Supporting women to manage their weight during pregnancy: the HELP feasibility study

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Background

Being obese before, and excessive weight gain during pregnancy pose health risks to both mother and baby. These include maternal pre-eclampsia, gestational diabetes, increased likelihood of caesarean delivery, larger babies increasing delivery complications and increased risk of maternal death¹. Obese mothers also find it more difficult to establish breast-feeding and long-term post-partum weight retention results in the mother commencing subsequent pregnancies with a higher BMI. The Healthy Eating and Lifestyle in Pregnancy (HELP) intervention was established to support women to manage their weight during pregnancy. Findings from the feasibility study are reported here.

Methods

Obese, pregnant women were invited to attend a weekly support group encouraging adoption of healthy eating and activity habits jointly led by a trained Slimming World Consultant and a midwife. A policy was in place to ensure that any women losing weight kept a food diary to ensure nutritional adequacy and they were carefully monitored. Study participants were able to attend the group for as many weeks as they wished and up to 6 weeks post-delivery. Data on weight change, mode of birth, gestation, birth weights and breast-feeding rates was collected.

Results

148 pregnant women attended with a mean starting BMI of 37.4kg/m² (range 30 to 58.7). Of those women returning to the group after giving birth (n=55), the mean weight change after giving birth was -9.1kg (-1.8 to -16.8). All of these women weighed less than they did at the start of the intervention.

39 mothers lost weight during their pregnancy but no difference in birth weights were seen, 3594g v. 3530g in those mothers not losing weight during pregnancy.

- Mean gestation was 39.76 weeks
- 47.7% had a standard vaginal delivery
- There were no cases of pre-term birth or low birth weight
- There were no cases of shoulder dystocia a recognised risk factor associated with maternal obesity

	Mean weight change	Maximum	Minimum
Weight change before giving birth	+3.3kg (SD 0.7)	+13.2kg	-11.1kg
Weight change after giving birth	-9.1kg (SD 0.5)	-1.8kg	-16.8kg
Total weight change since joining group	-5.6kg (SD 0.7)	+7.3 kg	-17.0kg

The data for breast-feeding rates, both initiation and 28 days, showed positive trends compared to the respective rates for the whole of Wales. In the intervention group breast-feeding initiation was 89% compared to 52% for the wider Welsh population. Breast-feeding in the intervention group was 64% at 28 days compared to 44% at 5-8 days (new-born screening) in the wider Welsh population².

Conclusion

The HELP intervention is a scalable public health intervention which meets the NICE guidance³ on best practice for weight management during pregnancy, promoting adoption of healthy lifestyle behaviours including an eating plan which is not restrictive. Some women did lose weight during pregnancy but this was not to the detriment of the health of the mother or baby and may have had positive long-term benefits.

References:

- 1. CEMACH (2007), 'Saving Mothers Lives; reviewing maternal deaths to make motherhood safer' www.cemach.org.uk
- 2. Welsh Government, Breast-feeding statistics 2004. wales.gov.uk/topics/statistics/headlines
- 3. NICE (2010), 'Weight management before, during and after pregnancy' www.nice.org.uk

