

CS04-03 - OILY FISH AND OMEGA-3 FATTY ACIDS: WHAT IS THE EFFECT SIZE?

M.Makrides^{1,2}

¹Women's and Children's Health Research Institute, North Adelaide, ²University of Adelaide, Adelaide, SA, Australia

Introduction: There is uncertainty about the benefits of omega-3 long chain polyunsaturated fatty acids (LCPUFA) found in oily fish to prevent depression, particularly in the perinatal period, despite international recommendations that pregnant women increase their intakes of omega-3 LCPUFA.

Objective: To determine whether increasing omega-3 LCPUFA during the last half of pregnancy will result in fewer women with post-partum depression.

Methods: Women < 21 weeks gestation with singleton pregnancies were randomly allocated fish oil capsules (providing 900 mg omega-3 LCPUFA daily) or matched vegetable oil capsules without omega-3 LCPUFA from study entry to birth. Post-partum depression was indicated by a score of >12 on the Edinburgh Postnatal Depression Scale at 6 weeks or 6 months post partum.

Results: Of 2399 women enrolled, 98% completed the trial. The percentage of women with post-partum depression did not differ between the fish oil and control groups (9.7% vs 11.2%, respectively; adjusted relative risk [ARR] 0.85; 95% confidence interval [CI] 0.70 to 1.02; n=2399, P=0.09). Depressive symptoms were more common among women with a history of depression at trial entry but did not differ between groups (20.9% vs 24.2%, ARR 0.87, 95% CI 0.68 to 1.12; n=564, P=0.28) despite the greater effect size.

Conclusion: The use of fish oil capsules compared with vegetable oil capsules during pregnancy did not result in lower levels of postpartum depression in mothers. Further studies are required to determine whether there are specific benefits of fish oil supplementation for women with a history of depression.