

Practice change intervention to improve antenatal care for alcohol consumption: a randomised stepped wedge controlled trial

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Introduction and Aims: Clinical guideline recommendations for addressing alcohol consumption in pregnancy are sub-optimally implemented by maternity services. The aim of this study was to determine the effectiveness of a practice change intervention in improving the provision of antenatal care addressing alcohol consumption during pregnancy.

Design and Methods: A randomised stepped-wedge controlled trial was undertaken with maternity services in three health sectors of the Hunter New England Local Health District. All antenatal care providers were subject to a seven month multi-strategy intervention to support the introduction of a recommended model of care for addressing alcohol use in pregnancy. For 35 months (July 2017–May 2020) outcome data were collected from randomly selected women following attendance at an initial, 27-28 weeks gestation and 35-36 weeks gestation antenatal visit. Logistic regression models assessed intervention effectiveness.

Results: 5694 telephone/online surveys were completed with pregnant women. The intervention was effective in increasing receipt of assessment (OR:2.63; 95% CI:2.26-3.05; $p < 0.001$), advice (OR:2.07; 95% CI:1.78-2.41; $p < 0.001$), complete care (advice and referral) (OR:2.10; 95% CI:1.80-2.44; $p < 0.001$) and all guideline elements (OR:2.32; 95% CI:1.94-2.76; $p < 0.001$). Greater intervention effects were found at the 27-28 and 35-36 weeks gestation visits compared to the initial antenatal visit. No differences by health sector were found. Almost all women (98.8%) found the model of care acceptable.

Discussions and Conclusions: The practice change intervention improved the provision of antenatal care addressing alcohol consumption in pregnancy. Future research is warranted to target elements of care that did not achieve optimal levels and to sustain improvements.

Implications for Practice or Policy: The practice change approach utilised in this study could be adopted by maternity services to improve antenatal care addressing alcohol consumption in pregnancy.

Disclosure of Interest Statement: This study was funded by an NHMRC Partnership Project grant (APP1113032).