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IMPACT OF AN IMMEDIATE POSTPARTUM IMPLANT UPTAKE ON CLOSELY SPACED PREGNANCIES IN PORT MORESBY GENERAL HOSPITAL, PAPUA NEW GUINEA.

K. Black¹, M. Morris², S. Aihi² and H. Tanimia³ ¹ University of Sydney, Australia; ² University of Papua New Guinea ³ Port Moresby General Hospital, Papua New Guinea

Introduction

Papua New Guinea (PNG) continues to have both high maternal mortality and low uptake of modern methods of contraception. (1,2) The introduction of a midwifery-led postpartum contraceptive service including antenatal education of Long-acting reversible contraceptives (LARCs) has been shown to improve uptake of contraceptive implants in the immediate postpartum period, especially those with an unmet need. (3)

Objectives

To understand the full benefits of this program we aimed to document the proportion of women in the implant versus the non-implant group who represent with a repeat pregnancy within 12 months of giving birth at Port Moresby General Hospital. We also aim to document the contraceptive continuation and breastfeeding rates amongst these two groups within the study period.

Materials and methods

We conducted a 12-month cohort study of postpartum patients recruited from the postnatal ward who gave birth between June 2023 and August 2023. Patients aged 18-45 who had a vaginal birth with a singleton, live baby not requiring admission to the special care nursery were eligible for inclusion and invited to participate. At baseline, we asked about whether they plan to use an implant before maternity discharge and documented the contraceptive method received i.e. implant or non-implant users. Patients were followed up up to one year with information regarding contraceptive use, breast feeding and repeat pregnancy collected.

Results

We enrolled 386 women, 194 in the implant group and 184 who chose other methods of contraception or no methods (non-implant group).

Follow-up was completed for 153/194 (78.9%) implant users and 178/194 (91.2%) of non-implant users at 12 months (**Table 1**). At the 12-month follow-up, there were 30 pregnancies recorded; 2 in the immediate postpartum implant group and 28 in the non-implant group. Thus, there were significantly higher proportions of shortly spaced pregnancies in the non-implant group. ($X^2=21.075$; $p<0.01$).

12-month Follow-up Data	Implant users N (%)	Non-implant users N (%)	p-value
Baby alive			0.653
Yes	152 (99.3)	176 (98.9)	
No	1 (1.4)	2 (1.1)	
Still breastfeeding			0.515
Yes	137 (90.1)	152 (87.9)	
NO	15 (9.9)	21 (12.1)	
Use FP now			<0.001
Yes	139 (90.8)	48 (27)	
No	14 (9.2)	130 (73)	
FP method in use			<0.001
Implant	130 (85)	21 (11.8)	
Pills/condoms	1 (0.7)	1 (0.6)	
Depo	7 (13.4)	22 (12.4)	
Natural methods	1 (0.7)	4 (2.2)	
none	14 (9.2)	130 (73)	
Contraceptive satisfaction			0.287
Extremely satisfied	101 (66.4)	38 (77.6)	
Somewhat satisfied	49 (32.2)	11 (22.4)	
unhappy	2 (1.3)	0 (0)	
Repeat pregnancy within 1 year of delivery			<0.001
Yes	2 (1.3)	28 (15.7)	
No	151 (98.7)	150 (84.3)	
Pregnancy outcomes			<0.001
Ongoing pregnancy	2 (1.3)	21 (11.8)	
Ectopic	0	1 (0.6)	
Miscarriage	0	6 (3.4)	
Non-pregnant	151 (98.7)	150 (84.3)	
Intended pregnancy			< 0.001
Yes	0 (0)	2 (7.1)	
No	2 (100)	26 (92.9)	

Conclusions

Uptake of immediate postpartum contraceptive implants significantly decreased the chance of women presenting with a repeat pregnancy within 12 months of a birth. In a low-middle income country such as Papua New Guinea, where closely spaced pregnancies can lead to disastrous social and pregnancy-related outcomes, immediate postpartum implant uptake has potential beneficial impacts for the mother and baby.

Further information

Kirsten.black@sydney.edu.au

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