A SYSTEMATIC REVIEW OF TOBACCO TREATMENT INTERVENTIONS FOR PREGNANT WOMEN WHO USE TOBACCO AND OTHER SUBSTANCES

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Introduction: The combination of maternal nicotine and substance use has significant, additive adverse effects on fetal/newborn development. Despite reported desires to stop tobacco smoking, pregnant women who use alcohol and/or other drugs face barriers including prioritised substance use treatment, high nicotine-dependence, comorbid conditions, synergistic effects of tobacco with other substances, stigma, and social smoking norms. These are compounded by a lack of effective, targeted cessation interventions. This review provides the first comprehensive synthesis of tobacco smoking treatments for concurrent maternal substance and tobacco use.

Method: A systematic review of health and psychology databases, including grey literature was conducted in April 2019. All studies, of any design methodology, that quantitatively reported smoking behaviour changes in pregnant women being treated for substance use were included. Interventions were any psychological, behavioural and/or pharmacological treatments used to treat tobacco use.

Results: Of 1837 retrieved papers, six interventional studies were identified (two RCT's, four pilot/program-evaluations). Three were counselling-based, two were incentive-based and one involved education and cessation treatment referral. Only one (incentive-based RCT) impacted abstinence with 31% of participants considered smoke-free at some point during the intervention. All interventions substantially reduced cigarette consumption. Other positive outcomes included decreased depression/anxiety, decreased carbon-monoxide levels, increased motivation to quit and enhanced tobacco-related knowledge.

Discussion: Historically, little has been done to improve smoking rates in this health-disparate group. Interventions that effectively treat cessation in general maternal populations may not address the complex needs of women with comorbid substance and tobacco use. Incentive-based interventions appear to hold the most promise. The results deliver an impetus for more comprehensive interventions that reduce barriers to smoking cessation.

Implications for Practice: A focus on new and innovative treatments embedded in a holistic, supportive system of health provision should be considered to improve the health outcomes of high-priority pregnant women who smoke tobacco.

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