

Comparing the Acceptability, Clinical-, and Cost-effectiveness of Mental Health E-screening to Paper-based Screening in Pregnant Women: a Randomized, Parallel-group, Superiority Trial

D. Kingston¹, D. Kingston¹, S. McDonald², A. Biringer³, M.P. Austin⁴, S.D. McDonald⁵, R. Giallo⁶, A. Ohinmaa⁷, G. Lasiuk⁸, G. MacQueen⁹, S. Van Zanten¹⁰

¹Nursing, University of Alberta, Edmonton, Canada ; ²Population health, Alberta Health services, Calgary, Canada ; ³Family Medicine, University of Toronto, Toronto, Canada ; ⁴Psychiatry, University of New South Wales, Sydney, Australia ; ⁵Obstetrics and Gynecology, McMaster University, Hamilton, Canada ;

⁶Research, Murdoch Children's Hospital, Melbourne, Australia ; ⁷Public Health, University of Alberta, Edmonton, Canada ; ⁸Nursing, University of Alberta, Edmonton, Canada ; ⁹Psychiatry, University of Calgary, Calgary, Canada ; ¹⁰Medicine, University of Alberta, Edmonton, Canada

Substantial barriers to prenatal mental health screening exist. The primary objective of this randomized controlled trial is to evaluate the acceptability of computer tablet-based prenatal screening compared to paper-based screening. Secondary objectives are to compare the two screening modes on: (1) detection of depression/anxiety symptoms; (2) disclosure of symptoms; (3) factors associated with acceptability, and disclosure; (4) psychometric properties of the e-version of the tools; and (5) cost-effectiveness.

Pregnant women were recruited from maternity clinics in an urban Canadian city, and were eligible if they were: 1) able to speak/read English; 2) willing to have a diagnostic interview within 1 week. Allocation was by computer-generated randomization. Women in the intervention group completed screening on a computer tablet and those in the control group completed the same assessment in paper-based form. Intention-to-treat analyses compared groups on primary and secondary outcomes. Multivariable logistic regression will identify predictors of intervention acceptability and disclosure.

Preliminary Results – Recruitment was completed on December 8, 2014 (n=587). Mean age of women was 28.7 years (SD 4.7) with 96% partnered and 77% completing at least some post-secondary education. One-third (32.3%) had been treated previously for a mental health problem. Over 90% of women in the intervention and control groups indicated they found/would find computer-based screening acceptable and could fully disclose their concerns. No significant differences in mean depression or anxiety scores were found between groups. Additional results to be generated for presentation

Implications: Clinical and cost data will inform approaches to routine prenatal mental health screening.