



Patterns and Predictors of Postpartum Weight Retention in Gampaha District

Group A.1.2

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Introduction

Postpartum weight retention is defined as the difference between, weight at point in time after delivery and weight prior to pregnancy.

Overweight and obese individuals are at increased risk of developing cardiovascular disease, diabetes etc. Postpartum weight retention may lead to overweight & obesity.

Therefore determining the pattern and identifying the associated factors of postpartum weight retention are an important first step in tackling this.

Objective

To describe the pattern of postpartum weight retention and factors associated with it among postpartum mothers bringing their children aged 6, 12 and 18 months to the immunization clinics in the Gampaha district.

Materials and Methods

Study design : Descriptive Cross sectional study

Study setting : Selected MOH vaccination clinics in the Gampaha District

Study period : From March 2019 to March 2020

Study population: Mothers who bring their children for 6, 12 and 18 month vaccination

Sample size : 140 per group (for each postpartum duration) - Total of 420

Sampling technique: Consecutive sampling of eligible women attending vaccination clinic.

Study Instruments : Interviewer administered questionnaire

Data collection method : Face to face interviews followed by telephone interviews

Data collection tool : Interviewer administered questionnaire

Data analysis : Data was analysed using R software. Descriptive statistics were presented as mean and sd. The t test, correlation and linear regression was used to identify factors associated with postpartum weight retention.

Ethics : Approval for the study was obtained from the Faculty ERC

Results

A total of 412 postpartum women participated.

Table 01. Distribution of background variables and postpartum weight gain by postpartum months.

	Postpartum Months		
	6 (PPM6) n = 141	12 (PPM12) n = 143	18(PPM) n = 128
Age (years)	29.5 (5.6)	29.7 (5.6)	29.6 (5.0)
Pre Pregnancy Weight (kg)	55.8 (11.9)	55.1 (11.4)	54.9 (11.6)
Pregnancy Gain (kg)	9.7 (6.3)	11.0 (6.9)	9.4 (6.5)
BMI (kg/m ²)	23.6 (4.9)	23.2 (4.5)	23.2 (4.7)
Postpartum Weight Retention (kg)	4.3 (6.1)	4.7 (6.4)	4.2 (6.4)

Maximum postpartum weight retention seen in 18-25 age group

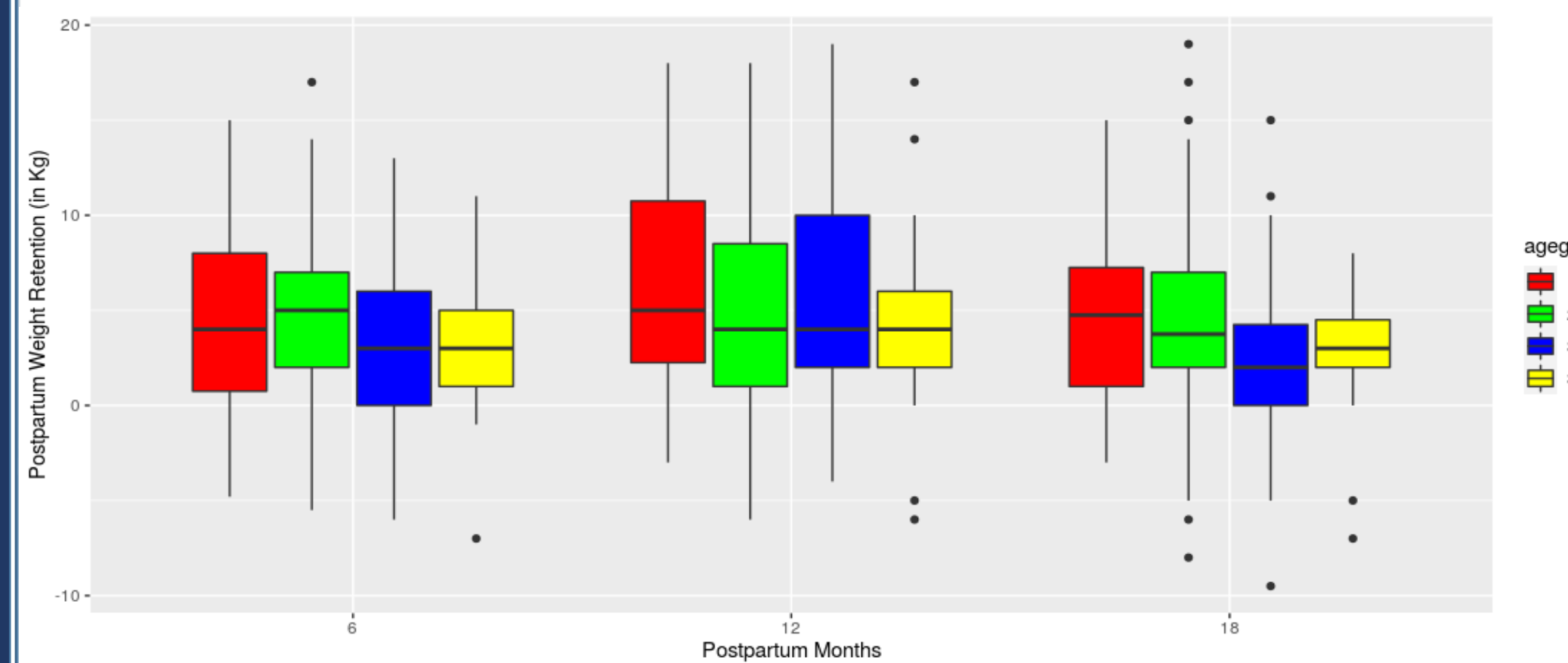


Figure 01. Maternal Age & PPWR by Postpartum Months

More Postpartum Weight Retention in Primi-parity mothers

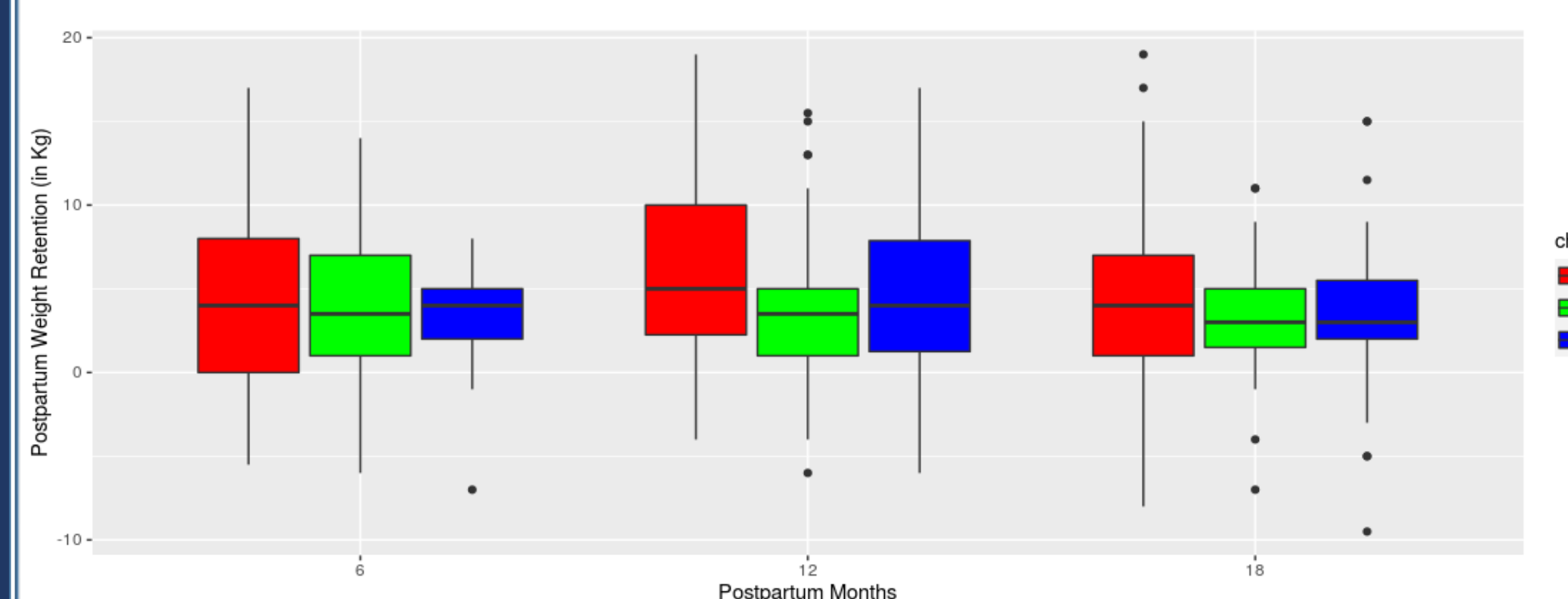


Figure 02 .Parity & PPWR by Postpartum Months

Postpartum Weight Retention was inversely associated with pre pregnancy weight, especially at 18 months

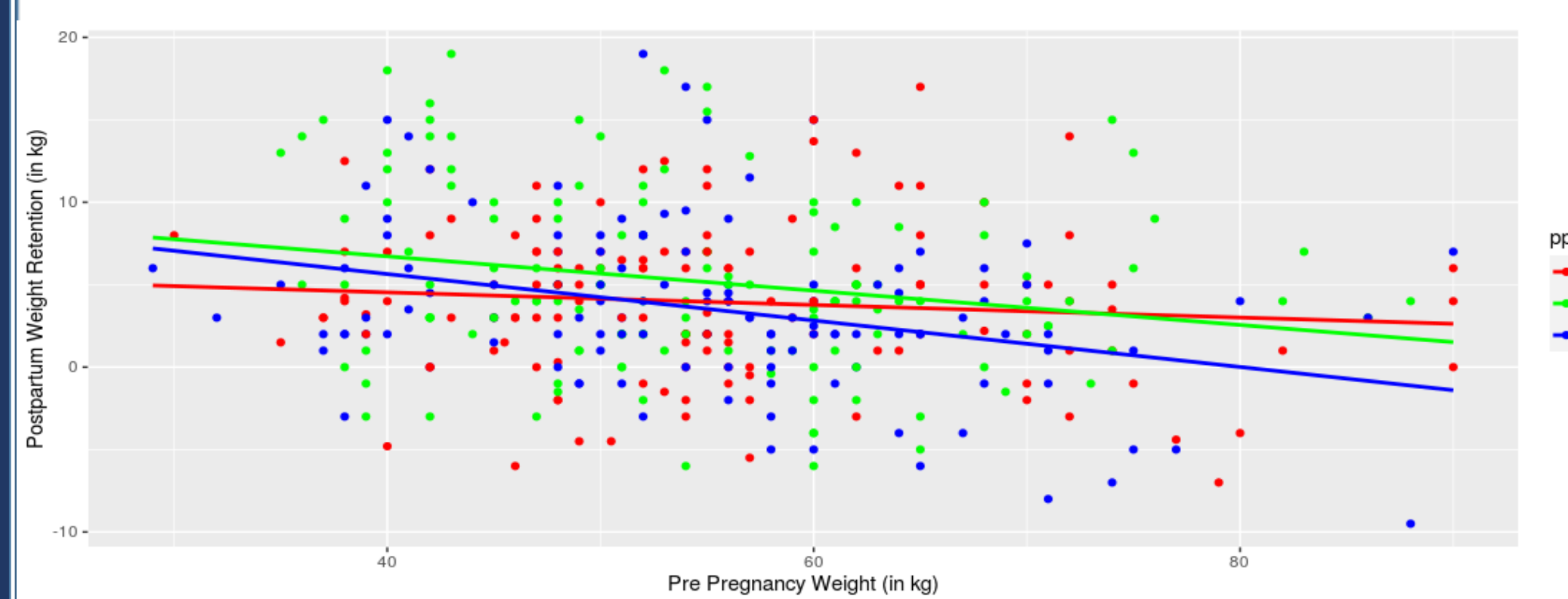


Figure 03.Pre-pregnancy Weight & PPWR by Postpartum Months

Postpartum Weight Retention was inversely associated with pre-pregnancy BMI especially at 18 months

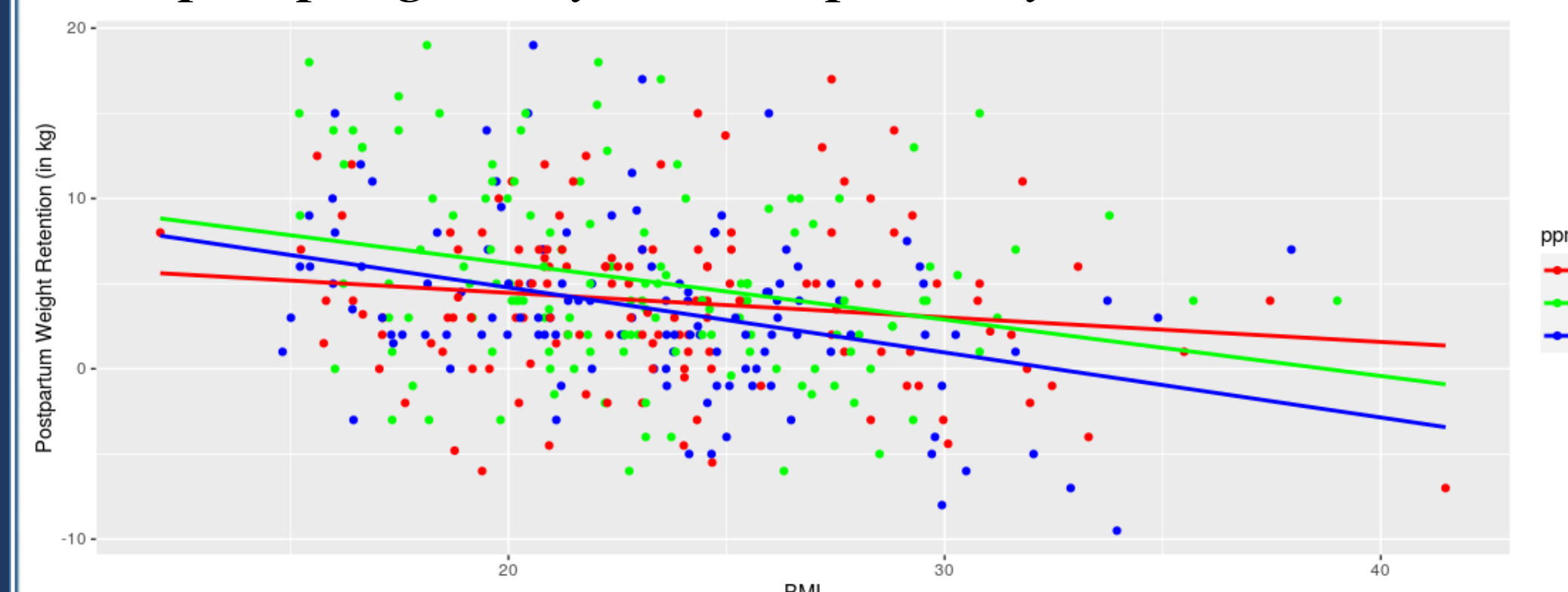


Figure 04.BMI & PPWR by Postpartum Months

Postpartum Weight Retention showed positive association with Pregnancy weight gain

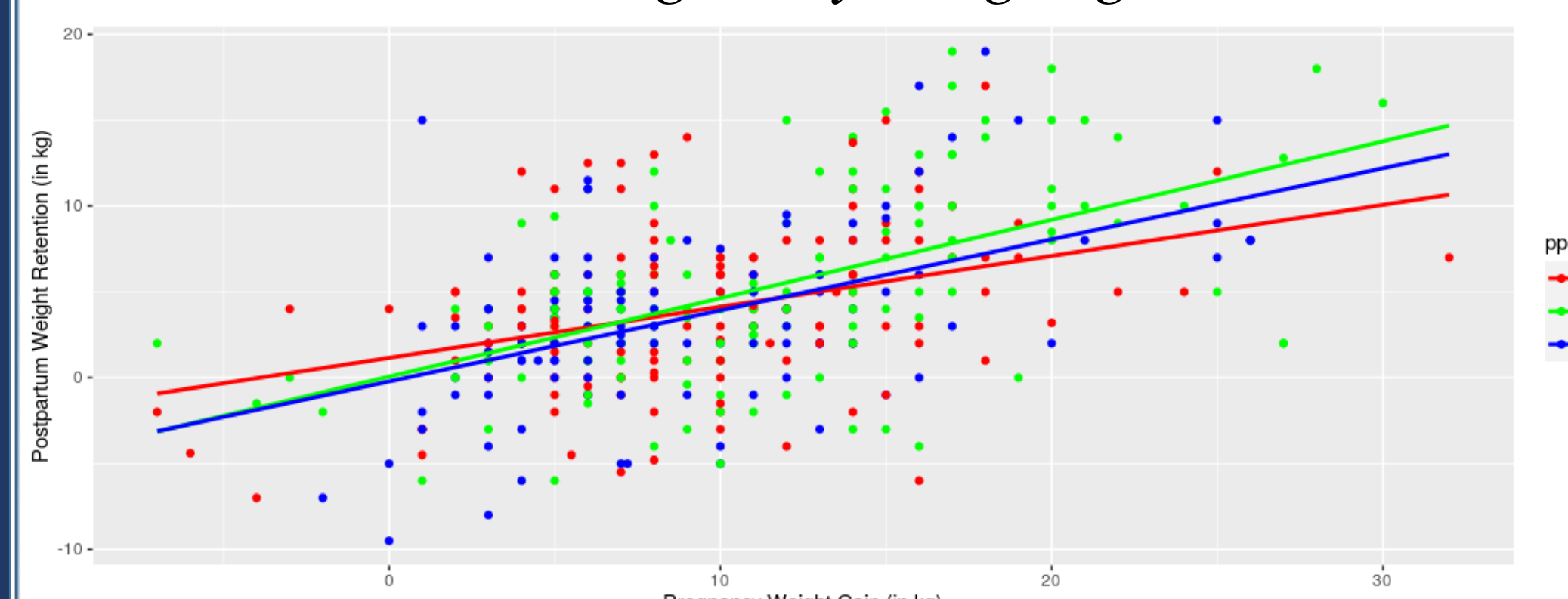


Figure 05.Pregnancy Weight Gain & PPWR by Postpartum Months

Postpartum Weight Retention was higher in women who used hormonal contraceptive methods

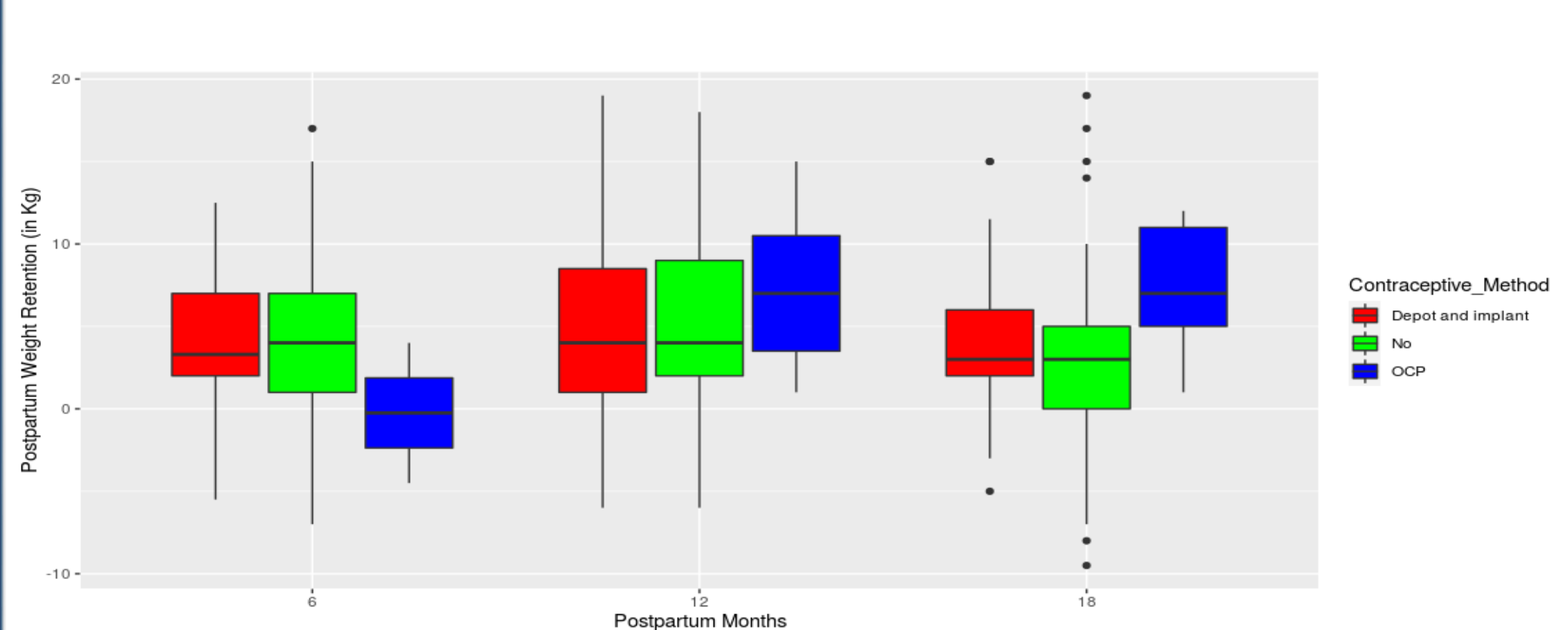


Figure 06.Contraceptive method & PPWR by Postpartum Months

Conclusion

- This study shows significant postpartum weight retention can be seen in mothers in PPM6, PPM12, PPM18.
- PPM 6– Mean postpartum weight retention 4.2kg ±6.0 (95% CI 3.2 – 5.2)
- PPM 12- Mean postpartum weight retention 4.6kg ± 6.4 (95% CI 3.6 - 5.7)
- PPM 18– Mean postpartum weight retention 4.2kg ± 6.4 (95% CI 3.1 – 5.3)
- Age** –Maximum Median PPWR can be seen in 18-25 Age group in 12PPM & 18PPM.
- Parity** –PPWR is more in Primi-parity mothers than in multi-parity mothers by 12PPM,18PPM
- Pre pregnancy weight** – PPWR reduces with increasing pre pregnancy weight in 6PPM,12PPM &18PPM
- BMI**-PPWR reduces with increasing BMI in 6PPM, 12PPM & 18PPM
- Pregnancy Weight Gain** –PPWR increases with increasing Pregnancy Weight Gain respectively in 12PPM,18PPM & 6 PPM
- Contraceptive Methods** – Median PPWR more in mothers who use OCP in 12PPM & 18 PPM.

References

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