

ASSESSING THE FACTORS LEADING TO ALCOHOL ABUSE IN PREGNANCY

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A CRITICAL REVIEW of "Rural and small-town attitudes about alcohol use during pregnancy: a community and provider sample."

Logan TK, Walker R, Nagle L, Lewis J, Wiesenhahn D. *J Rural Health* 2003; 19(4):497-505.

"Assessing maternal perceptions of harmful effects of drug use during pregnancy." Perry BL, Jones H, Tuten M, Svikis DS. *J Addict Dis* 2003; 22(1):1-9.

Fetal Alcohol Spectrum Disorder (FASD), formerly Fetal Alcohol Syndrome and Fetal Alcohol Effects, is a major concern amongst health professionals due to the lack of awareness of the problem in the general population. It has been estimated that nearly 1% of live births are children born with FASD.¹ Between 4% and 40% of women who drink heavily during pregnancy are believed to have babies affected with FASD and up to 60% of women worldwide drink alcohol at some point during pregnancy.² The statistics are frightening because they exemplify the fact that many women are still not heeding warnings or are not receiving proper education on the harmful effects of alcohol consumption during pregnancy. There have not, however, been many studies investigating the predictors of alcohol use or illicit drug use during pregnancy.³ Recently, Perry *et al* and Logan *et al* examined possible predictors to alcohol abuse during pregnancy.

Logan *et al* focused on women and men in rural and small-town environments and assessed their available resources and knowledge on FASD. They conducted a survey on 3,346 people (males and females) from 18 years old to 66 years old on their attitudes and perceived barriers towards alcohol use during pregnancy. This study provided some interesting results although it

lacked important controls. They found that although females had a larger understanding, neither females nor males in their sample area had adequate knowledge of the harmful effects of alcohol use during pregnancy. They concluded that prevention education is necessary for both women and men and greater resources need to be available in rural and small-towns.⁴ The study failed to provide proper information regarding education level, socioeconomic status, marital status, or other factors that might affect the mother's knowledge on the subject. The literature reports that women who drink throughout their pregnancy and into the third trimester typically have less education, are older, more likely to be black, have higher rates of illicit drug use and lower social status.⁵

This study also looked at the knowledge of nurses, doctors and health educators on the subject of FASD. Logan *et al* found that the prenatal health department personnel were lacking sufficient training in alcohol abuse and FASD. Only 42% of 149 personnel surveyed had received prior training and only about 1 in 5 believed the training was effective.⁴ In a similar study looking at 50 nurses/midwives, it was found that their knowledge base on substance abuse and pregnancy was also very low.⁶

These are the front line workers in the fight against FASD and it is therefore important that all prenatal health personnel be properly trained on the risks associated with FASD and the available resources in their area. Healthcare professionals must be knowledgeable on this subject and it is their institution's duty to ensure that this is the case. They also must be aware of additional resources, such as Motherisk, to refer their patients to should they request additional

information or should they not know the answers

Perry *et al* specifically compared treatment and non-treatment seeking pregnant, drug-using women and their knowledge of the harmful effects of illicit drug use during pregnancy. They found that the knowledge base of treatment-seeking drug-using women was comparable to that of non-drug using women and was statistically greater to that of non-treatment seeking drug-using women.⁷ The surveys used in Logan *et al*'s study were collected in 16 different public sites, none of which included a treatment centre. Although alcoholism is a serious medical condition, most people do not seek treatment.⁸ It would be interesting to look at treatment-seeking alcohol-using women during pregnancy and to compare them with non-treatment seeking alcoholic women. As was seen in Perry *et al*'s study, it is often the case that if people are interested in bettering themselves, they will be more knowledgeable on the subject. Perry *et al* did conclude that there is a need for greater educational efforts explaining the negative consequences on illicit drug use during pregnancy specifically in areas where drug abuse is great.⁷

Current education programs on FASD are very often insufficient. With up to 60% of women still drinking during pregnancy, the message is not getting across to a sufficient number of women. More studies must be done on this subject to identify major determinants of women's desire to drink during pregnancy. There are many factors which have been raised in previous studies that must be examined. First of all, the socioeconomic status of the women must be addressed. With less monetary resources available, women might not have the time to seek help due to employment. Education level must also be controlled as with Perry *et al*'s study. Women with higher levels of education might be more inclined to research the possible effects of alcohol during pregnancy. Another variable that must be looked at is whether or not the woman planned the pregnancy. Women who plan their pregnancies might be more likely to proactively find prenatal education programs.

As was found by Day *et al*, other illicit drug use is another factor that also must be studied. If the mothers are heavy drug users then it might affect their decision to seek help. It has been demonstrated in previous studies that with available resources, women are able to increase their knowledge on this subject;⁷ however, knowledge transfer does not necessarily change behaviour. If parents-to-be are not aware that alcohol use during pregnancy is a problem, they will not be able to cease and correct it. More emphasis and funding therefore must be put on public and healthcare personnel education.

REFERENCES

1. Sampson PD, Streissguth AP, Bookstein FL, Little RE, Clarren SK, Dehaene P, *et al*. Incidence of fetal alcohol syndrome and prevalence of alcohol-related neurodevelopmental disorder. *Teratology* 1997; 56:317-326.
2. Koren G, Nulman I. The Motherisk guide to diagnosing Fetal Alcohol Spectrum Disorder. Graphic Centre, The Hospital for Sick Children 2002. Toronto, Ontario.
3. Morrison DM, Spencer MS, Gillmore MR. Beliefs about substance use among pregnant and parenting adolescents. *J Res Adolesc* 1998; 8(1):69-95.
4. Logan TK, Walker R, Nagle L, Lewis J, Wiesenhahn D. Rural and small-town attitudes about alcohol use during pregnancy: a community and provider sample. *J Rural Health* 2003; 19(4):497-505.
5. Day NL, Cottreau CM, Richardson GA. The epidemiology of alcohol, marijuana, and cocaine use among women of childbearing age and pregnant women. *Clin Obstet Gynecol* 1993; 36(2):232-245.
6. Raeside L. Attitudes of staff towards mothers affected by substance abuse. *Br J Nurs* 2003; 12(5):302-310.
7. Perry BL, Jones H, Tuten M, Svikis DS. Assessing maternal perceptions of harmful effects of drug use during pregnancy. *J Addict Dis* 2003; 22(1):1-9.
8. Proudfoot H, Teesson M. Who seeks treatment for alcohol dependence? Findings from the Australasian National Survey of Mental Health and Wellbeing. *Soc Psychiatry Psychiatr Epidemiol* 2002; 37(10):451-456.