

Substance Abuse Treatment Linked with Prenatal Visits Improves Perinatal Outcomes: A NEW STANDARD

Early Start <http://www.kp.org/earlystart>

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Hypothesis

- o Treatment efforts aimed at reducing maternal substance abuse during pregnancy are beneficial to babies and their mothers
- o Babies of the Early Start treated group will:
 - Do better than the babies of the untreated substance abusers
 - Do worse than the babies of the controls

Methods

- o 49,985 female KP members
- o Completed ES Prenatal Substance Abuse Screening Questionnaires 01/99 - 6/03
- o Urine toxicology screening test
- o Live birth or IUFD at a KPNC hospital

Data

- o ES Screening Questionnaire
- o Assessment and treatment data
- o Newborn data
- o Pediatric data
- o Maternal outcomes
- o Toxicology screen results for 9 drugs:
 - Alcohol
 - Opiates
 - Cocaine
 - Barbiturates
 - THC
 - Benzodiazepines
 - Amphetamines
 - PCP
 - Methamphetamines

Data Analysis

- o Characterize the study groups
- o Statistical Analyses
 - Chi-square tests: compare the 4 study groups on each outcome
 - Logistic regressions: estimate the relative risk of each neonatal outcome of interest across the four study groups controlling for potential confounders
- o Controlled for maternal age, ethnicity, and amt of prenatal care

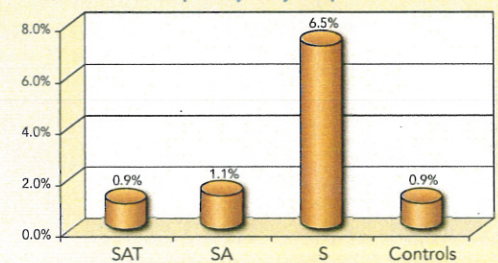
Definition Of Study Groups

Group	Definition	Questionnaire Risk Status	Assessment Status	Tox Screen	N (%)
SAT	Assess + by Early Start, w/ follow-up	+ or -	+	+, -, or missing	2073
SA	Assess + by Early Start, no follow-up	+ or -	+	+, -, or missing	1203
S	Untreated substance abusers	+ or -	None	+	156
C	Controls	-	None	-	46,553

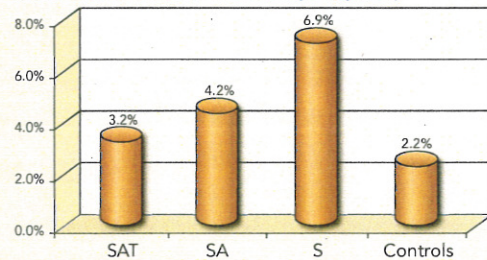
Substance Use Risk Factors By Study Groups

Characteristic	% in group		
	SAT	SA	S
Alcohol wkly/daily since preg	6.6	7.3	4.3
Meth wkly/daily since preg	1.3	1.7	1.2
THC wkly/daily since preg	14.7	8.9	6.2
Alcohol wkly/daily before preg	32.9	33.8	17.9
Meth wkly/daily before preg	5.7	4.6	1.2
THC wkly/daily before preg	34.1	28.1	12.4
Smoked cigarettes during preg	26.6	22.1	17.3

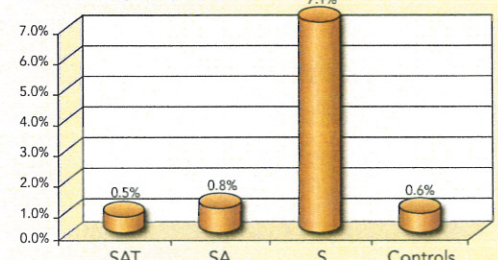
Rate Of Placental Abruption By Study Group



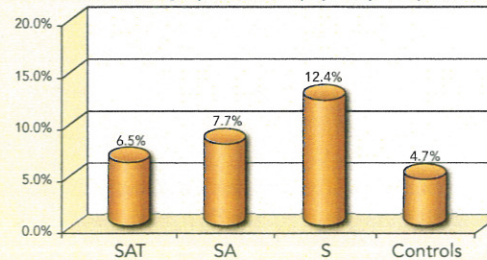
Rate Of Neonatal Assisted Ventilation By Study Group



Rate Of IUFD By Study Group



Rate Of Low Birthweight (<2500 Grams) By Study Group



Conclusions

Substance abusing women who received counseling during pregnancy did significantly better than untreated substance abusers and compared favorably with controls on rates of:

- Neonatal assisted ventilation
- Low birth weight
- Preterm delivery
- Preterm labor
- Placental abruption
- IUFD

Rate Of Delivery Before 37 Weeks Gestational Age By Study Group

