

Prognostic factors for pregnancy-related Pelvic Girdle Pain (PGP) in first-time mothers in Ireland

Francesca Wuytack *DC, PhD*

Deirdre Daly *RM, PhD*

Elizabeth Curtis *RN, MEd, PhD*

Cecily Begley *RM, PhD, FTCD*

Background & aim

PGP is a **common** maternal morbidity affecting around half to two thirds of pregnant women

Persistent PGP postpartum affects 22% of women 3 months postpartum (Gutke 2011) and 8.5% 2 years postpartum (Albert 2002)

Aetiology is uncertain

Knowledge of **prognostic factors** can guide development of treatment **strategies**, but few studies have examined this (Wuytack 2016)

Aim of this study: To determine the prognostic factors for Pregnancy-related PGP that persists 3, 6, 9 and 12 months postpartum

Methods: Longitudinal cohort study

REC approval

Five surveys

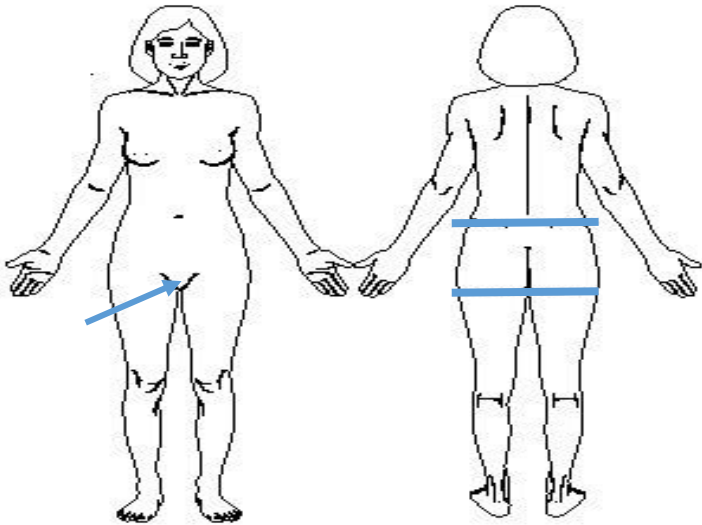
Antenatal (1st
booking visit)
1478 women

3 months
postpartum

6 months
postpartum

9 months
postpartum

12 months
postpartum



Pain diagram in all 5 surveys

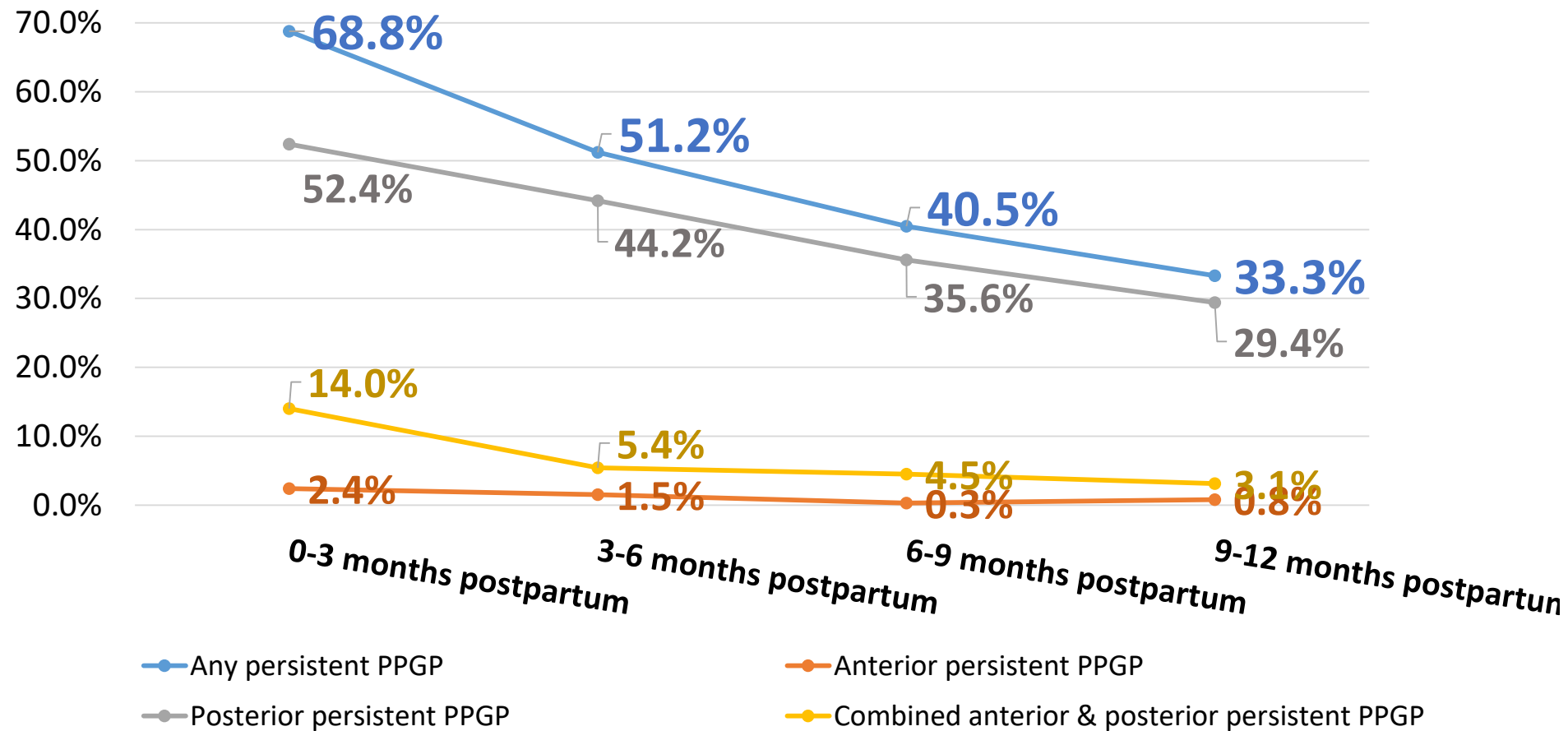
17 factors examined: age, BMI, pain location, history of lumbopelvic pain, history of severe period pain, stress (DASS), educational level, mode of birth, return to work, smoking, history of heavy periods, employment status, marital status, ethnicity, breastfeeding, anxiety, depression

Analysis:

Logistic multivariable regression analysis

Findings: Prevalence

Percentage of women with PGP during pregnancy (n = 1003, 67.9%) who have persistent symptoms postpartum



Findings: Prognostic factors

Factors	Adjusted OR (95% Confidence interval)			
	3 months pp	6 months pp	9 months pp	12 months pp
BMI≥30kg/m ²	2.3 (1.2-4.4)	2.0 (1.1-3.4)	2.4 (1.4-4.5)	3.1 (1.7-6.0)
Combined anterior and posterior PGP during pregnancy	3.4 (1.6-7.3)	4.0 (1.8-9.4)	4.2 (1.4-12.4)	4.5 (1.0-21.6)
History of lumbopelvic pain	2.4 (1.7-3.4)	2.5 (1.7-3.5)	3.5 (2.4-5.1)	3.7 (2.4-5.8)
History of severe period pain	1.5 (1.0-2.1)	1.4 (0.9-2.0)	/	/
Higher stress levels 3 months postpartum (DASS)	/	1.7 (0.9-3.2)	2.5 (1.2-4.8)	3.4 (1.6-7.2)
No university education	1.3 (0.8-2.0)	1.3 (0.9-2.1)	1.6 (1.0-2.6)	/
Vacuum or kiwi assisted birth (vs spontaneous vaginal birth)	0.5 (0.3-0.9)	0.5 (0.3-0.8)	/	/
On unpaid maternity leave 9-12 months pp (vs returned to work)	/	/	/	0.3 (0.9-1.0)

Age, smoking, history of heavy periods, employment status, marital status, ethnicity, breastfeeding, anxiety, depression were not significant prognostic factors at all 4 follow up times.

Conclusion & Implications

- Not all women recover after the birth and about a third still have symptoms 12 months postpartum
- Women who have **combined anterior and posterior PGP** during pregnancy, have a **history of lumbopelvic pain**, or who are **obese/very obese** are less likely to recover from PGP postpartum.
- **Stress** in the early postpartum period might affect recovery six to twelve months postpartum
- Monitoring women with these factors can trigger early management to maximise recovery.

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Contact

Address: School of Nursing & Midwifery, Trinity College Dublin, 2 Clare Street, Dublin 2, Ireland

Email: wuytacf@tcd.ie

Tel: 00353(0)18963200

Website: www.mammi.ie