



# Drug and Alcohol Educational Interventions for Pregnant Women in a Rural Setting: A Randomized Trial



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**Context:** A concerning number of neo-natal deaths occurred over a four month period at Bathurst Base Hospital in 2007. A series of case reviews revealed smoking as the only common risk factor amongst the mothers in this group. Further investigation identified that comprehensive antenatal drug and alcohol (D&A) assessments were not being conducted and subsequently problems associated with drugs and alcohol were not being identified. This in turn limited the ability to provide expectant mothers with appropriate information or referral to treatment that would assist improved health outcomes in the perinatal period.

**Aim:** This study sought to answer the research question:

Does educational material alone or educational material given in a face to face setting improve knowledge and reduce risk behavior in rural women who use psychoactive substances during pregnancy?

**Method:** All women accessing the antenatal booking-in clinic at Bathurst Base Hospital from October 2010 – April 2011 were assessed for substance use prior to confirmation of the current pregnancy. Participating women were randomised and allocated to either the control or intervention group. All participants completed a 13-question D&A questionnaire at enrolment and after the birth of the baby. The Intervention group was scheduled for a specific face to face educational package relating to the questionnaire with a D&A worker and a literature package. The control group received the literature package only.

**Results:** A total of 70 women were enrolled into the study: 38 were allocated to the control group and 32 to the Intervention group. Pre-intervention measures for the two groups were not significantly different. Knowledge scores post intervention had increased significantly for both control and intervention. Changes in behaviour showed no significant differences between the two groups.

**Discussion:** The use of a comprehensive D&A assessment in the antenatal clinic along with provision of literature to pregnant women improved their knowledge of issues associated with substance use in pregnancy. Further face to face education did not provide additional benefit, although the small sample size did not allow sufficient statistical power for this issue to be comprehensively examined.

**Conclusion and recommendations:** This study showed that when provided with comprehensive educational material pregnant women avail themselves of the content and make changes to their behaviour in this important time of life. The use of a comprehensive D&A assessment is in itself an invaluable tool and may reveal issues otherwise unknown to both midwife and expectant mother. Larger studies could explore the value of additional face-to-face education.

*For the full report on this project visit our website, follow the link to the Rural Research Capacity Building Program and click on 'view completed projects'*

Jean has worked in health for almost 40 years, initially as a Registered Nurse and Midwife and then commenced in Drug and Alcohol services in Western NSW LHD in Bathurst, and now in the Orange region. Jean also has experiences in Infection Control, Immunization and Staff Health, Occupational Health & Safety and provided supportive, guidance for staff members returning safely to work.

Jean enjoys working with nurses and midwives to educate, support and provide clinical expertise when working with complex drug and alcohol presentations in both the acute care and maternity settings. Jean provides clinical advice and support for the D&A Consultation Liaison Service in Orange & Region and participates within the Senior Clinical Team to support the development of clinical governance for the Drug & Alcohol Service.

