

# Endometriosis and Pelvic Pain: What Predicts the Decision to Operate and the Subsequent Presence and Stage of Endometriosis?

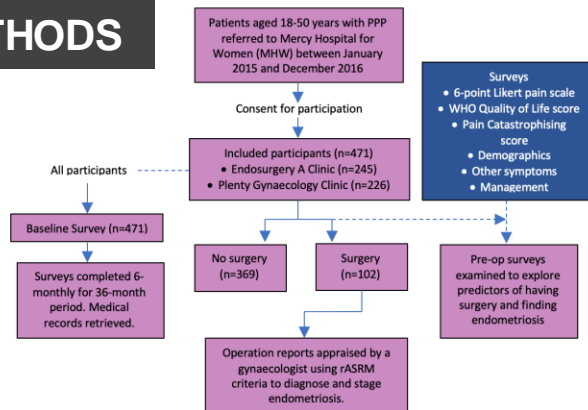
Conroy I, Mooney S, Kavanagh S, Jakab I, Duff M, Robertson K, Quinless A, Nair S, McCutchan A, Origanti N, Fitzgerald A, Madden S, Sewell M, Mirowska-Allen K, Maxwell S, Porter J, Grover SR

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## INTRODUCTION

Persistent pelvic pain (PPP) is common and significantly impacts many women. Endometriosis is considered a major cause of PPP, leading to surgery for both diagnosis and treatment purposes, despite only 30-50% of these women being identified with endometriosis. An improved understanding of clinical predictors for both surgery and endometriosis may improve management. This study explores both the clinical predictors of laparoscopy and the finding of endometriosis and its severity.

## METHODS



## RESULTS

102 women underwent laparoscopy or laparotomy, of whom 52 had endometriosis (n=37 stage I-II; n=15 stage III-IV).

**Table 2:** Preoperative predictors of being diagnosed with or without endometriosis (n=97)

Predictors of Endometriosis	Odds ratio	95% Confidence Interval	P-Value
Age	0.972	[0.917, 1.032]	0.353
Parity	0.682	[0.396, 1.178]	0.169
Dissatisfaction with pain management	1.266	[0.907, 1.767]	0.166

Penalised Maximum Likelihood Estimation

*There were no predictors identified for endometriosis diagnosis*

**Table 1:** Baseline predictors of being referred for surgery (laparoscopy or laparotomy) (n=439)

Predictors of Surgery	Odds ratio	95% Confidence Interval	P-Value
Clinic (Endosurg A = 0, Plenty = 1)	0.342	[0.209, 0.561]	0.000
Parity	0.767	[0.620, 0.949]	0.015
Overall median pain score	1.303	[1.079, 1.572]	0.006

Multiple logistic regression. Clinic allocation was coded as 0= Endosurgery A, 1= Plenty.

*Gynaecology unit, pelvic pain intensity and lower parity were all identified as predictors of surgery*

**Table 3:** Preoperative predictors of being diagnosed with minimal-mild or moderate-severe endometriosis (n=47)

Predictors of Endometriosis Severity	Odds ratio	95% Confidence Interval	P-Value
Age	1.155	[1.047, 1.310]	0.003
Family history of endometriosis	0.119	[0.002, 1.623]	0.151
Total pain catastrophising scale score	0.959	[0.891, 1.024]	0.218

Exact multiple logistic regression

*The only predictor of severity was increasing age*

## DISCUSSION

Pain intensity and gynaecology unit were key predictors of undergoing laparoscopy, however, pain severity did not predict endometriosis diagnosis or staging. Additionally, women attending a gynaecology unit with specific additional endoscopic skills are more likely to undergo surgery than women with statistically indistinguishable symptoms who attend a unit with additional skills in medical management.

## CONCLUSION

These findings indicate the need to review the current frameworks guiding practice towards surgery for pelvic pain.