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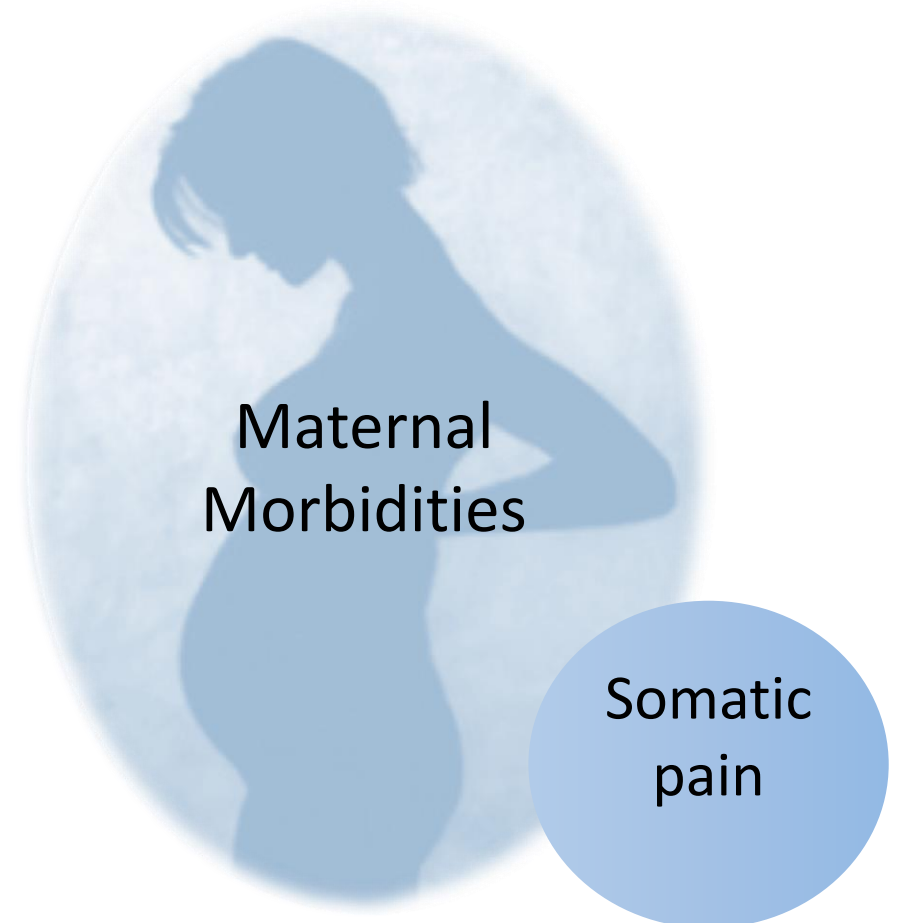
Somatic pain before, during and after pregnancy in primiparous women in Ireland: a longitudinal cohort study

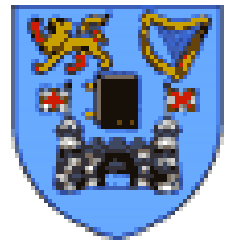
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Wuytack F., Daly D., Curtis E., Begley C.

Context

- Nearly all women experience some somatic pain during pregnancy (Borg-Stein et al. 2005).
- Women with somatic pain report **lower self-rated health** (Schytt et al. 2005)
- Pain can be **disabling** and negatively impact **sleep**.
- Absence of data on the prevalence of somatic pain during pregnancy & postpartum in **Ireland**.
- **Pain** as a symptom is complex & multifactorial.





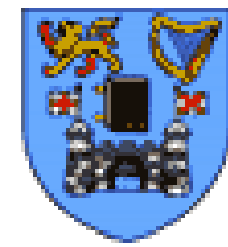
Aim/objectives

Aim

To identify the **prevalence** of, and changes in, somatic pain experienced by primiparous women **pre-pregnancy, during pregnancy, and postpartum** in one maternity hospital in Ireland.

Objectives

1. To identify the **prevalence** of somatic pain pre-pregnancy, in early pregnancy and 3 months postpartum
2. To examine **associations** between pain and women's mental health during pregnancy



Methodology

MAMMI (Maternal health And Maternal Morbidity in Ireland) study
Longitudinal cohort study

Ethical approval of university and site hospital

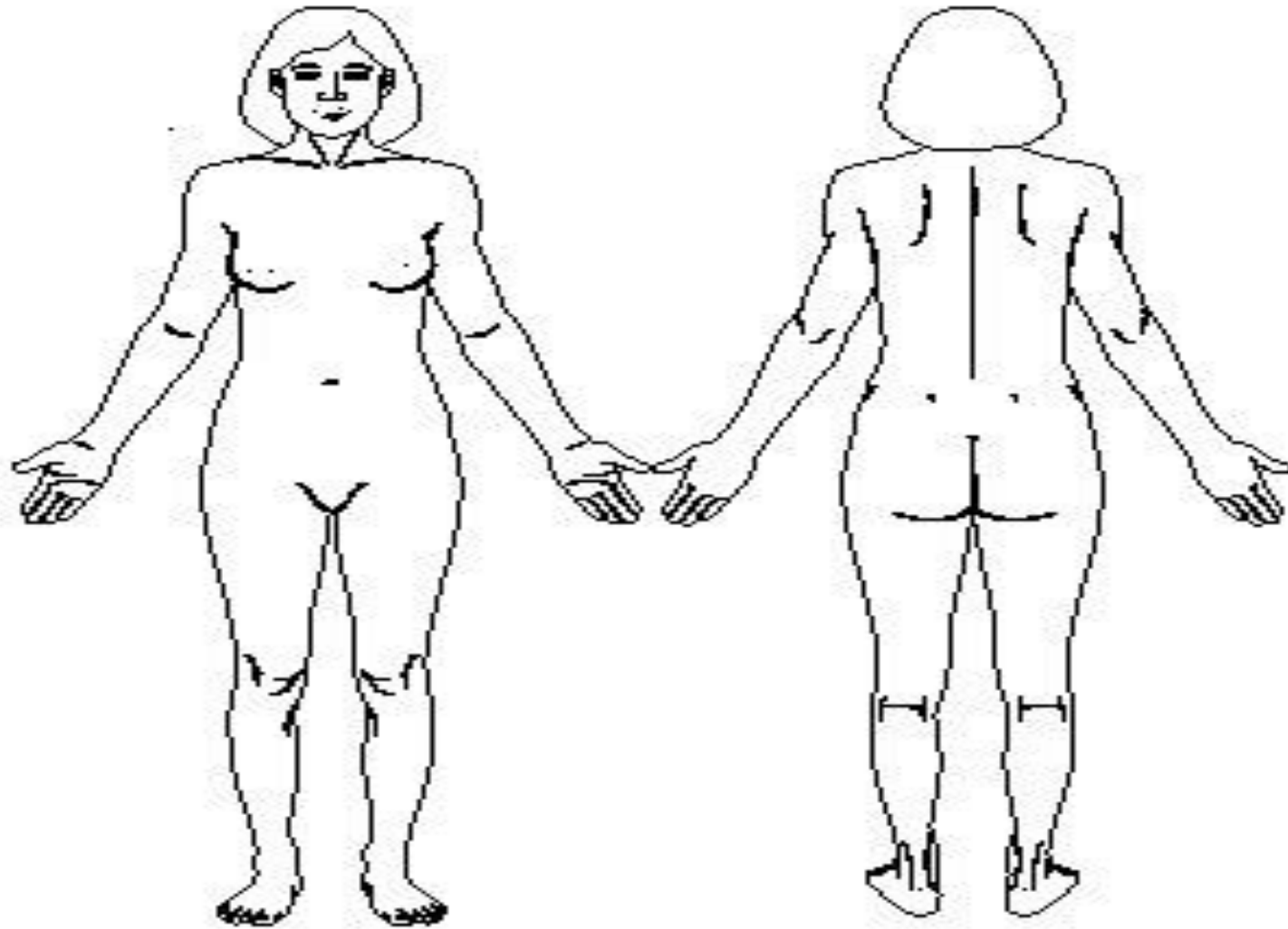
Data Collection

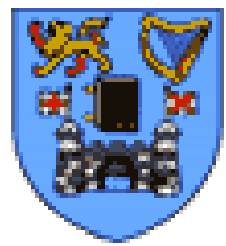
- Self-completed surveys (during pregnancy & 3 months postpartum)
 - 2000 participants (1092 to date)

Data Analysis

- Descriptive statistics
- Correlational statistics

Data Collection – Self-reported Pain



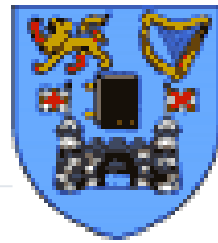


Participant characteristics

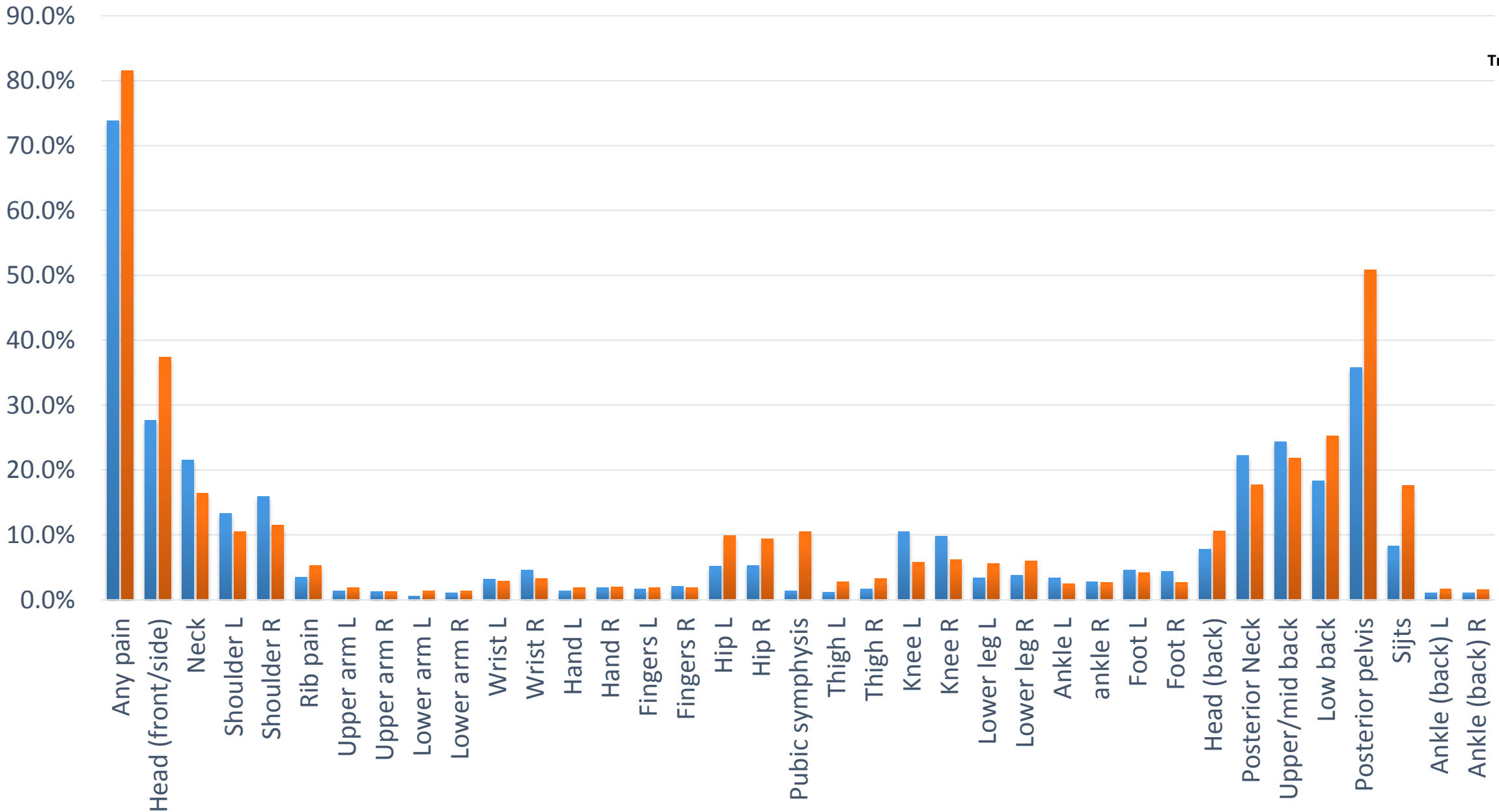
Age	MAMMI (%) (n = 1092)	Hospital (%) (n = 8846)
Up to 24	8.4	14.4
25-29	25.4	23.2
30-34	41.4	34.8
35-39	21.3	22.0
Over 40	3.5	5.5
Country of birth	MAMMI (%) (n = 1078)	Hospital (%) (n = 8846)
Ireland	65.3	64.4
Other European country	27.3	22.0
Non-European country	7.4	13.4

Somatic pain 12 months pre-pregnancy & in early pregnancy

Pre-pregnancy
Early pregnancy



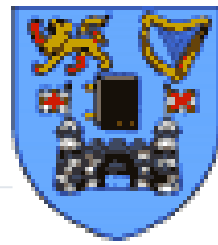
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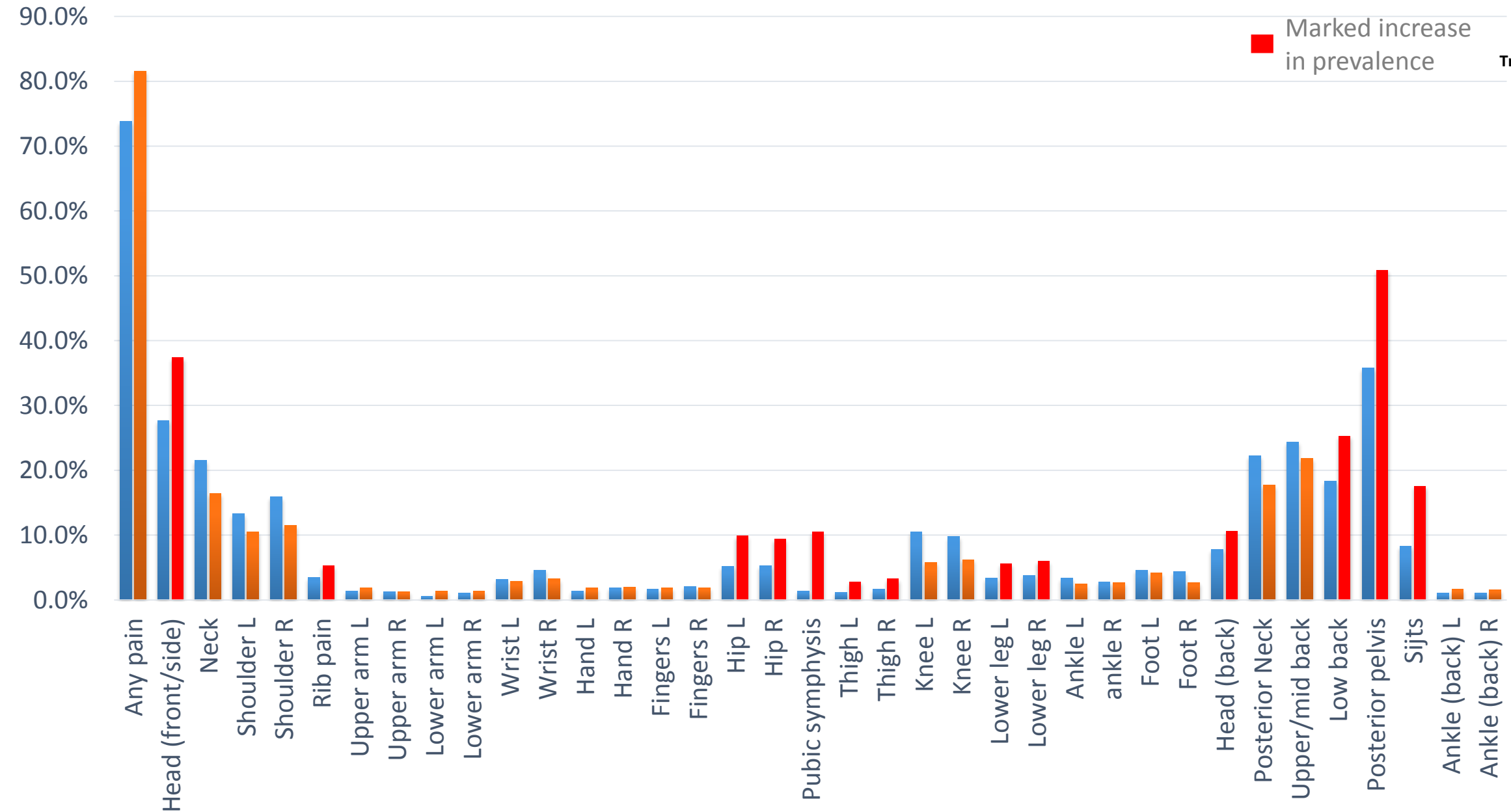
Somatic pain 12 months pre-pregnancy & in early pregnancy

Pre-pregnancy
Early pregnancy

Marked increase
in prevalence

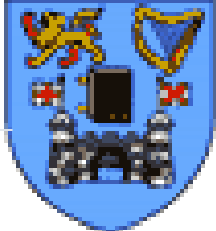


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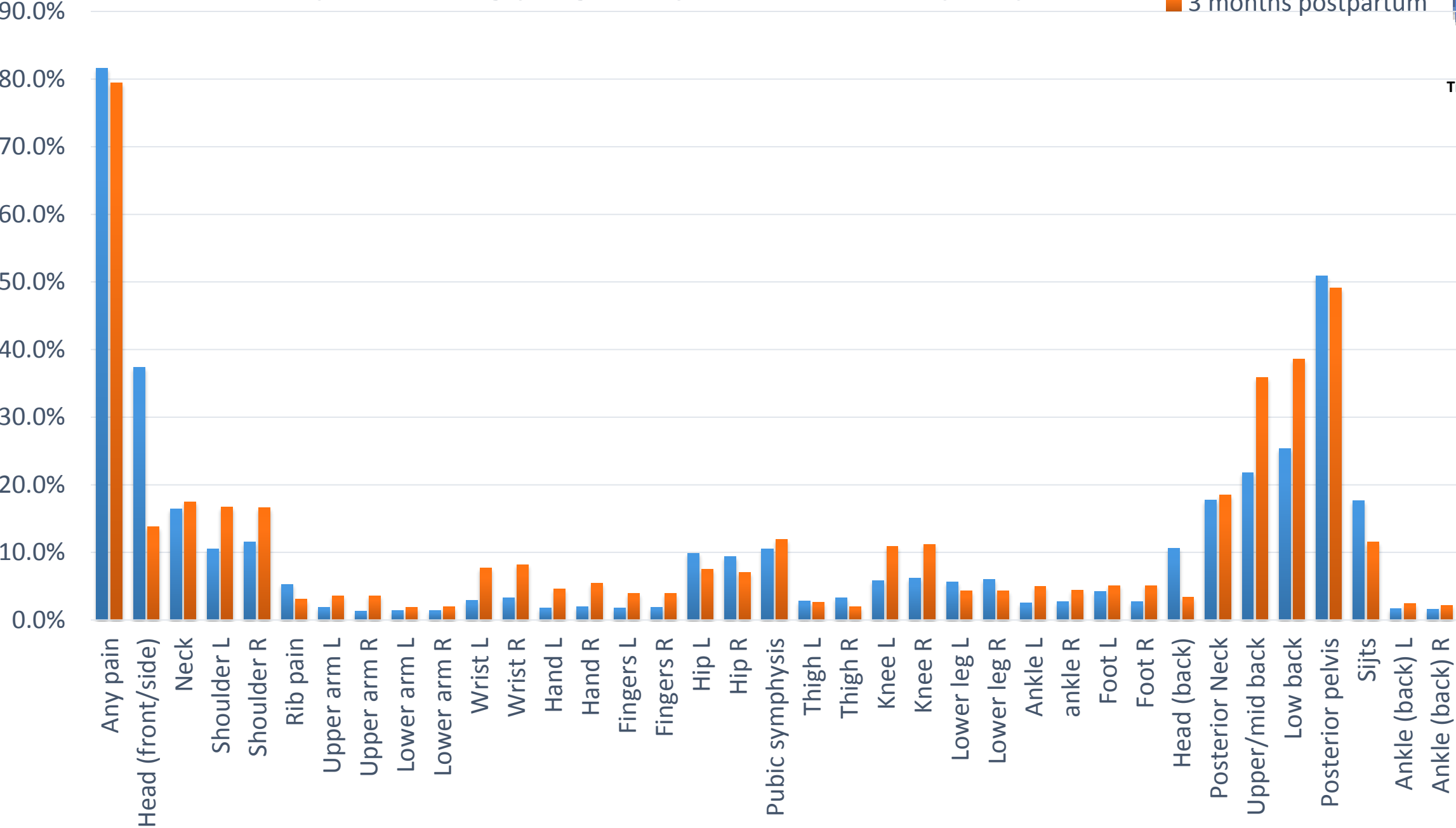


Somatic pain during pregnancy and 3 months postpartum

■ Early pregnancy
■ 3 months postpartum



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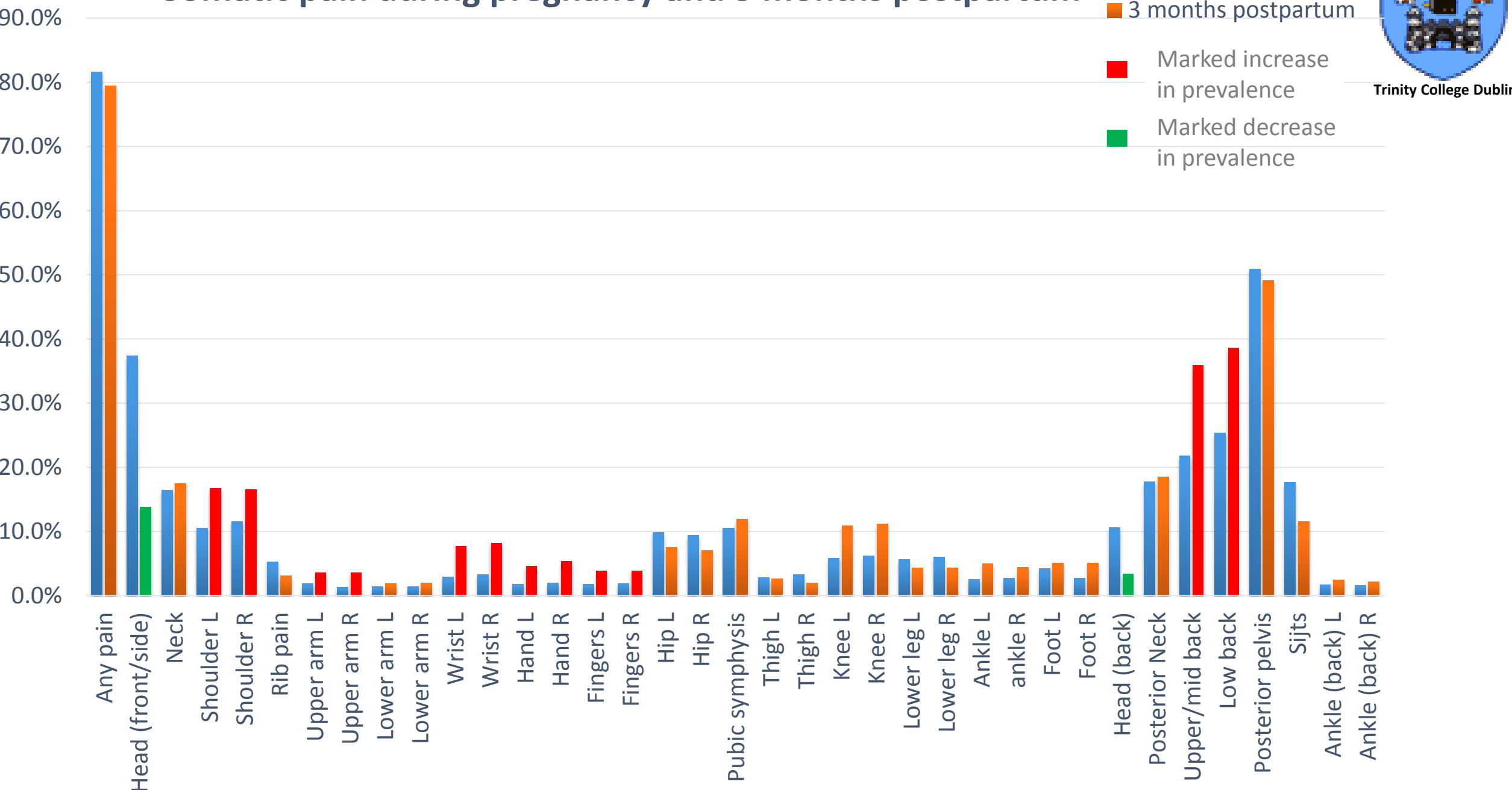


Somatic pain during pregnancy and 3 months postpartum



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- Early pregnancy
- 3 months postpartum
- Marked increase in prevalence
- Marked decrease in prevalence



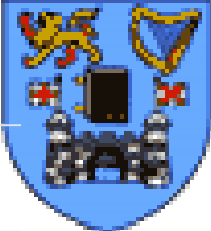
Somatic pain pre-pregnancy and 3 months postpartum

Pre-pregnancy

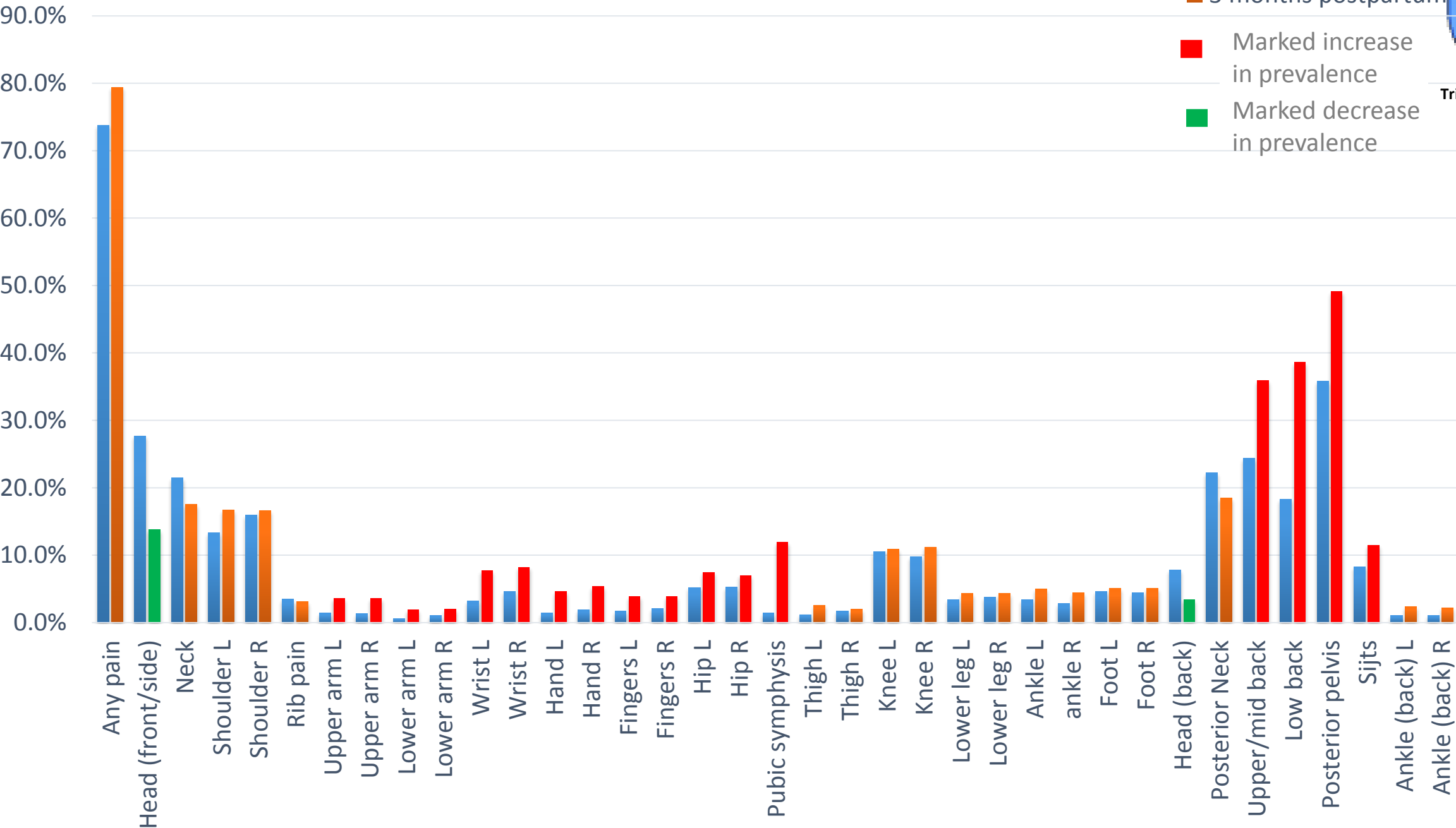
3 months postpartum

Marked increase
in prevalence

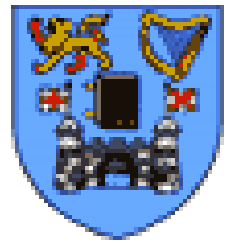
Marked decrease
in prevalence



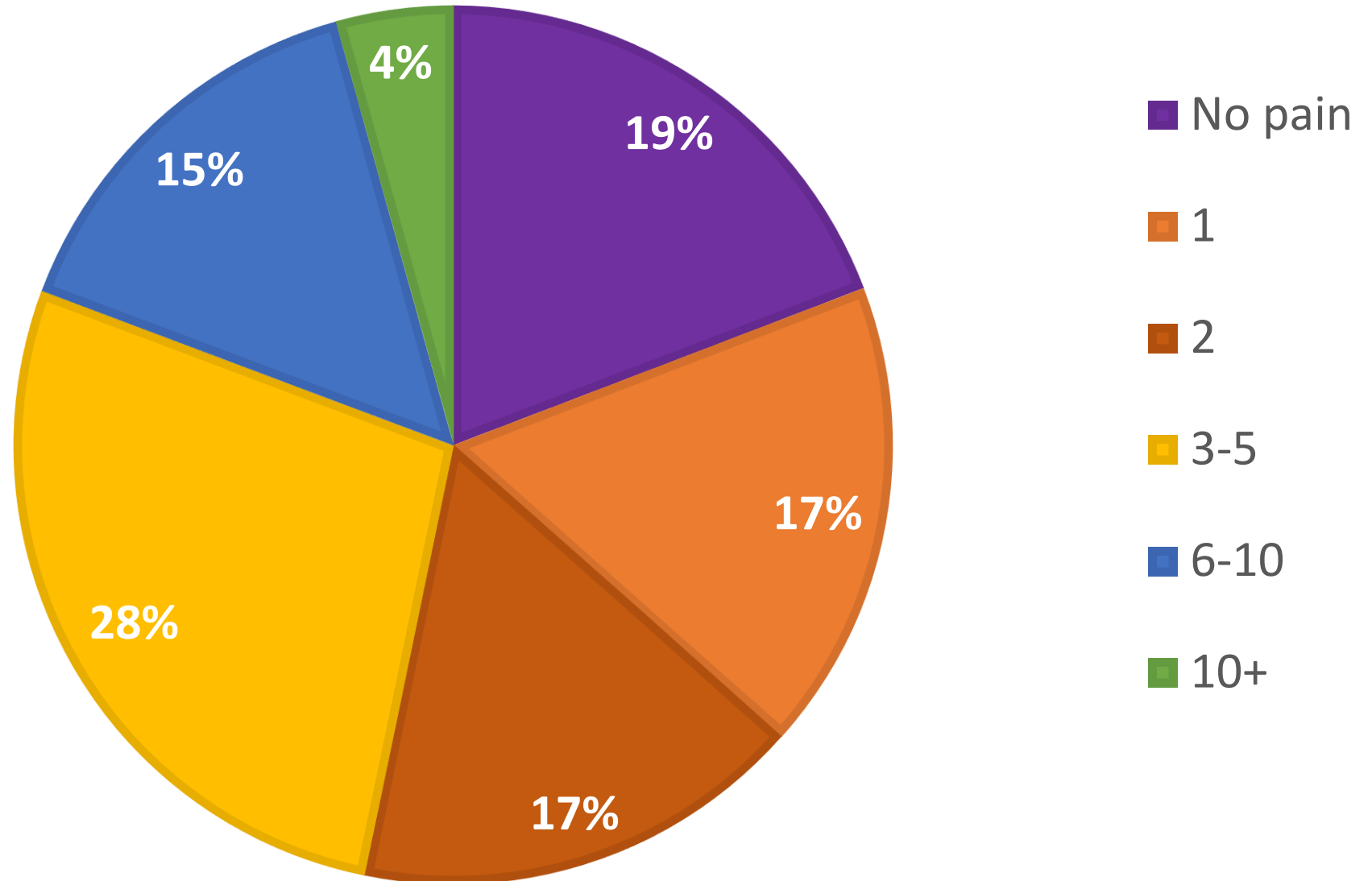
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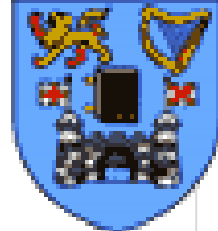
NUMBER OF AREAS OF PAIN (OF 36 BODY AREAS): DURING PREGNANCY



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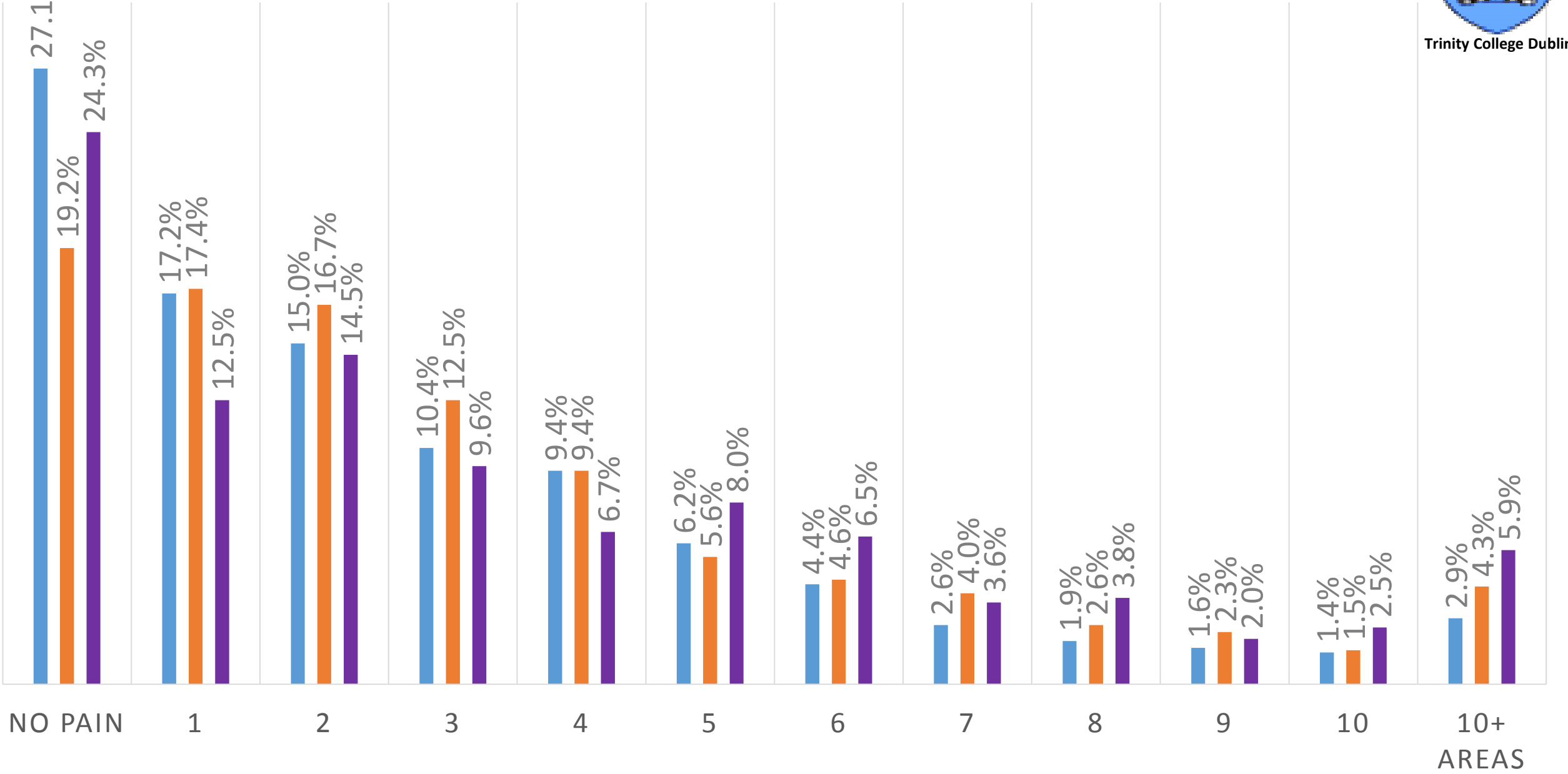


NUMBER OF AREAS OF PAIN

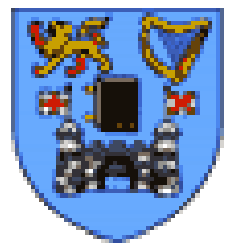


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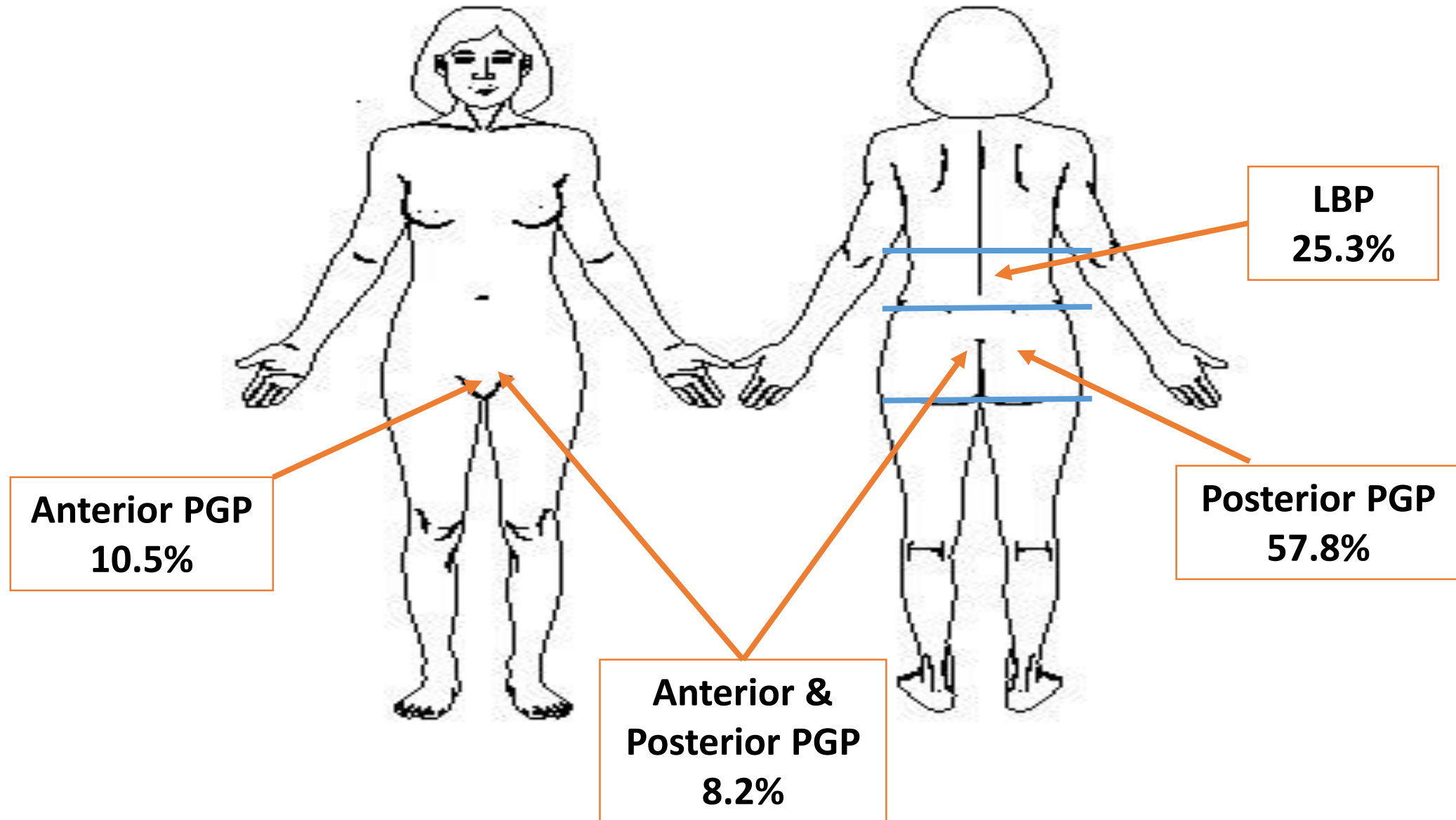
■ Year Before Pregnancy ■ In early pregnancy ■ 3month Postpartum



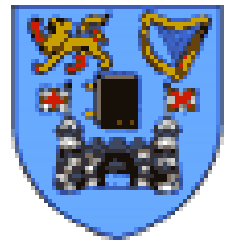
Low back Pain (LBP) & Pelvic Girdle Pain (PGP) during pregnancy



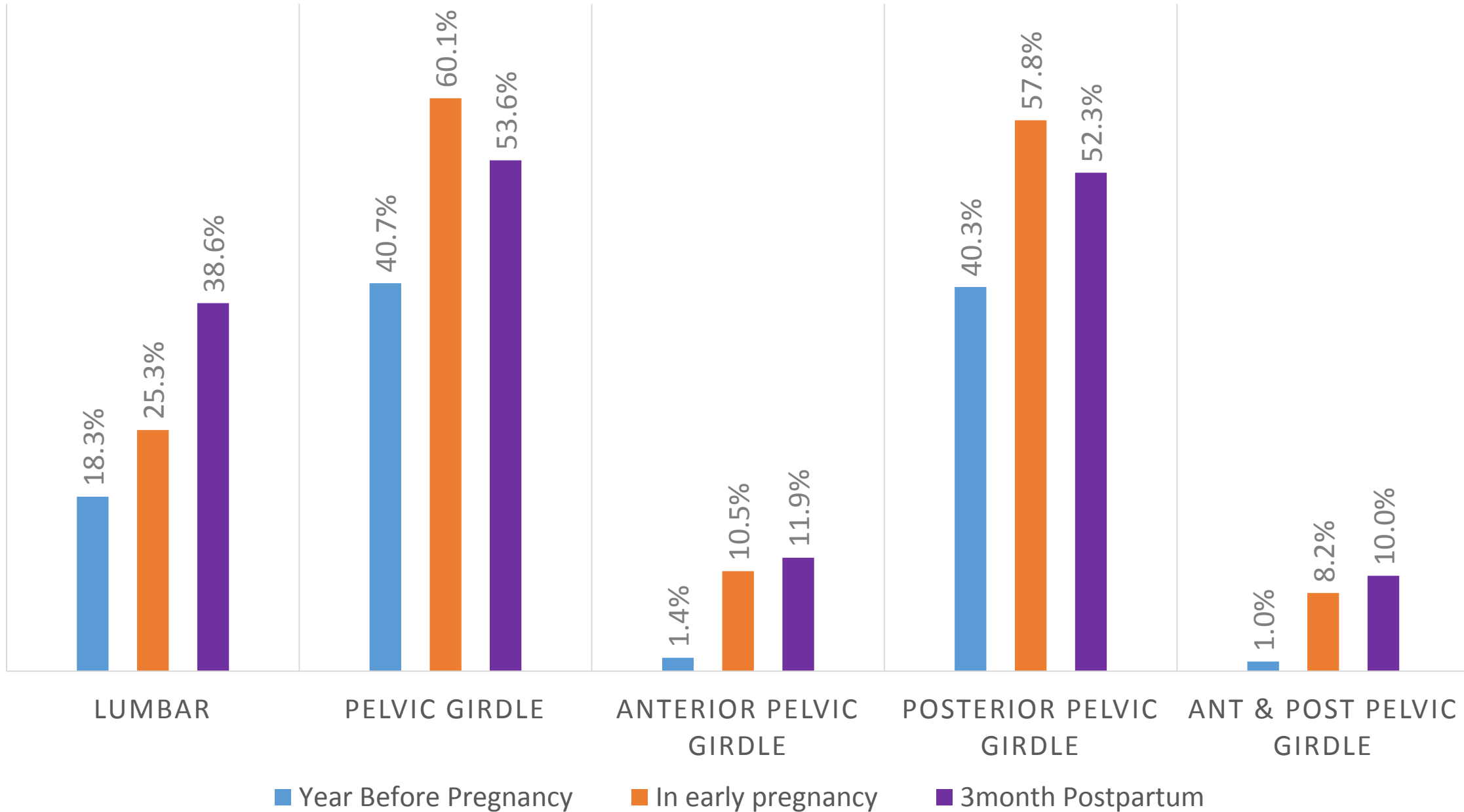
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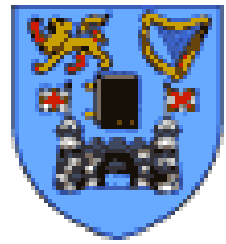
LOW BACK & PELVIC GIRDLE PAIN PREVALENCE



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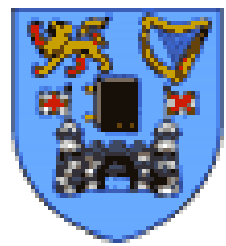


The complexity of pain



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Pain & Depression, Anxiety, Stress during pregnancy

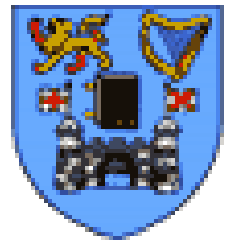
- Depression, Anxiety & Stress measured by the DASS 21 scale
- Mann Whitney U test

	Any Pain	PGP
Depression	$p=0.002$	$P=0.001$
Anxiety	$p<0.0001$	$p<0.0001$
Stress	$p=0.005$	$p=0.021$

Conclusion

- Somatic pain significantly **increases** during pregnancy, particularly in the pelvic girdle and low back.
- Pain often **persists** postpartum.
- Women often have pain in **several areas**, potentially increasing its negative impact.
- Assessment of the pain is required to direct **management** where appropriate and reduce risk chronicity.
- Further research to explore the interrelations between pain and other maternal morbidities pregnancy and postpartum.



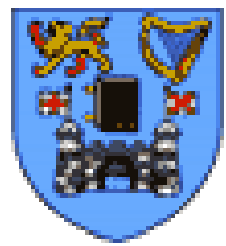


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Acknowledgments

- The women who participated in the study
- Principal Investigators Prof Cecily Begley and Prof Mike Clarke
- MAMMI study team
- The midwives and midwifery students who distributed the information
- Rotunda Hospital
- Health Research Board Ireland





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