LETTER TO THE EDITOR



Maternal education predicts compliance to exercise during pregnancy

Sir,

We thank Drs Martin-Arias et al for their interest in our study. 1,2 They are leaders on the study of the effect of exercise in pregnancy, contributing with several, large, important randomized controlled trials on this topic. Exercise during pregnancy has been shown to be associated with different benefits, 2-6 including a significantly higher incidence of vaginal delivery and a significantly lower incidence of cesarean delivery, gestational diabetes mellitus and hypertensive disorders, ^{2,3} and with a reduction in the incidence of preterm birth and gestational diabetes mellitus in overweight and obese pregnant women. 4 Therefore, women with uncomplicated pregnancies should be encouraged to engage in aerobic and strength-conditioning exercises before, during and after pregnancy, as also suggested by the American College of Obstetricians and Gynecologists (ACOG) guidelines.7

We agree with Drs Martin-Arias et al that non-compliance with the suggested exercise program is indeed the biggest barrier to reducing the well-known beneficial effects of exercise in pregnant women, as we mentioned above. We also agree with them that higher maternal education is associated with better compliance with exercise. More research is needed on interventions to increase compliance with suggested exercise programs and to spread the culture of the importance of physical activity during pregnancy to women with a lower level of education. After an accurate clinical evaluation to rule out any potential contraindications to exercise, pregnant women should be counseled that at least 150 minutes of moderateintensity, aerobic exercise per week will improve obstetric and perinatal outcomes, and is essential for a healthy pregnancy.

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REFERENCES

- 1. Martin-Arias A, Brik M, Vargas-Terrones M, Barakat R, Santacruz B. Predictive factors of compliance with a program of supervised exercise during pregnancy. Acta Obstet Gynecol Scand. 2019;98:807-808.
- 2. Magro-Malosso ER, Saccone G, Di Tommaso M, Roman A, Berghella V. Exercise during pregnancy and risk of gestational hypertensive disorders: a systematic review and metaanalysis. Acta Obstet Gynecol Scand. 2017;96:921-931.
- 3. Di Mascio D, Magro-Malosso ER, Saccone G, et al. Exercise during pregnancy in normal-weight women and risk of preterm birth: a systematic review and meta-analysis of randomized controlled trials. Am J Obstet Gynecol. 2016;215:561-571.
- 4. Magro-Malosso ER, Saccone G, Di Mascio D, Di Tommaso M, Berghella V. Exercise during pregnancy and risk of preterm birth in overweight and obese women: a systematic review and meta-analysis of randomized controlled trials. Acta Obstet Gynecol Scand. 2017;96:263-273.
- 5. Berghella V, Saccone G. Exercise in pregnancy! Am J Obstet Gynecol. 2017;216:335-337.
- 6. Saccone G, Berghella V, Venturella R, et al. Effects of exercise during pregnancy in women with short cervix: secondary analysis from the Italian Pessary Trial in singletons. Eur J Obstet Gynecol Reprod Biol. 2018;229:132-136.
- 7. ACOG Committee Opinion No. 650: physical activity and exercise during pregnancy and the postpartum period. Obstet Gynecol. 2015;126:e135. Reaffirmed 2017.