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THE INFLUENCE OF HATHA YOGA ON BIRTH OUTCOMES OF FIRST-TIME
MOTHERS IN NEW ZEALAND

By

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Thesis

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ABSTRACT

Yoga is an ancient health practice that provides integrated control and harmonious balance through a practice of postures, muscle contractions, controlled breathing, and meditation. Although yoga has been popularized in New Zealand as a complementary, non-traditional physical fitness regime for pregnant women, little is known empirically about the safety and effectiveness of yoga during pregnancy. The primary aim of this natural history study was to assess the safety and effectiveness of antenatal yoga for first-time mothers in New Zealand. This study investigated how first-time mothers who participated in yoga (N=34) performed across a range of antenatal and postnatal measures, taken during their third trimester of pregnancy (Time 1: T1) and at three months postpartum (Time 2; T2), when compared with first-time mothers who did not participate in yoga (N=37). An additional aim of the study is to attempt to predict birth type from the above measures. Measures assessed demographic factors (T1), antenatal pain medication preferences (T1) and utilisation of pain relief during labour (T2), physical activity levels (T1, T2), complementary therapy utilisation (T1), maternal mood (T1, T2), social networks (T1, T2), maternal self-efficacy (T2), and labour experience and birth outcomes (T2). Those in the yoga group reported greater satisfaction with their diet, used a greater number of complementary therapies, had a preference for significantly less analgesia during labour, and were less likely to be prescribed bedrest or require an episiotomy compared to those in the non-yoga group. The two groups did not differ significantly on other antenatal or postnatal measures. Among a number of significant correlates of birth outcomes for the group as a whole, natural birth was associated with having a midwife or GP as lead maternity carer, shorter labour durations, less utilisation of analgesia, and more tearing. Heavier birth weights were associated with greater use of complimentary therapies, dietary supplements, longer labours and greater maternal depression and overall mood disturbance three months postpartum when compared with women who had children with lower birth weight. Higher 1-minute Apgar scores were associated with higher consumption of dietary supplements during pregnancy, while higher 5-

minute Apgar scores were associated with lower anger / hostility and working antenatally. Maternal factors which significantly predicted vaginal versus cesarean delivery and medical versus natural delivery were, participation in antenatal yoga, levels of complementary therapy utilisation, self-rating of diet, maternal age, and level of analgesia utilised during labour. When these variables were considered individually, level of analgesia utilised during labour, self-reported diet and maternal age significantly predicted natural versus medical delivery. However, of the aforementioned maternal variables, only level of analgesia utilised during labour significantly predict medical (i.e., casearean and operative births) versus natural birth. This study of antenatal yoga among first-time mothers in the Auckland region of New Zealand found the practice of antenatal yoga to be safe and associated with a number of benefits. However, before the practice of antenatal yoga can be recommended, a larger randomized control study is warranted. Future research in this field should also investigate the influence and practice of antenatal yoga among women from socially and ethnically diverse populations, including those residing outside of main urban centres.

To Mia.

“Life is what happens to you while you're busy making other plans” (John Lennon)

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