Research Review: How Safe is Exercise During Pregnancy?

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HOW SAFE IS EXERCISE DURING PREGNANCY?

Title: Physical Activity and injuries during Pregnancy
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Introduction: The website TopNews.us recently published a story about a research study which found a significant increase in the birth-rate, attributed by a midwife to the cold US winters; ‘You’ve got to find some way to keep yourself occupied’ one midwife was quoted as saying.

Which brings us nicely to the study at hand. Dr Vladutiu and her colleagues report that approximately 65 per cent of pregnant women in the US participate in at least some form of ‘leisure time physical activity’. Physical activity and exercise have been shown to be highly beneficial for women’s health, decreasing their risk of developing heart disease, stroke, type 2 diabetes, cancer (colorectal and breast), osteoporosis and improved wellbeing. Dr Vladutinu further reports that during pregnancy, regular exercise increases energy and controls excess weight, which in turn reduces the risk of developing gestational diabetes. In spite of these numerous benefits, women continue to report a fear of exercising while pregnant. The purpose of this study, therefore, was to determine the incidence and types of injuries occurring as a result of participation in physical activity while pregnant.

Methodologies: Women with less than 20 weeks gestation who were aged 17 years and older and carrying a single gestation were recruited to participate in the study. While they were pregnant, the women completed two telephone interviews, two clinic visits and two self-administered questionnaires. The medical records for all births were attained after delivery. Subjects were asked if they participated in any non-work, recreational activity or exercise that caused at least some increase in breathing and heart rate. If the respondent answered ‘yes’ they were asked to report the number of sessions for the week, duration of each session and perceived intensity for each activity. Subjects were then asked whether they suffered any injury as a result of their physical activity or exercise during pregnancy. A positive response then led to questions about the date, type of injury, body part injured, activity at the time of occurrence and level of medical attention received.

Results: A total of 1,460 pregnant women participated in the study; 94 per cent reported participating in physical activity during their pregnancy (rated as either fairly light, somewhat hard or hard) and 70 per cent reported engaging in exercise during their pregnancy (also rated as fairly light, somewhat hard or hard). A total of 3.3 per cent of the women reported a fear of injury as a barrier to participation.

Thirty-four (2 per cent) of the women reported experiencing at least one injury during their pregnancy (44 total injuries reported); the overall rate of physical activity-related injury was 3.2 per 1,000 physical activity hours. The most common type of injury was a bruise/scrape (n=24) followed by a strain (n=10) and sprain (n=7). The majority of injuries occurred to the ankle (21 per cent), knee (16 per cent), back (14 per cent) and abdomen (9 per cent). There were six injuries that required...
hospitalisation, all of which were associated with falls. The majority (67 per cent) of these injuries occurred while walking.

Discussion: The authors concluded that the two per cent injury rate is low and that two thirds of the injuries occurred from ‘non-exercise’ physical activities, and two thirds of all of the injuries were attributed to falls (all of the injuries requiring hospitalisation were attributed to falls). This finding is in agreement with other studies that have reported falls as a leading cause of maternal injury, most likely attributable to musculoskeletal changes during pregnancy and a change in the body’s centre of gravity.

Pros: Excellent study, the findings of which should provide further confidence for women to continue exercising during their pregnancy. However, all pregnant women are strongly advised to speak with either their GP or obstetrician to discuss the appropriateness of initiating exercise.


Cons: It will be beneficial to conduct a large-scale national study to confirm these findings. Also, as falling is recognised as the primary cause of maternal injury, would there be benefit in a falls prevention program in this cohort?

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