinking 2-5 times/week (p-value = 0.27). Women who reported relying on their partner were less likely to smoke, 5.1% versus 17.9% (p=0.015) and use alcohol, 26.1% versus 42.9% (p=0.071).

**Conclusions:** There is no statistically significant difference in the amount of social support that pregnant women who smoke or drink alcohol feel compared to women who do not smoke or drink. Partner support on the Norbeck was not associated with health behaviors. Increased self-reported partner reliance is associated with decreased rates of smoking and alcohol in pregnant women.

#### INTRODUCTION

- •Many associations between father involvement and child development including decreased infant mortality, increased child learning capacity, improved psychological outcomes (1, 2)
- •Partner involvement has also been shown to reduce cigarette consumption and maternal depression (1, 3, 4).
- •Martin *et al.* found that women who smoked at conception and who had involved partners reduced their cigarette consumption by 36% more than women with uninvolved partners (1).
- •McNamara et al. found that maternal support was not predictive of prenatal alcohol use (5).

# **OBJECTIVE**

We undertook a study of partner support in pregnancy, as quantified by mother and partner individually, primarily to understand the impacts of partner support on the maternal health behaviors of alcohol consumption and tobacco use in pregnancy.

## **METHODS**

- 198 women surveyed in the outpatient OB/GYN offices of Thomas Jefferson University.
- Women self-identified as pregnant and were between the ages of 18-44
- A composite support score was generated for each woman who identified her partner as her main support in pregnancy
- Support was determined with a modified version of the Norbeck Social Support Questionnaire on a scale from 5 35.
- •Support scores were evaluated with women's demographic information using ANOVA and Student's t-test.

# RESULTS Demographics

Characteristic	Pregnant Women (n%)	Partner n (%)
	198	60
Age (years)		
Mean	29.4	31.4
Range	18-42	19-51
Race		
White	77 (39%)	30 (50%)
Black/African American	84 (43%)	19 (32%)
Hispanic/Latino	11 (6%)	4 (7%)
Asian	17 (9%)	5 (8%)
Education		
High School or Less	38 (19.5%)	15 (25%)
2 year College	41 (21%)	7 (12%)
< 4 Years of College	16 (8%)	8 (13%)
Completed 4 Years of College	46 (23%)	15 (25%)
Graduate Degree or Above	57 (29%)	15 (25%)
Annual Household Income (\$)		
0-20,000	24 (13%)	6 (11%)
20,001 – 40,000	18 (16%)	7 (12.5%)
40,001-60,000	26 (15%)	6 (11%)
60,001 – 100,000	39 (21%)	10 (18%)
100,000 +	62 (35%)	27 (48%)
Insurance Provider		
None	2 (1%)	10 (17%)
Work	130 (66%)	41 (71%)
Other	35 (17.5%)	6 (11%)
Medicaid	30 (15%)	1 (2%)

#### Maternal smoking and drinking during pregnancy

	Do you smoke?	Average Support Score ±SD		
Yes		$30.5 \pm 4.175$		
No		$32.45 \pm 2.863$		
P-value: 0.231				

How often do you drink alcohol?	Average Support Score ±SD	
Never	32.46 ± 2.906	
1-2 times/year	$31.30 \pm 4.014$	
2-4 times/month	31.64 ± 2.110	
2-5 times/week	33.22 ± 2.108	
P-value:		

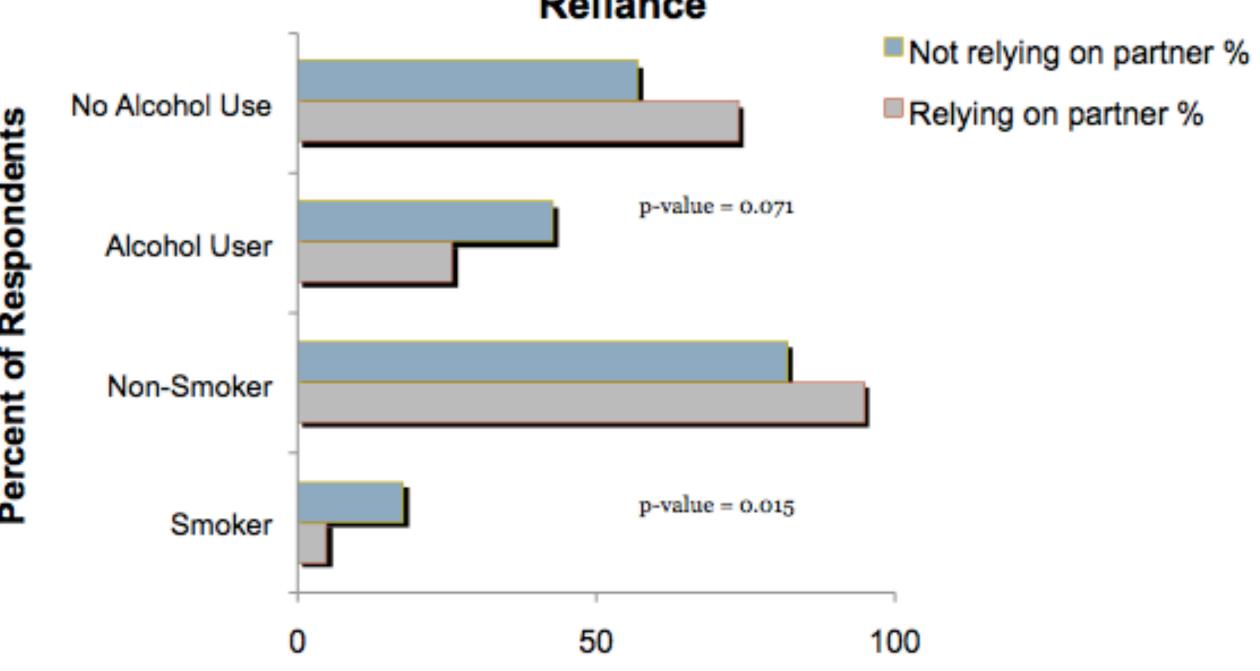
<b>Social Habits</b>	Relying on	Not Relying	P value
	Partner	on Partner	
Smoker	5.1%	17.9%	0.015
Non-smoker	94.9%	82.1%	
Alcohol Use	26.1%	42.9%	0.071
No Alcohol	73.9%	57.1%	
Use			

No statistically significant difference in the amount of social support that pregnant women who smoke or drink alcohol feel compared to women who do not smoke or drink.

Statistically significant difference in the number of women who smoke and have a partner versus those who do not have a partner

#### **RESULTS**

# Alcohol and Smoking for Pregnant Patients and Partner Reliance



# DISCUSSION

#### Strengths:

- Area of growing research
- Assessment of broad urban clinic population, focusing on high risk population
- Identifies possible areas of future interest and intervention
- Subjects interviewed to assess reliance on partner

#### Limitations:

- Responses suggest high level of alcohol use in pregnancy possibly indicating misinterpretation of survey question
- Limited external validity of subject partner reliance

## Future directions:

- Survey of partner support and its impact on other healthy behaviors, such as exercise, diet, and childbirth class attendance
- Intervention to recruit partners in encouraging healthy behaviors in pregnancy

#### CONCLUSIONS

Smoking and drinking during pregnancy were not associated with decreased feelings of support in pregnancy.

Women who relied on partners reported lower levels of smoking and drinking during pregnancy.

#### REFERENCE

1.Martin LT, McNamara MJ, Milot AS, Halle T, Hair EC. The effects of father involvement during pregnancy on receipt of prenatal care and maternal smoking. Matern Child Health J. 2007;11(6):595-602.

2. Alio AP, Lewis CA, Scarborough K, Harris K, Fiscella K. A community perspective on the role of fathers during pregnancy: A qualitative study. BMC Pregnancy and Childbirth. 2013;13.

3. Alio AP, Bond MJ, Padilla YC, Heidelbaugh JJ, Lu M, Parker WJ. Addressing policy barriers to paternal involvement during pregnancy. Matern Child Health J. 2011;15(4):425-30.

4. Records K, Rice M. Psychosocial correlates of depression symptoms during the third trimester of pregnancy. JOGNN - Journal of Obstetric, Gynecologic, and Neonatal Nursing. 2007;36(3):231-42

5. McNamara TK, Orav EJ, Wilkins-Haug L, Chang G. Social support and prenatal alcohol use. Journal of Women's Health. 2006;15(1):70-6.