

## Pregnancy and Exercise: Short Communication

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### Abstract

International Medical School (IMS), Management and Science University, Malaysia Pregnant mothers with uncompleted pregnancies should be encouraged to perform physical exercises. Aerobic and muscle strengthening exercises are beneficial in pregnancy [1].

**Keywords:** Malaysia, uncompleted pregnancies, body weight.

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### Changes Associated with Pregnancy

There are many changes occur during pregnancy.

As the pregnancy advances the body weight increase up to 10-14 Kg. The weight increase and weight distribution changes body shape. The centre of the gravity of the body moves forward. The balance and coordination are altered. The gait become waddling gait. Many hormones are increased during pregnancy. Hormone relaxin relax the ligaments. There is a lowering of blood pressure during mid pregnancy. The pregnant mother should be careful and avoid sudden change of posture like lying down to standing

### Benefits of Exercise in Pregnancy

The regular exercise in pregnancy releases the stress tension and anxiety. It improves the fitness and minimise the joint and pelvic pain. It improves the posture.

Activities that are generally safe during pregnancy, even for beginners, include: walking, swimming, cycling – outdoors or on a stationary bicycle, jogging, muscle strengthening exercises, including pelvic floor exercises, exercise in water (aquarobics) and yoga, stretching and other floor exercises.

Swimming is an ideal and safe form of exercise during pregnancy. It exercises the arms and legs, and increase heart and lungs activities.

Aerobic exercise strengthens the heart and tones of the body. It is safe as long as keep the exercises low-impact to protect the joints.

Dances are permitted. However, leaps, jumps, twirls and sudden changes of directions should be avoided since the patient may lose the balance and fall down. Pilate exercises improved flexibility. Increased muscle strength and tone, particularly of abdominal muscles, lower back, hips and buttocks and muscular strength on both sides of the body. Enhanced muscular control the back and limbs.

It improves the blood sugar level in mild gestational diabetes mellitus. Appropriate exercises will help to maintain the body weight. Relaxing exercises maintain a good mood. Exercises can prevent or minimize the severity of pregnancy induced hypertension [2].

Pelvic floor exercises during pregnancy can reduce the postpartum urinary incontinence and related problems [3].

Pelvic floor exercises help to strengthen and improve the tone of the pelvic floor muscles, which provide perineal support for the pelvic structures, the urethra, vagina and rectum. There is strong evidence to suggest that women who do intensive, supervised pelvic floor exercises during pregnancy may reduce the risk of postpartum urinary incontinence [4].

Stretching should be controlled and not ‘over-extended’ since the joints and ligaments are already stretched and loose due to the release of the hormone relaxin in preparation for birth. The mother should avoid wide squats, lunges or any unilateral leg exercises that place excessive shearing forces on the pubic symphysis.

The following exercises should be avoided in pregnancy. Sports that can lead to fall such as horse riding, skating, skiing gymnastics etc. Activities that can change your direction suddenly and change the balance such as tennis and squash. Contact and collision sports such as basketball, football and rugby significant changes in pressure – such as SCUBA diving heavy lifting high-altitude training at over 2000m supine exercise position (lying on your back) – the weight of the baby can slow the return of blood to the heart; some of these exercises can be modified by lying on your side wide squats or lunges.

The mothers without any complications can perform exercises without any limitations. However, in the following conditions the mothers should get the advice of caregivers before embarking on exercises.

- a) Past history of preterm delivery, preterm prelabour rupture of membranes (pPROM)
- b) Bleeding during current pregnancy
- c) Anaemia- Haemoglobin level is less than 11 g/dl
- d) Extremes of matern l body mass index (BMI)- Prepregnant BMI less than 12 or more than 40
- e) Mothers with muscle and bone injuries
- f) Heart disease complicating pregnancy
- g) Respiratory disorders
- h) Obstetric complications such as multiple pregnancy, foetal growth restriction

It is very important to obtain the advice of healthcare professionals to choose the appropriate exercise program suitable for each individual. Vigorous and tedious exercise can cause serious adverse effects.

The following exercises are not recommended during pregnancy abdominal trauma or pressure – such

as weightlifting contact or collision– such as martial arts, soccer, basketball and other competition sports hard projectile objects or striking implements – such as hockey, cricket or softball falling – such as downhill skiing, horse riding and skating extreme balance, co-ordination and agility – such as gymnastics significant changes in pressure – such as SCUBA diving heavy lifting high-altitude training at over 2000 m supine exercise position (lying on your back) – the weight of the baby can slow the return of blood to the heart; some of these exercises can be modified by lying on your side wide squats or lunges.

Evidence from twelve systematic reviews suggests that, for healthy women, physical activity/exercise during pregnancy is safe and is associated with numerous benefits to the mother and unborn child/foetus [5].

## REFERENCES

1. Nascimento, S. L., Surita, F. G., & Cecatti, J. G. (2012). Physical exercise during pregnancy: a systematic review. *Current Opinion in Obstetrics and Gynecology*, 24(6), 387-394.
2. Kasawara, K. T., NASCIMENTO, S. L. D., Costa, M. L., Surita, F. G., & e Silva, J. L. P. (2012). Exercise and physical activity in the prevention of pre-eclampsia: systematic review. *Acta obstetricia et gynecologica Scandinavica*, 91(10), 1147-1157.
3. Mørkved, S., & Bø, K. (2014). Effect of pelvic floor muscle training during pregnancy and after childbirth on prevention and treatment of urinary incontinence: a systematic review. *British journal of sports medicine*, 48(4), 299-310.
4. Price, N., Dawood, R., & Jackson, S. R. (2010). Pelvic floor exercise for urinary incontinence: a systematic literature review. *Maturitas*, 67(4), 309-315.
5. Ferraro, Z. M., Gaudet, L., & Adamo, K. B. (2012). The potential impact of physical activity during pregnancy on maternal and neonatal outcomes. *Obstetrical & gynecological survey*, 67(2), 99-110.