Abstract

Background: Substance and alcohol use during the antenatal period increases the risk of

poor maternal and fetal outcomes of pregnancy. Although substance use is common in South

Africa, there is a paucity of research among pregnant women.

Aim: To determine the prevalence of substance use among pregnant women who delivered at

Rahima Moosa Mother and Child Hospital during January 2013. A secondary objective was

to explore associations between substance use and the socio-demographic and clinical

profiles of the study sample.

Methods: A quantitative, retrospective record review was conducted of women who

delivered at Rahima Moosa hospital in Gauteng, South Africa the 1st and 21st of January

2013.

Results: 399 records were retrieved; 84% of women were aged between 20 and 40 years, 8%

were 19 years or less and 8% over 40 years. Any substance use was recorded in 45% (n=178)

of clinical files. Of these, concurrent use of alcohol and tobacco was recorded in 63%

(n=113), tobacco in 20% (n=36), alcohol in 14% (n=25), cannabis in 2% (n=4). Chi-square

testing showed significant associations between substance use and premature delivery

(p<0.0001), positive HIV status (p=0.04) and low birth weight (p=0.001). Multivariate

logistic regression found women using substances were more likely to have a low-birth

weight baby than non-users (aOR = 2.5, 95%CI: 1.23 - 5.16, p= 0.01).

Conclusion: Alcohol and tobacco were commonly used during pregnancy among women

who delivered at Rahima Moosa hospital, Gauteng province. Substance use was associated

with positive HIV status, preterm labour and low birth weight.

Key words: Substance use; pregnancy; South Africa