

S2 - Promoting Mental Well-being of Pregnant Women with Mindfulness-based Childbirth and Parenting (MBCP): A Randomized Controlled Trial in Hong Kong

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Introduction and Project Objectives: A mother's mental health during pregnancy can influence the pregnancy outcome, her child's health and development, and the father/partner's mental health. This randomized controlled trial aimed to evaluate the effectiveness of the Mindfulness-based Childbirth and Parenting (MBCP) program in Chinese pregnant women in Hong Kong as compared to an active control group.

Methods: This trial had two study arms: MBCP versus Antenatal Childbirth Education and Support. A total of 183 pregnant women and their significant others (n=175) were included. The interventions in both conditions consisted of 9 weekly sessions and a half-day retreat delivered prenatally and a reunion session held after childbirth. Outcomes were measured at baseline (T1), at the last prenatal session (T2), 6-8 weeks postpartum (T3), and six months after childbirth (T4). The primary trial outcome was the Mental Component Score (MCS) of the 12-item Short Form Survey (SF-12) at T4.

Results: Compared to the control group, ANCOVA results demonstrated significant beneficial effects in the MBCP group in MCS scores (mean difference and its 95% Confidence Interval: 3.2 (0.1, 6.3), p=0.045) at six months postpartum. Before adjusting to a more stringent significance level, the results favoured the MBCP group on Center for Epidemiologic Studies Depression Scale (CESD) scores (p = 0.018), State-Trait Anxiety Inventory State (STAI-S) scores (-4.5 (-7.4, -1.7), p = 0.002), Five Facet Mindfulness Questionnaire (FFMQ) total scores (5.2 (1.6, 8.8), p=0.005) at T4, Prenatal Pregnancy Anxiety (PPA) scores (-1.4 (-2.6, -0.1), p=0.030), and Multidimensional Assessment of Interoceptive Awareness (MAIA) scores (0.2 (0.1, 0.3), p=0.03) before childbirth at T2, and Edinburgh Postnatal Depression Scale (EPDS) scores at T3 (-1.5 (-2.9, -0.1), p = 0.034). With an adjusted significance level at 0.005 for secondary outcomes, beneficial effects of MBCP were still seen on STAI-S and FFMQ scores. Linear mixed models showed similar results, as did per protocol analysis of those who attended 4 or more sessions in both groups. No significant beneficial effects were seen in clinical outcomes related to childbirth. Subgroup analyses showed that those women at risk for clinical depression at baseline benefited more from MBCP in the long term. No fetal death or severe adverse events were reported by the participants.

Conclusions: MBCP has a positive effect on the mental well-being of Chinese pregnant women during pregnancy that is maintained six months after childbirth.

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