

The HELP (Healthy Eating and Lifestyle in Pregnancy) preliminary study results

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The study

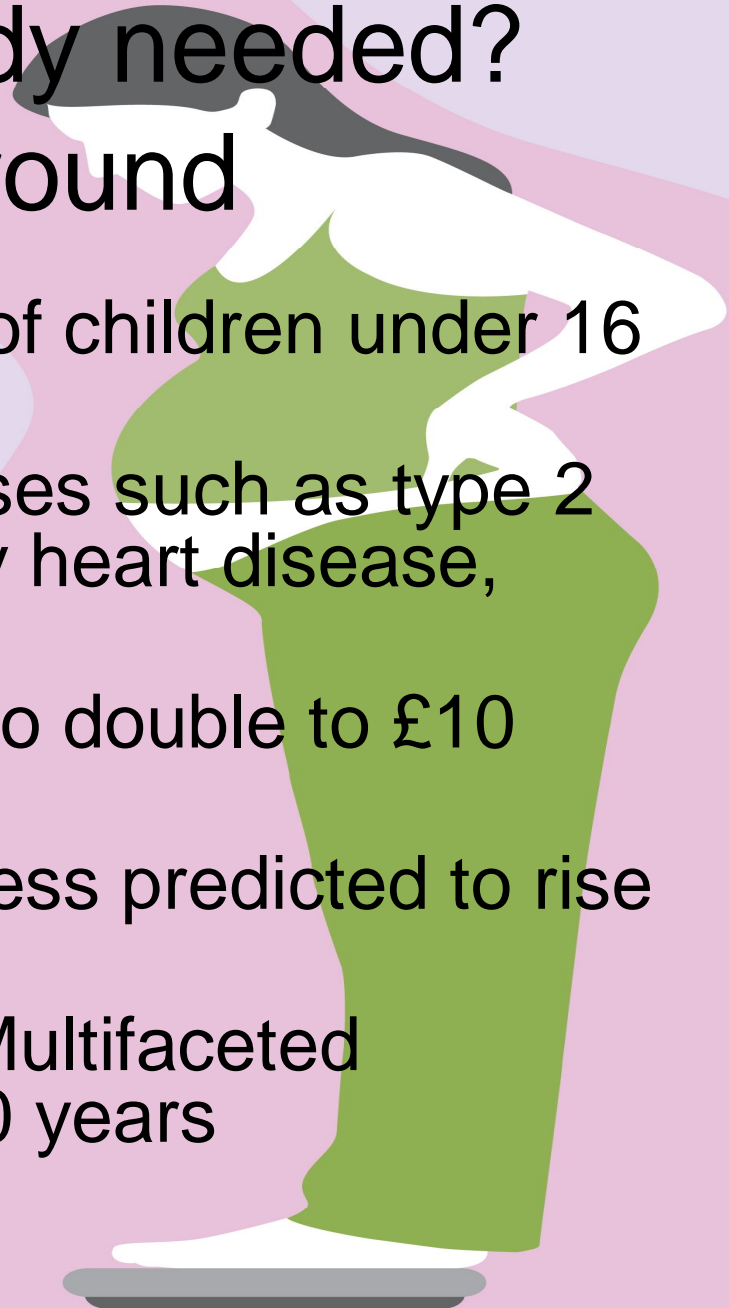
- The aim of this study was to explore the acceptability of a Healthy and Eating support group to pregnant women with raised BMI's
- Funding was obtained from Cardiff and Vale NHS research grant
- The study started recruiting in May 2008 until Dec 2008 and was completed on the birth of the last members baby in May 2009



Why was this study needed?

The Background

- 50% of women and 25% of children under 16 will be Obese by 2050
- Increase in chronic diseases such as type 2 diabetes, stroke, coronary heart disease, cancer and arthritis
- NHS costs are predicted to double to £10 billion by 2050
- Cost to society and business predicted to rise to £49.9 billion
- **RECOMMENDATION** – Multifaceted response over the next 30 years
- Foresight Report (2007)



Why is Obesity important in Maternity care?

UK National Guidance



- NICE guidance (2003) recommends that women with BMI over 35 should be provided with Obstetric led antenatal care
- Confidential enquiry (2007) found obesity to be the leading cause of avoidable deaths with a third of deaths in the obese category

Local Background



- Increase in options for place of birth with opening of 2 Midwifery Led Units
- Rising caesarean section rate
- Evidence of morbidity issues nationally
- Risk assessments categorising women at increased risk
- Reduced dietetic service for referral of all obese women



Cardiff Statistics

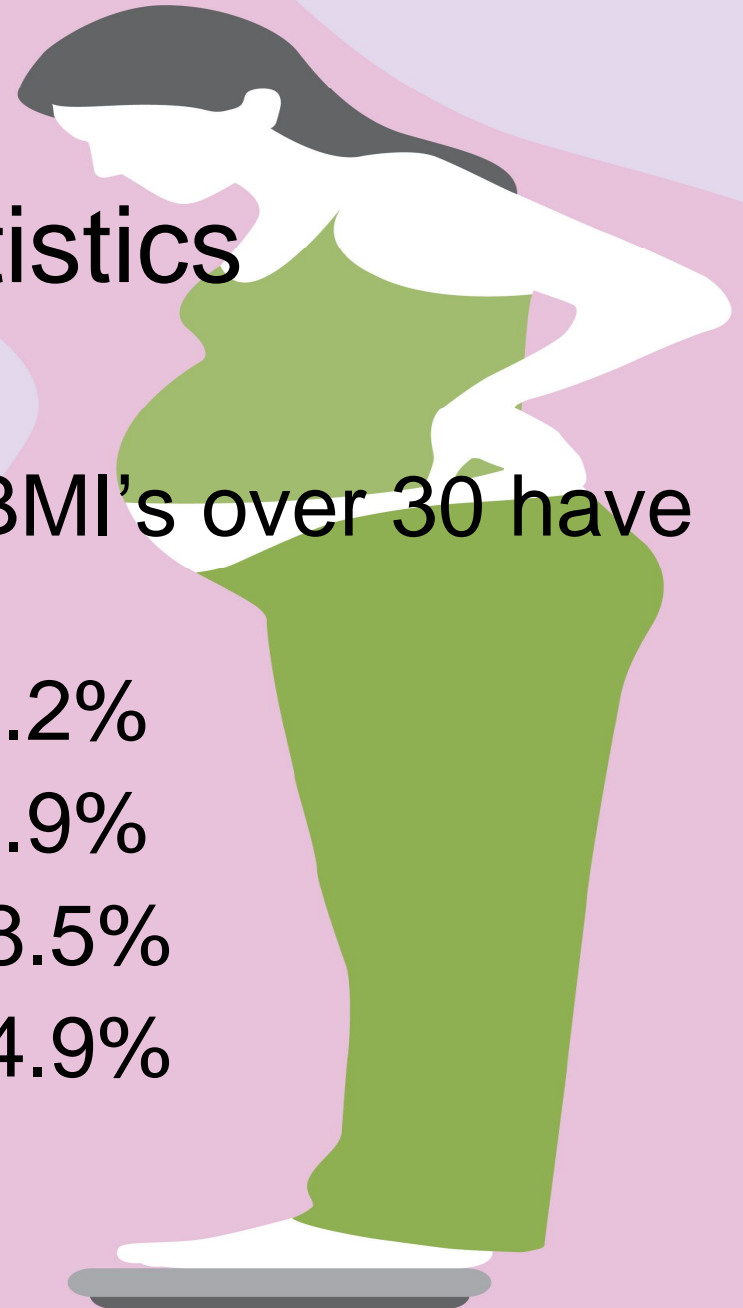
Statistics of women with BMI's over 30 have risen:

In 1990 – 3.2%

In 1999 – 8.9%

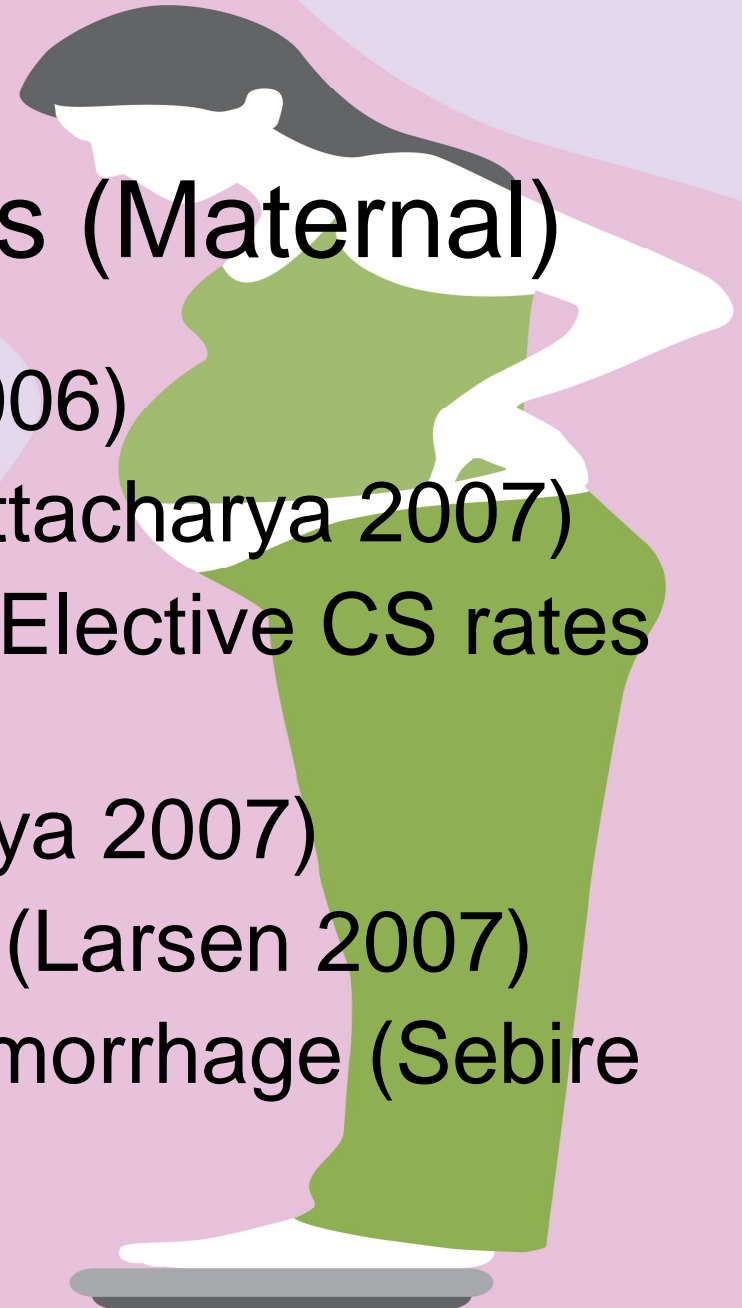
In 2006 – 18.5%

In 2008 – 24.9%



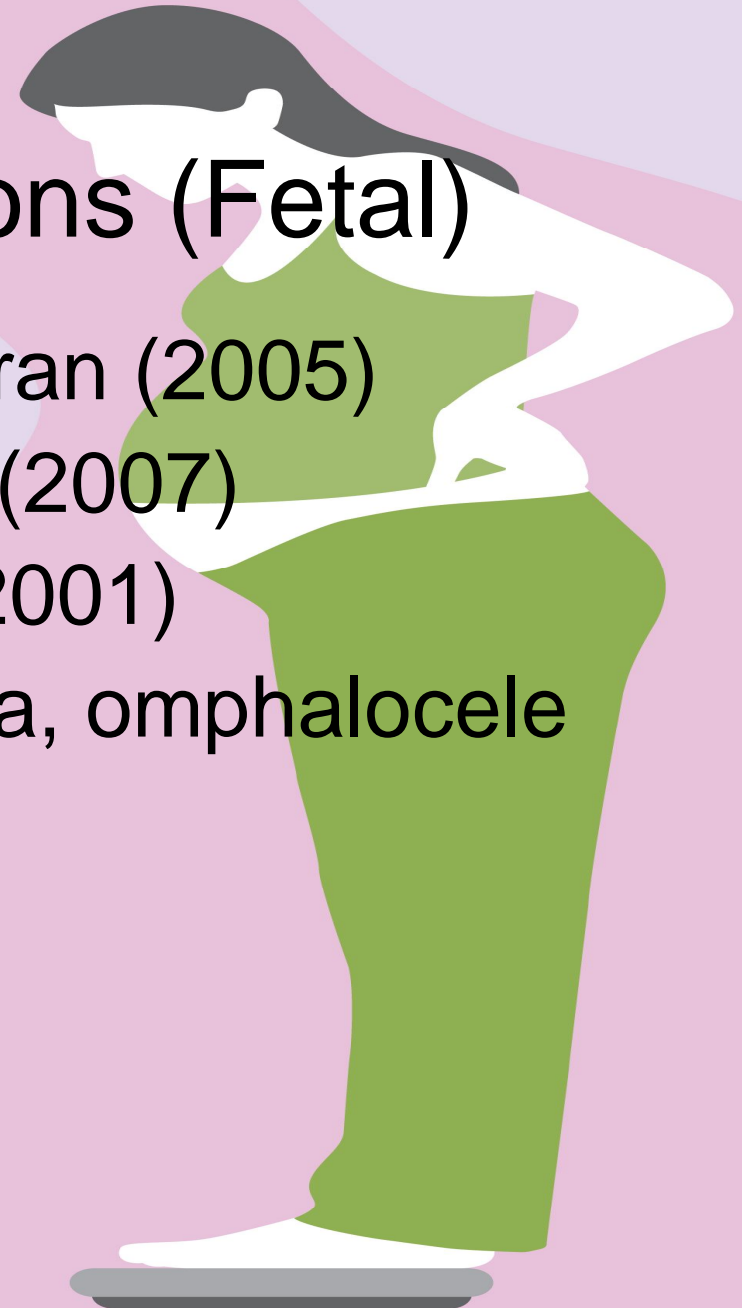
Health Implications (Maternal)

- Hypertension (Callaway 2006)
- Gestational Diabetes (Bhattacharya 2007)
- Increased emergency and Elective CS rates (Callaway 2006)
- Increased IOL (Battachaarya 2007)
- Venous thromboembolism (Larsen 2007)
- Increased postpartum haemorrhage (Sebire 2001)



Health Implications (Fetal)

- Shoulder Dystocia (Usha Kiran (2005))
- Pre-term birth (Battacharya (2007))
- Admission to NNU (Sebire 2001)
- Birth defects e.g. spina bifida, omphalocele (Usha Kiran 2005)
- Stillbirth (Sebire 2001)
- Macrosomia (Bianco 1998)



Background to the study

- No capacity within NHS
- Thinking differently
- Use of experts within field
- Bridging the gap by working in partnership with Slimming world



How the group works

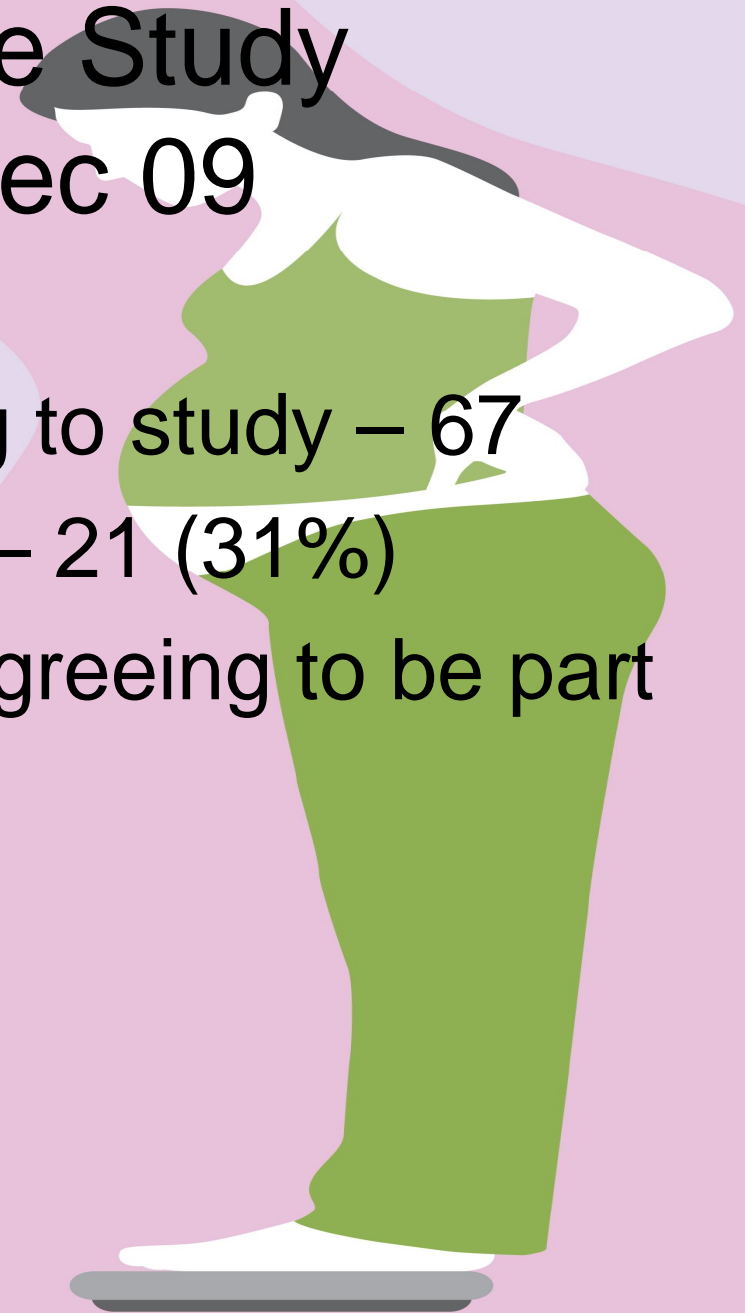
- Invite to group if BMI over 30 at antenatal visit (Over 35 initially for study and 30 from Aug 2008)
- Free attendance (Referral scheme)
- Weekly sessions led jointly by slimming world consultant and midwife
- Weekly weight/motivational group support/midwifery and lifestyle advice



Recruits to the Study

May 08 – Dec 09

- Total number agreeing to study – 67
- Total attending group – 21 (31%)
- Total non- attenders agreeing to be part of study – 46 (69%)



The Group



The Results



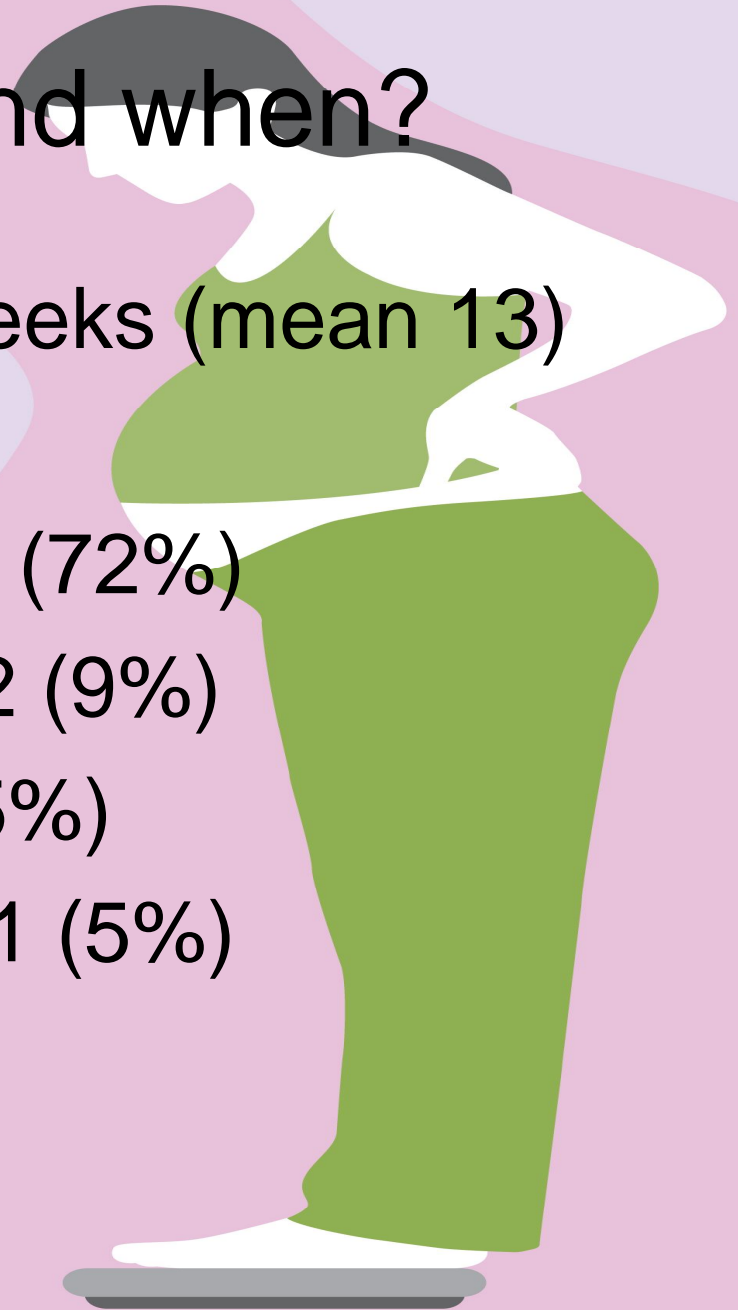
Who Attended?

- Age 23 – 40 (Mean 30)
- Booking weight 80kg – 140kg (Mean 105kg)
12st 8lb – 22 st (Mean 16st 7.5lb)
- Booking BMI 32 – 49 (Mean 39)

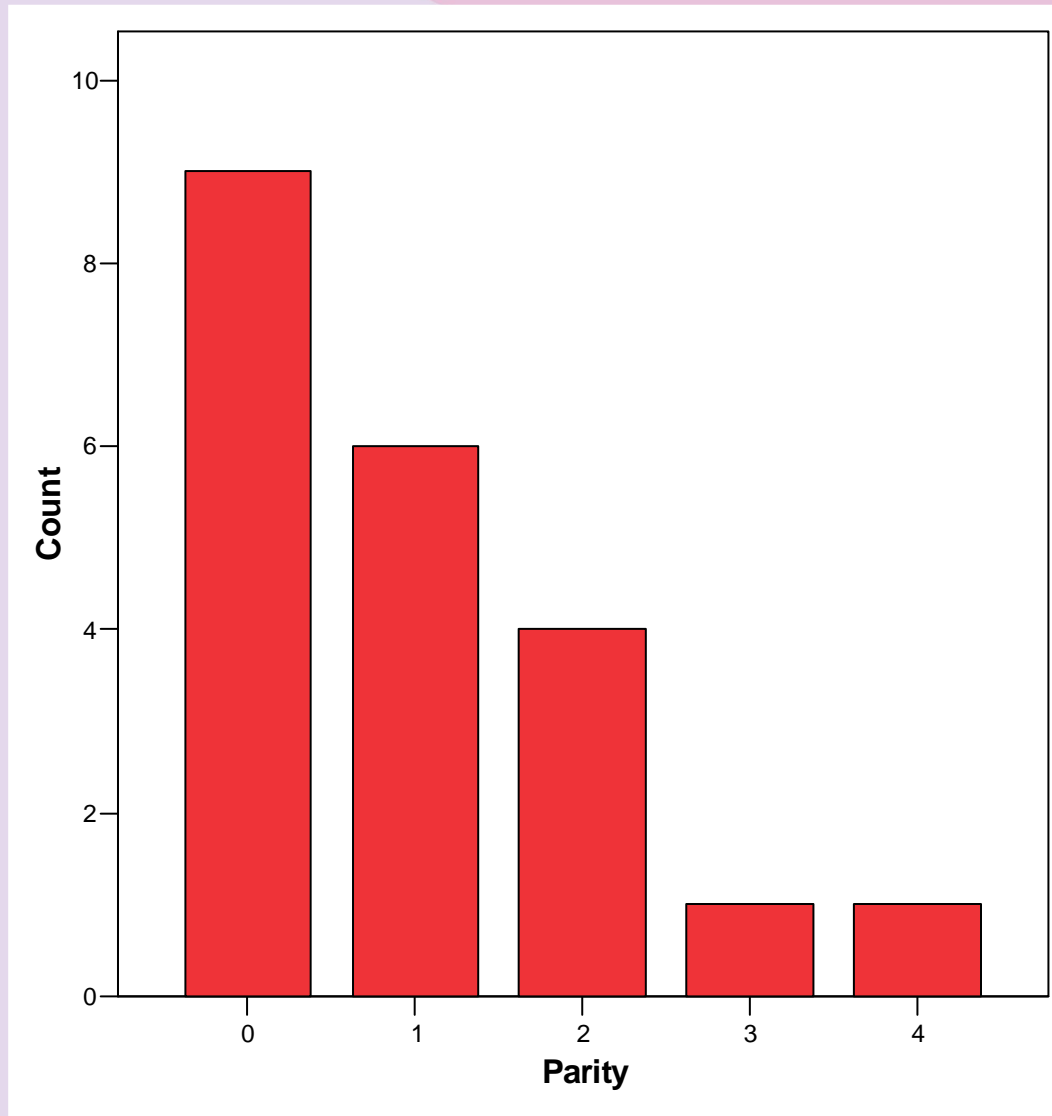


Who referred and when?

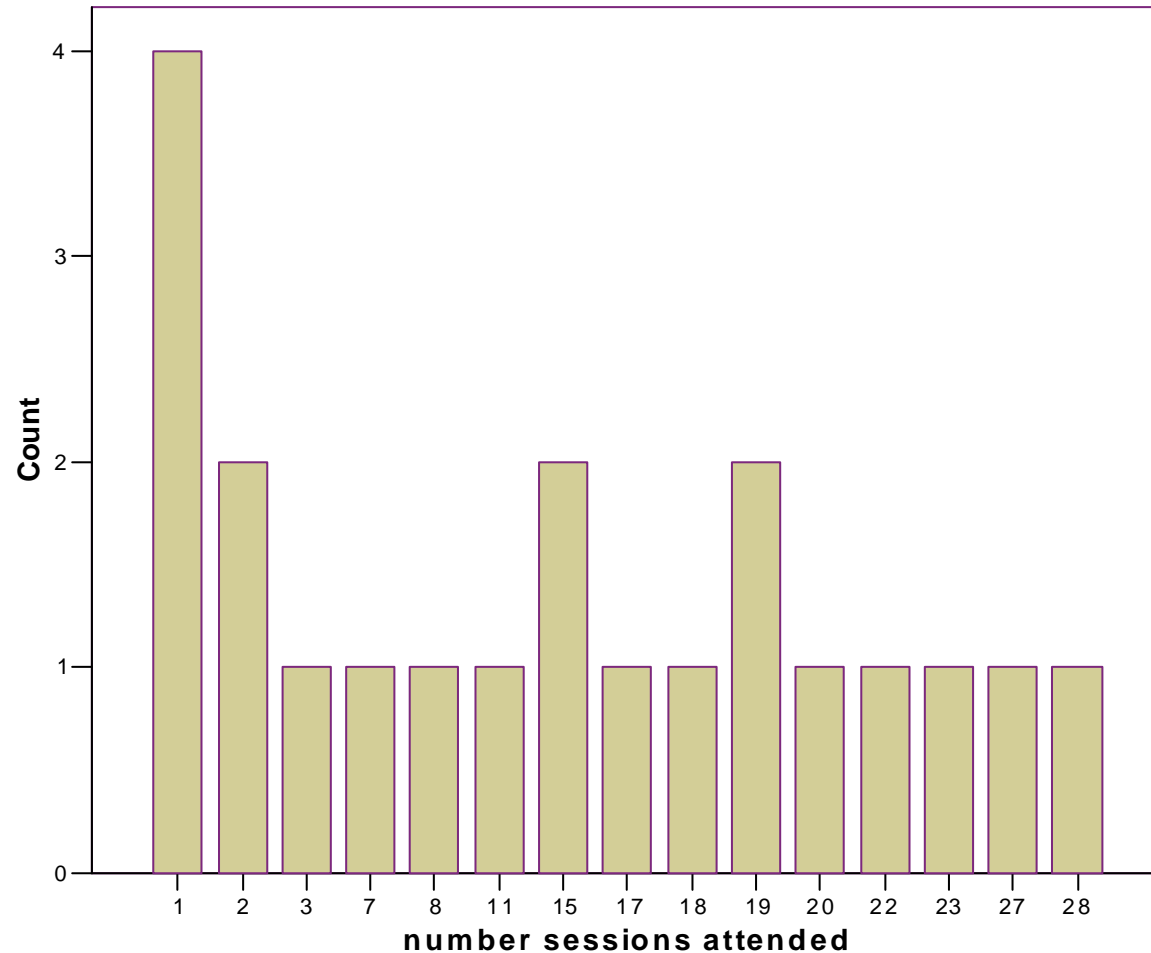
- Gestation – 10 – 21 weeks (mean 13)
- Referred by
 - ANC midwife – 15 (72%)
 - Comm midwife – 2 (9%)
 - Obstetrician – 1 (5%)
 - Slimming world – 1 (5%)
 - No info – 2 (9%)



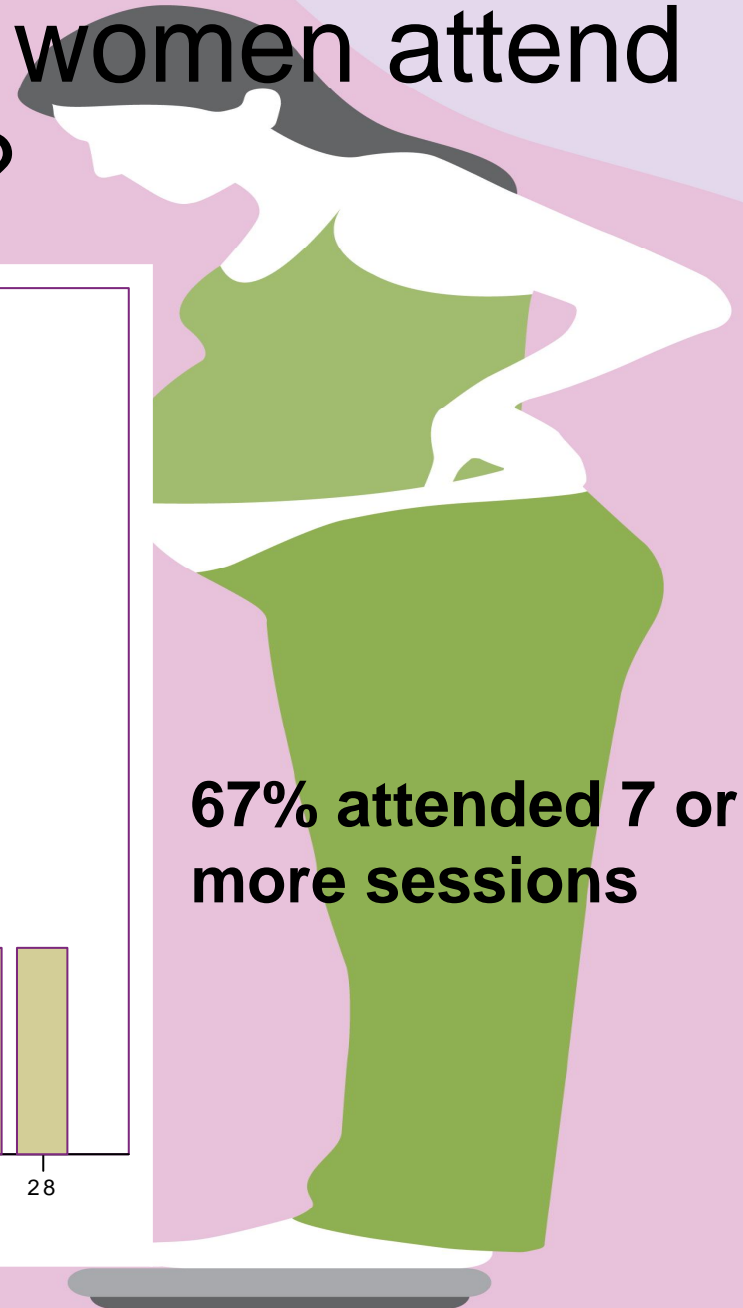
Was it the first pregnancy?



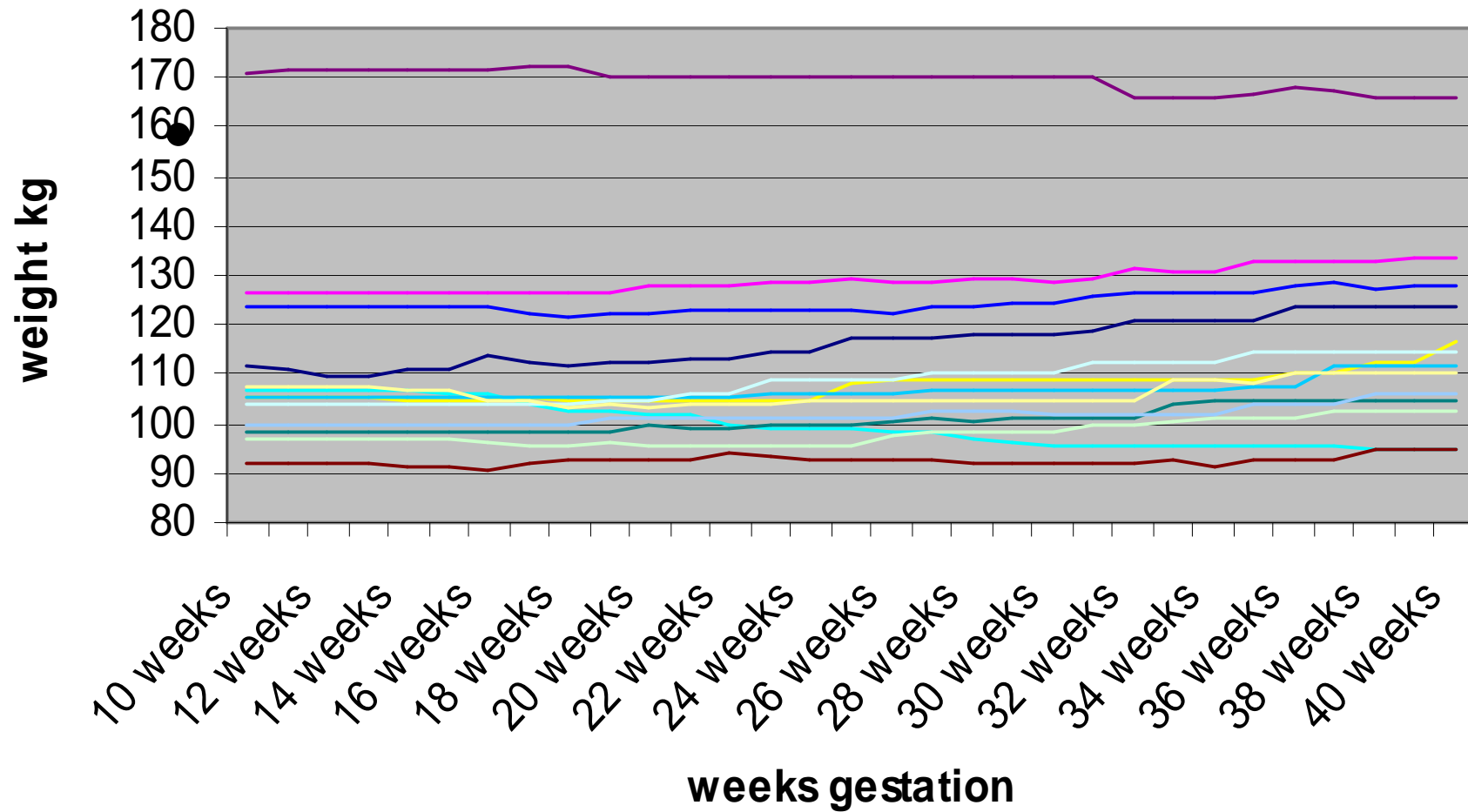
How many times did women attend group?



67% attended 7 or more sessions



Group weight changes



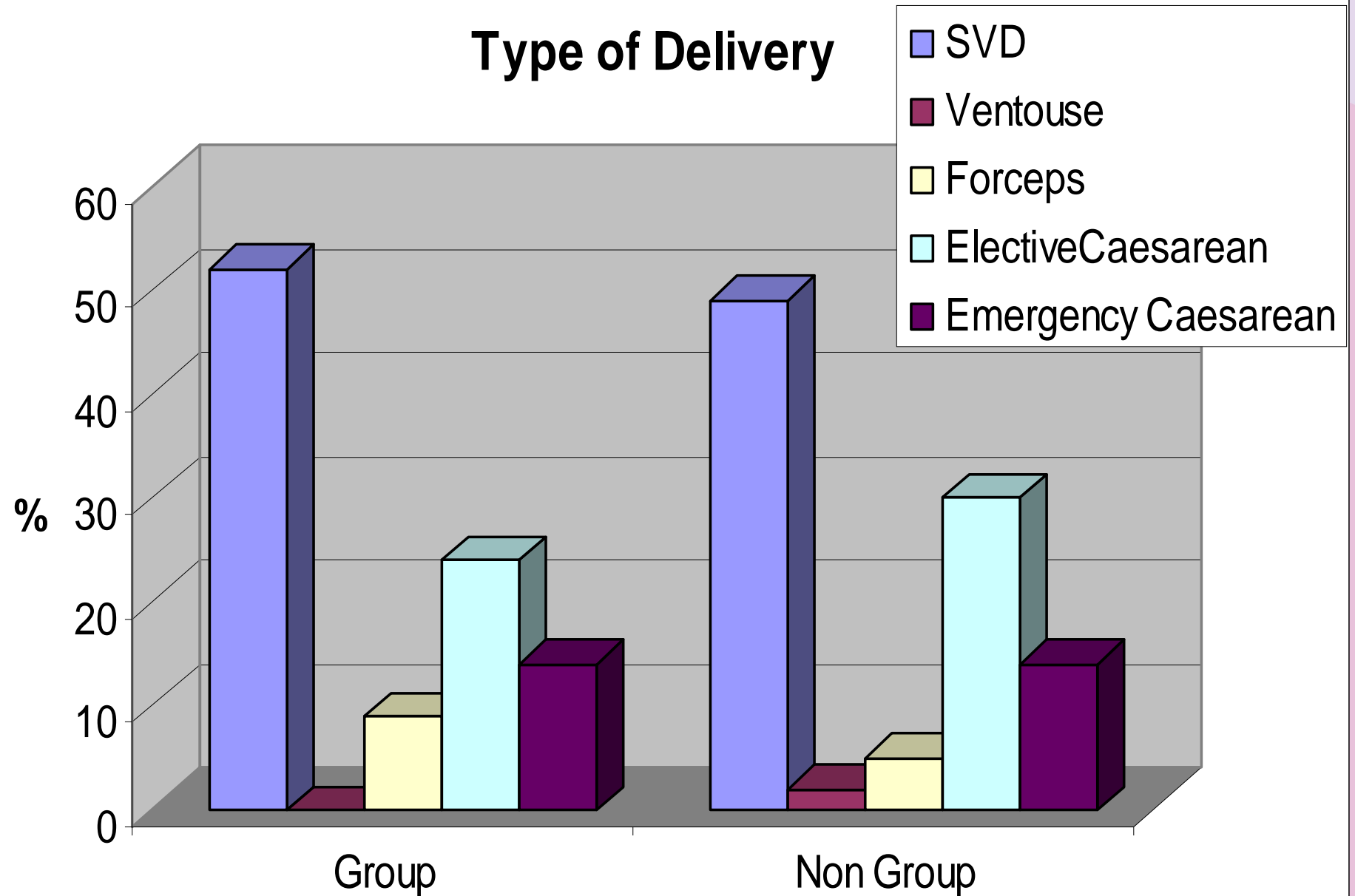
WEIGHT CHANGE at 36 weeks (IOM guidance 5 – 9 kgs)

	Group	Non-group
Number of women	16 (76%)	7 (15%)
Lowest gain	-12.9 kg -2 st	+1.8 kg +4 lb
Highest gain	+13.3 kg +2 st 1 lb	+21.5 kg +3 st 5 lb
Mean gain	+3.8 kg +8.3 lb	+7.9 kg +1 st 3 lb

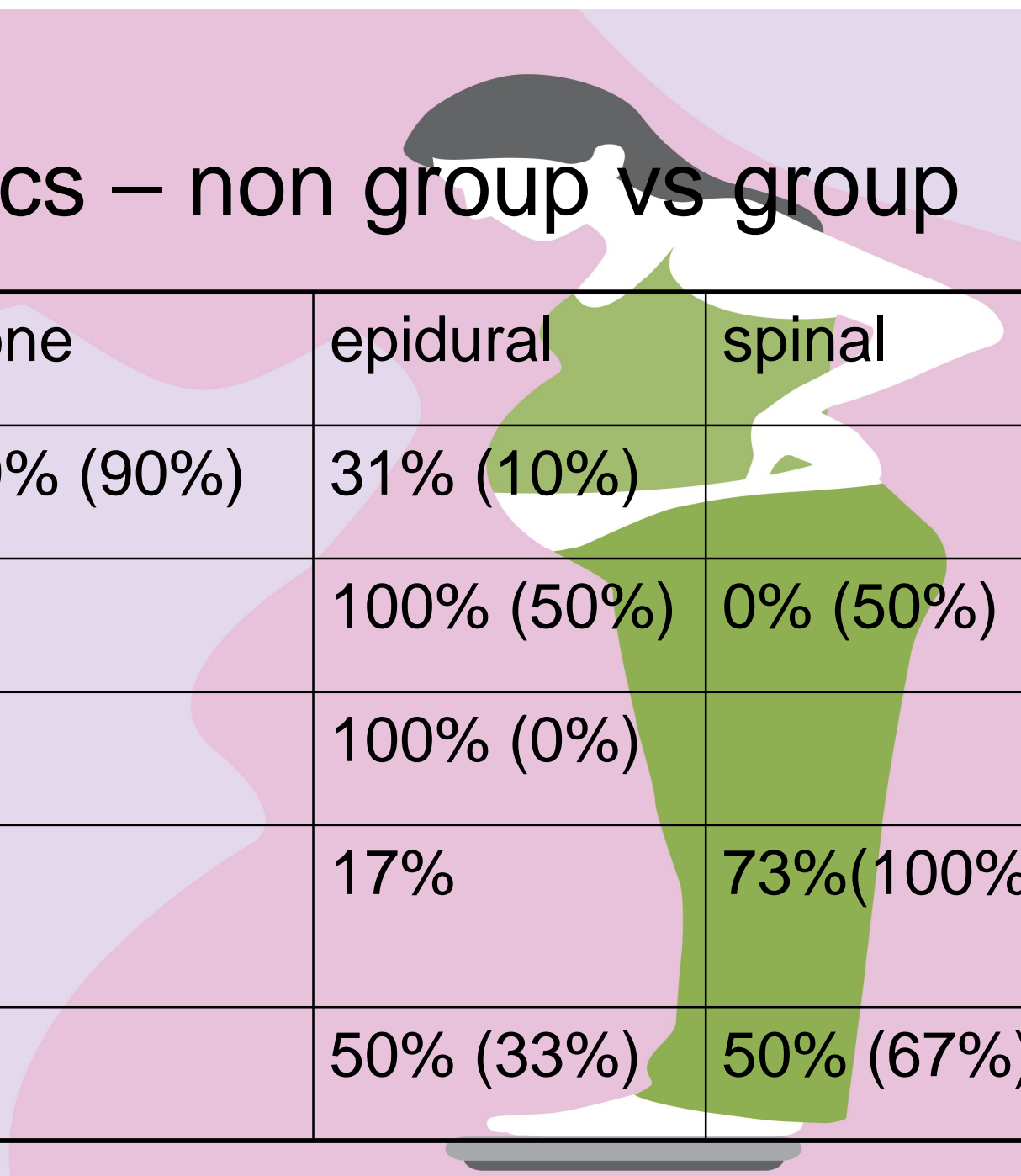
Delivery Results



Type of Delivery



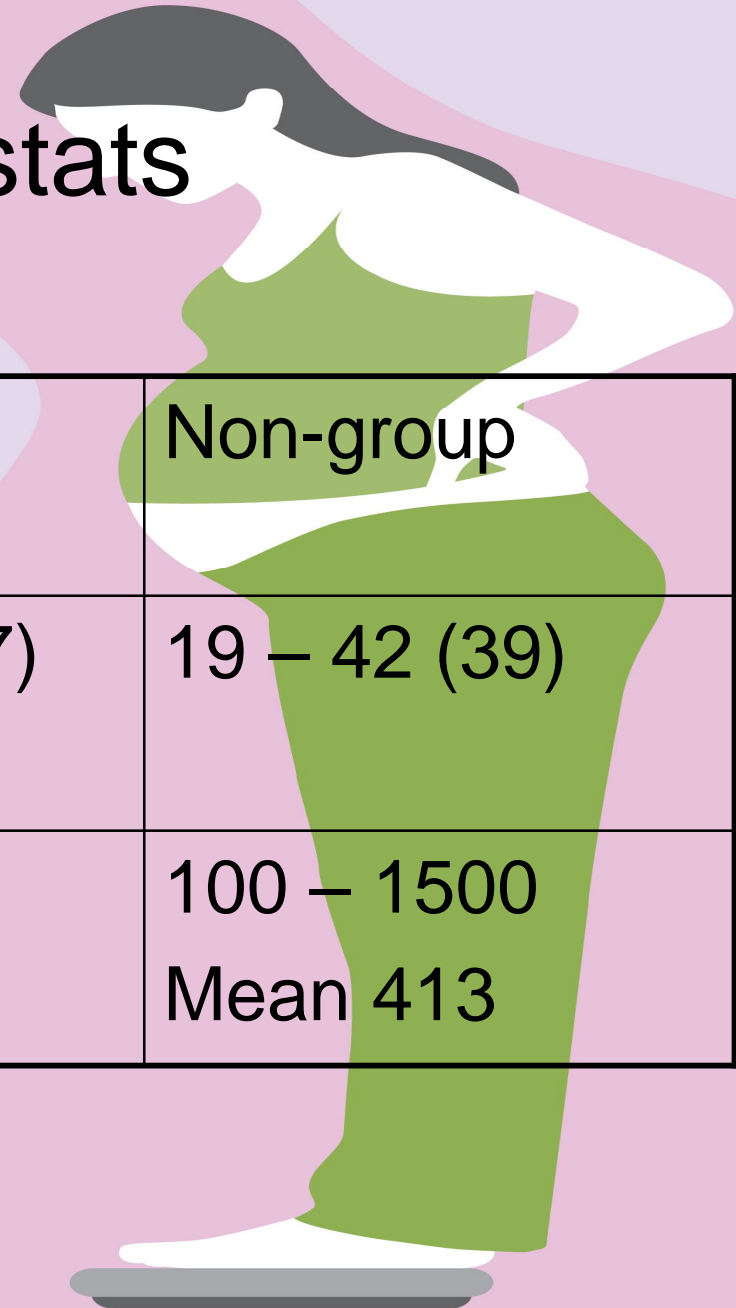
Anaesthetics – non group vs group



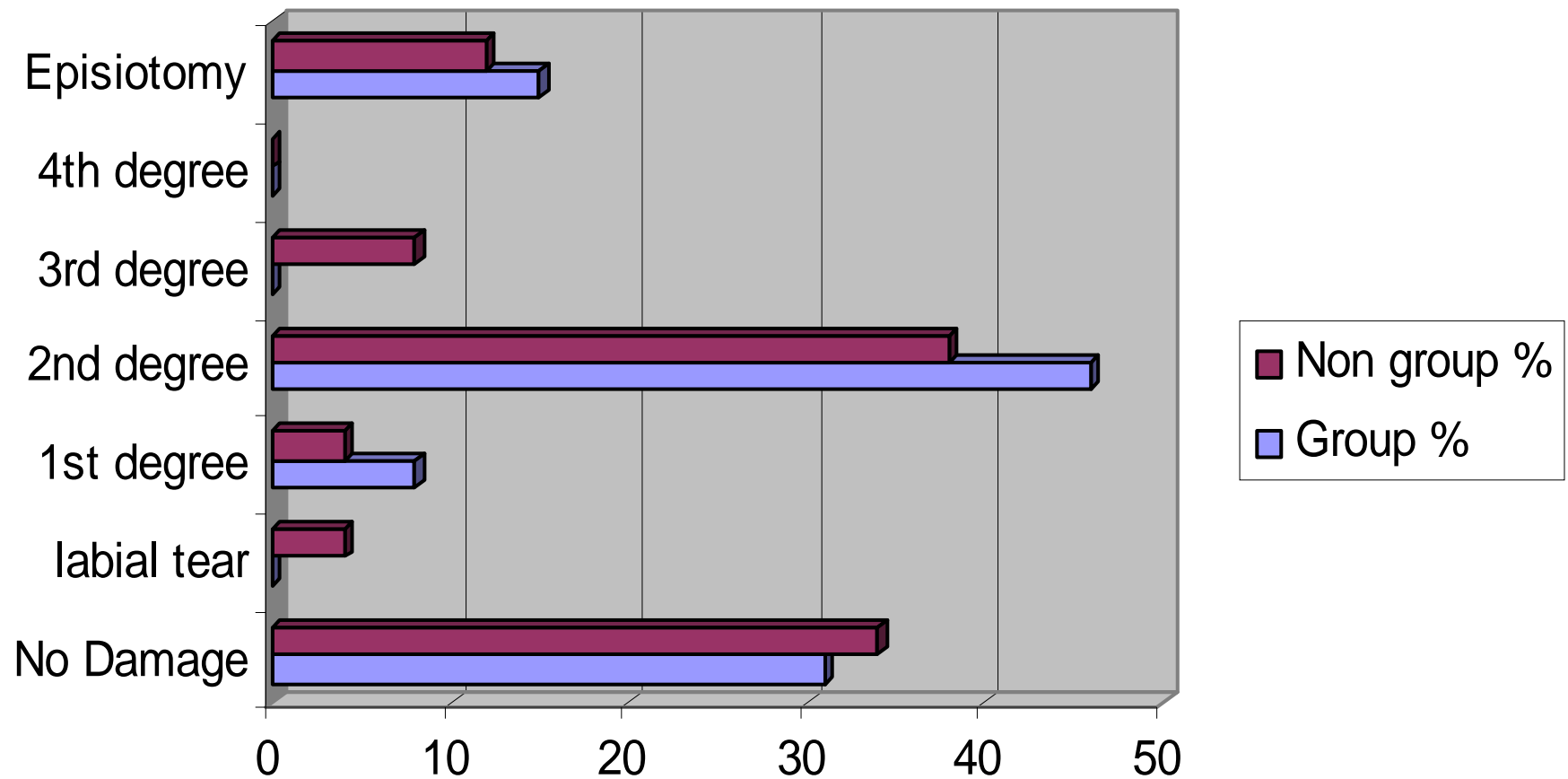
Type of birth	none	epidural	spinal
SVD	69% (90%)	31% (10%)	
Forceps		100% (50%)	0% (50%)
Ventouse		100% (0%)	
Elective CS		17%	73%(100%)
Emerg CS		50% (33%)	50% (67%)

Delivery stats

	Group	Non-group
Gestation at delivery	37 – 41 (39.7)	19 – 42 (39)
Blood loss	100 – 1200 Mean 412	100 – 1500 Mean 413



Perineal damage

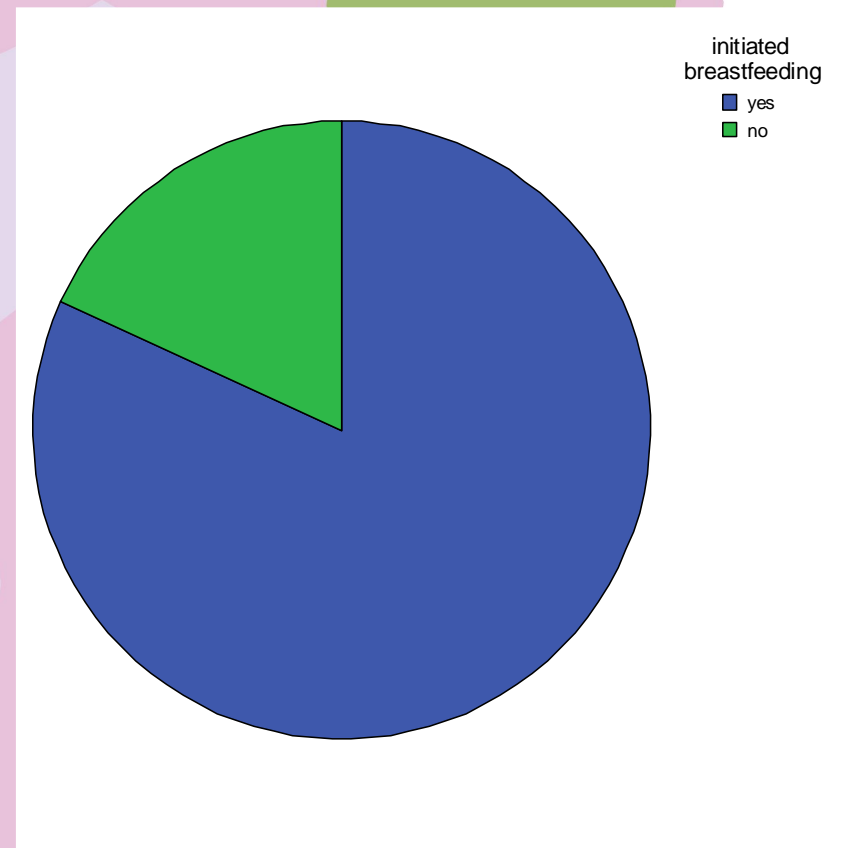
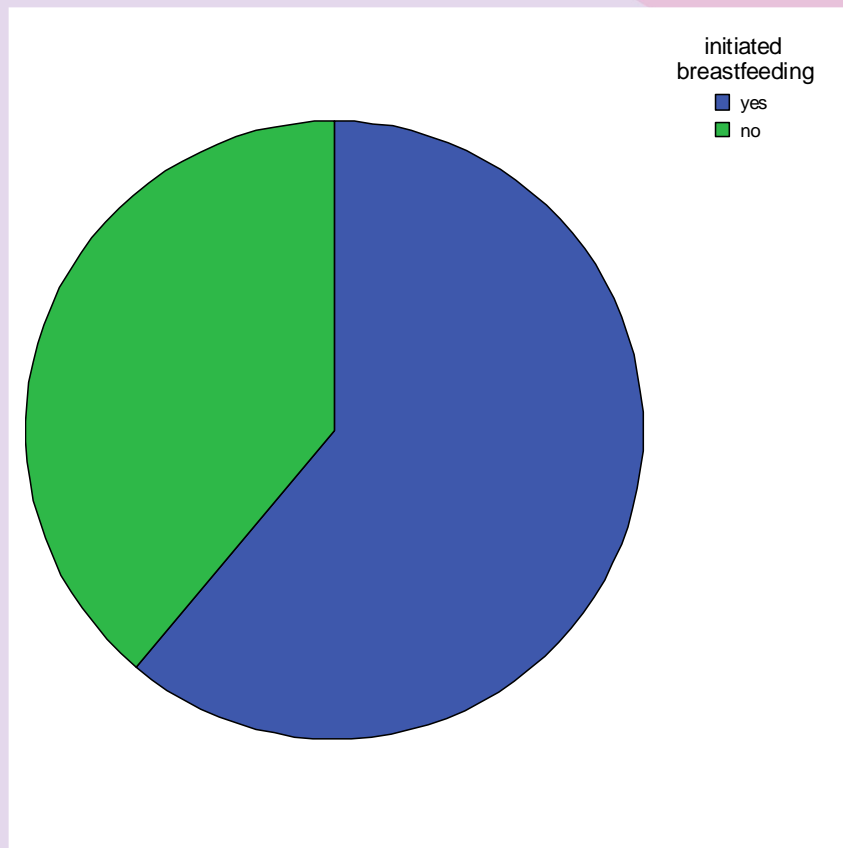


Baby details

	Group	Non-group
Apgars 1 + 5	8.7 – 9.3 mean	8.3 – 9.1 mean
Birth weight	2.555 – 5.000 Mean 3.652	2.230 – 4.650 Mean 3.512

Breastfeeding Initiation

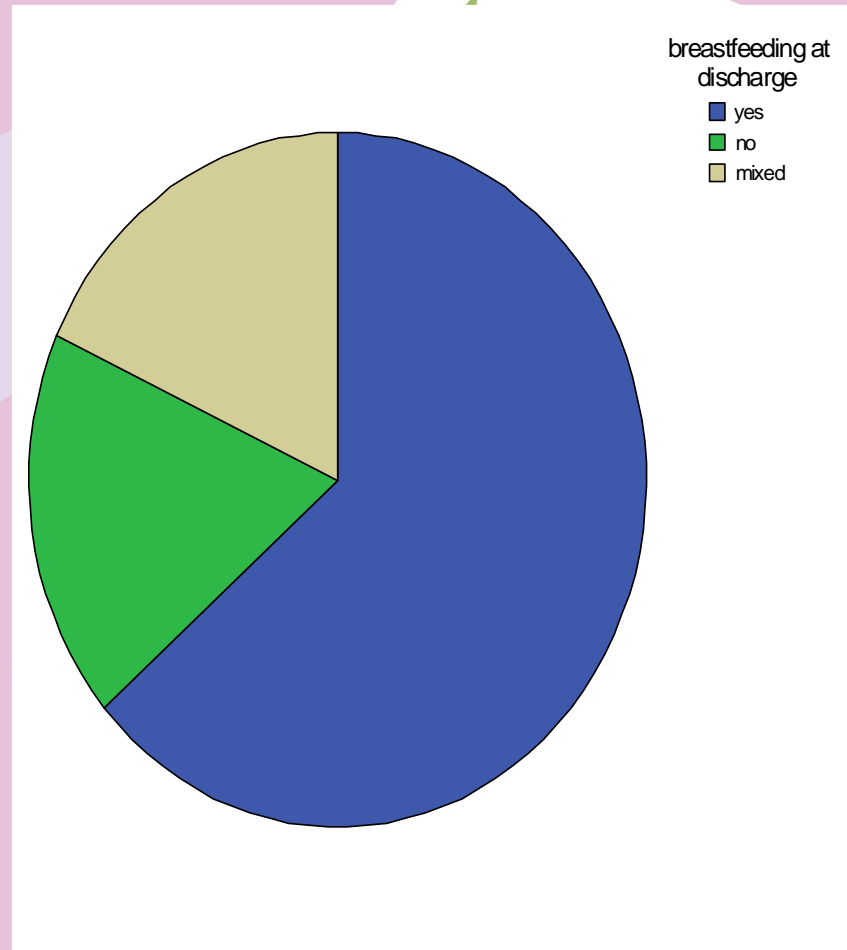
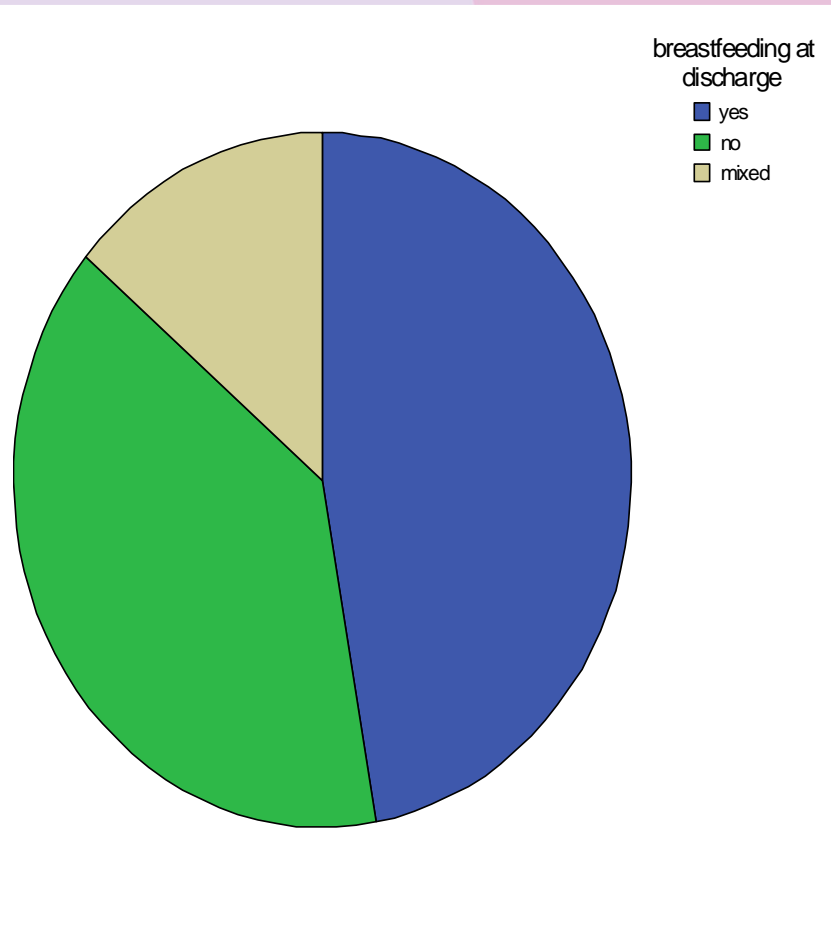
Non group Group



Breastfeeding at Discharge

Non-group

Group



Postnatal weight losses

- Changes from booking to 1st postnatal visit
-19.7kg to +3.3kg
mean change 4.2kg loss from booking
data from 12 women



What the women think

“I felt that I had no choices when they told me I was too big but coming to group and keeping control of my weight has given me my confidence back”

“I dropped 2 maternity jean sizes and felt great – I was lighter than I had been for years after I had my baby”

“Everyone should have a group like this”

“Thank you for keeping my daughter healthy in this pregnancy”

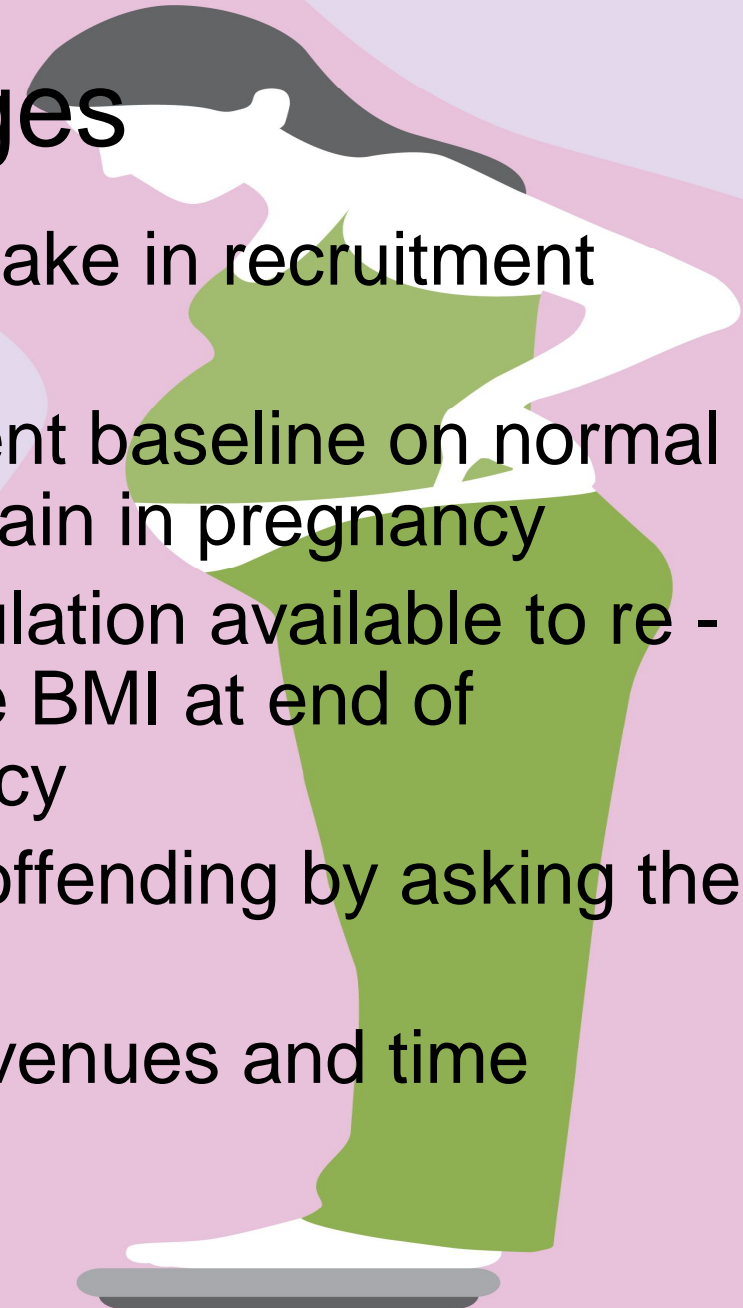
“Last time I put on 4 stone and had diabetes, this time I am in control”

“I really enjoyed the community



Challenges

- Poor uptake in recruitment initially
- No current baseline on normal weight gain in pregnancy
- No calculation available to re-measure BMI at end of pregnancy
- Fear in offending by asking the question
- Central venues and time
- Cost



The Future

- Proposal to extend to randomised controlled trial across UK – 20 centres of 1000+ births in collaboration with South East Wales Trials unit
- National CEMACH standards
- NICE guideline

