'Our COVID-19 cloud silver lining': the initiation and progress of postnatal contraception services during the COVID-19 pandemic in a UK maternity hospital

Kate Johanna Campbell , ^{1,2} Rachel Barlow-Evans, ^{1,2} Suzanne Jewell, ^{1,2} Natalie Woodhead, Ruchira Singh, Kulsum Jaffer

¹Sexual Health Services, University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK ²Birmingham Women's Hospital, Birmingham Women's and Children's NHS Foundation Trust, Birmingham, UK

Correspondence to

Dr Kate Johanna Campbell, Sexual Health Services, University Hospitals Birmingham NHS Foundation Trust, Birmingham B4 6DH, UK; kate.campbell6@ nhs.net

Received 1 July 2020 Revised 16 November 2020 Accepted 19 November 2020 Published Online First 7 December 2020



© Author(s) (or their employer(s)) 2021. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Campbell KJ, Barlow-Evans R, Jewell S, *et al. BMJ Sex Reprod Health* 2021;**47**:224–227. opportunity to rapidly improve postnatal contraception (PNC) services at the largest single-site maternity unit in the UK, Birmingham Women's and Children's Hospital NHS Trust.

The COVID-19 pandemic presented an

WHY WAS CHANGE NEEDED?

Prior to March 2020 there was no provision of PNC at the hospital. Midwives would routinely enquire about women's contraceptive plans and direct them to general practice for advice and initiation. Contraceptive services are free as part of the National Health Service (NHS) to UK residents.

The demand for and importance of PNC provision is well documented. In the UK almost 1 in 13 women presenting for an abortion or delivery has conceived within a year of a previous birth. An interpregnancy interval of less than 12 months increases the risk of complications for both mother and baby.² A 2017 UK survey showed 47% of women would prefer to have their contraception provided from the postnatal ward before discharge.³ A local service evaluation from 2011 highlighted a gap in access to PNC at our hospital and the desire of women to receive both advice and immediate provision.

During March 2020 the COVID-19 pandemic evolved in the UK. Routine health services were disrupted and access to contraception in the community became compromised. Birmingham Women's is a tertiary obstetric hospital caring for all women including those with complex medical needs and high-risk pregnancies. Lack of access to PNC for these women

Key messages

- Immediate postnatal contraception (PNC) services are convenient and acceptable for postnatal women.
- Providing immediate PNC is safe and supported by the Faculty of Sexual & Reproductive Healthcare guidance.
- During the COVID-19 pandemic immediate PNC reduces the need for contact with multiple healthcare providers. This may reduce virus transmission.

could have grave consequences. They are also at higher risk of adverse outcomes if they contract COVID-19⁵ and many are shielding during the pandemic.

Faculty of Sexual & Reproductive Healthcare (FSRH) guidance states that services providing care to pregnant women should offer all appropriate methods of contraception, including longacting reversible contraception (LARC), to women before discharge. Immediate PNC provision removes the requirement to attend future contraception consultations. During the pandemic this decreases contacts, thereby reducing the risk of viral transmission.

Immediate PNC makes it possible to contact the most vulnerable women, for example, those with substance misuse, mental health problems and language barriers. ⁴⁷ Vulnerable women experience more challenges accessing appointments. Women from some ethnic minority backgrounds are at increased risk of serious infection from COVID-19.⁸

HOW WAS CHANGE INITIATED?

Due to the pandemic three Community and Sexual Reproductive Health (CSRH) trainees were redeployed to the hospital. This provided a team with the necessary skills to initiate the service.

The team worked with pharmacy to stock postnatal wards with progestogen-only subdermal implants (POSDIs), progestogen-only injections (POICs) and local anaesthetic. A trolley was stocked with the non-prescription items including a donation of condoms. A patient information leaflet was developed and locally peer reviewed. The team produced posters to raise awareness of the service.

Each morning a CSRH trainee visited the postnatal wards. The service was only staffed during the week and was not able to cover the delivery suite or the midwife-led birth centre. All patients were offered verbal and written information about PNC. A bedside translating service was available. The increased effectiveness of LARC methods was emphasised. Where possible each woman's chosen method was provided. Oral contraception was prescribed at the time then dispensed on discharge. POSDIs and POICs were provided during the consultation. In order to minimise potential viral transmission, appropriate personal protective equipment was used and all equipment was cleaned according to local policy. Data were collected prospectively and entered into a secure database.

WHAT WAS THE OUTCOME OF THE CHANGE?

From 1 April to 30 June 2020 a total of 1917 mothers delivered a live birth at the hospital (table 1). Of these, 178 women were discharged directly from the delivery suite and the birth centre, the majority within 6 hours. Twenty-four women had a tubal ligation at the time of delivery. These 202 women were not eligible for our service. Over this period the team worked a total of 56 days and contraception was provided to 453 postnatal women, approximately 26.4% (453/1715) of the eligible postnatal women. Of the 453 postnatal women who initiated contraception, 89 (19.6%) opted for a LARC. One-third (32.2%, 146/453) of the postnatal women who initiated a method were high-risk due to a medical, surgical or social risk factor.

From 20 April the team started collecting additional data on the number of postnatal women approached and the number who accepted information on PNC. Figure 1 provides a snapshot of these data from 20 April to 29 June. Over this period the team approached 1029 women and 827 (80.4%) women accepted information; of these, 374 (45.2%) women chose to initiate contraception. Of those who initiated contraception, 75 (20.1%) women accepted a LARC.

The team conducted an anonymous paper and online multidisciplinary staff survey. We received 83 responses, of which 82 (99%) respondents felt PNC was important and 72 (87%) felt PNC was extremely important. Seventy-three (88%) respondents believed

Table 1 Women who delivered at the hospital that were eligible for the service and postnatal women provided with contraception from 1 April to 30 June 2020

	Postnatal women (n)			
Scenario	April	May	June	Total
Women who delivered a live birth	640	651	626	1917
Women discharged directly from delivery suite and birth centre	61	56	61	178
Women who had tubal ligation (sterilisation) at caesarean section	9	8	7	24
Potential eligible mothers	570	587	558	1715
Contraceptive methods provided by the team				
Progestogen-only subdermal implant (POSDI)	22	19	27	68
Progestogen-only injection (POIC)	4	9	8	21
Progestogen-only pill (POP) desogestrel	95	62	70	227
Combined oral contraceptive pill (COCP)*	7	3	0	10
Condoms†	59	68	0	127
All LARCS (POSDI and POIC)	26	28	35	89
All methods except condoms	128	93	105	326
All methods	187	161	105	453

^{*}The COCP was dispensed with instructions for delayed start in accordance with UK Medical Eligibility Criteria for Contraceptive Use (UKMEC) criteria: after 6 weeks for breastfeeding women, and after 3 or 6 weeks for non-breastfeeding women depending on other risk factors. †The supply of donated condoms ran out on 28 May 2020.

that PNC should be discussed on the postnatal ward and 52 (63%) felt that it should also be discussed antenatally. Sixty-nine (83%) women were interested or possibly interested in being provided with PNC but only 34 (41%) women were aware which methods could be initiated immediately postpartum.

WHAT LESSONS WERE LEARNED?

The response to PNC provision was overwhelmingly positive from women, midwives and obstetricians. We observed a shift towards a "culture of contraception". Staff initiated conversations with women and then contacted the team to provide an appropriate method. The maternal medicine team directly referred high-risk women whom they had counselled antenatally.

We predicted that uptake would increase with antenatal contraceptive counselling. Women would expect the service, having had time to consider their options. Evidence suggests antenatal contraceptive counselling at around 20–22 weeks' gestation is acceptable to women and effective. 9 10

Women admitted and discharged at weekends were missed, as were those discharged directly from the delivery suite and the birth centre.

A gap in the service was the inability to provide intrauterine contraception (IUC). The team counselled

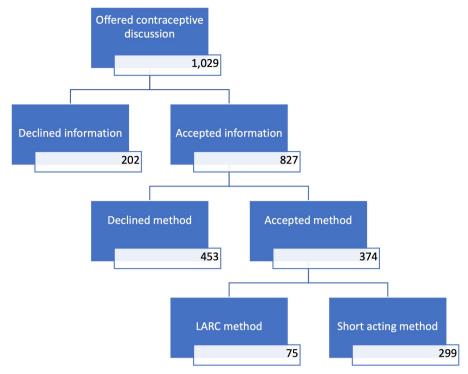


Figure 1 Flowchart illustrating contraception uptake in postnatal women from 20 April to 29 June 2020. Key short-acting methods were condoms, the progestogen-only pill and the combined oral contraceptive pill. Long-acting reversible contraception (LARC) methods were progestogen-only subdermal implants and progestogen-only injections.

women about where to access IUC and provided a bridging method if this was acceptable to the woman.

HOW DOES THE FUTURE LOOK?

Our ambition is to provide PNC of choice to any woman at any time. The experience of units that have achieved this objective shows us that we need to strengthen antenatal contraceptive counselling, initiate immediate postpartum IUC, and improve provision of postpartum methods by ensuring there are enough providers to deliver the contraception required. We need collaboration between the hospital, local sexual health services and primary care. Discussions to secure funding of an ongoing service are underway between commissioners.

Throughout the pandemic our team has provided contraceptive teaching to obstetric and midwifery colleagues via opportunistic face-to-face education and has organised small group or virtual sessions. Additionally, midwife-specific e-learning is being developed and we have started POSDI insertion training. A patient group direction allowing non-prescribers to provide oral desogestrel 75 μ g has been written. A standard operating procedure for immediate insertion of IUC at caesarean section and follow-up pathway is awaiting ratification. We plan to then progress to insertion of IUC at vaginal delivery.

Our PNC COVID-19 service has been a great success at a challenging time. We have developed a better way of working and we are determined to make it even better.

Contributors KJC: primary author and data collection. RBE: data analysis and data collection. SJ: data collection. NW: proofreading and editing. RS: concept, final proofreading. KJ: concept.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not required.

Provenance and peer review Not commissioned; externally peer reviewed.

This article is made freely available for use in accordance with BMJ's website terms and conditions for the duration of the covid-19 pandemic or until otherwise determined by BMJ. You may use, download and print the article for any lawful, non-commercial purpose (including text and data mining) provided that all copyright notices and trade marks are retained.

ORCID iD

Kate Johanna Campbell http://orcid.org/0000-0003-0065-6213

REFERENCES

- 1 Heller R, Cameron S, Briggs R, et al. Postpartum contraception: a missed opportunity to prevent unintended pregnancy and short inter-pregnancy intervals. J Fam Plann Reprod Health Care 2016;42:93–8.
- 2 Bigelow CA, Bryant AS. Short interpregnancy intervals: an evidence-based guide for clinicians. Obstet Gynecol Surv 2015;70:458–64.

- 3 Thwaites A, Logan L, Nardone A, *et al.* Immediate postnatal contraception: what women know and think. *BMJ Sex Reprod Health* 2019;45:111–7.
- 4 Faculty of Sexual & Reproductive Healthcare. CEU position. Essential SRH services during Covid19, 2020. Available: https://www.fsrh.org/documents/fsrh-position-essential-srh-services-during-covid-19-march-2020/ [Accessed 8 Jun 2020].
- 5 Birmingham Health Partners. COVID-19 research briefing 09/04/20 – comorbidities. Available: https://www.birmingh amhealthpartners.co.uk/covid-19-research-briefing-09-04-20comorbidities/ [Accessed 14 Jun 2020].
- 6 Faculty of Sexual & Reproductive Healthcare. CEU clinical guidance. Contraception after pregnancy, 2017. Available: https://www.fsrh.org/standards-and-guidance/documents/

- contraception-after-pregnancy-guideline-january-2017/ [Accessed 8 Jun 2020].
- 7 Saxena S, Copas AJ, Mercer C, et al. Ethnic variations in sexual activity and contraceptive use: national cross-sectional survey. Contraception 2006;74:224–33.
- 8 Kirby T. Evidence mounts on the disproportionate effect of COVID-19 on ethnic minorities. *Lancet Respir Med* 2020;8:547–8.
- 9 Cameron ST, Craig A, Sim J, et al. Feasibility and acceptability of introducing routine antenatal contraceptive counselling and provision of contraception after delivery: the APPLES pilot evaluation. BJOG 2017;124:2009–15 https://doi.org/
- 10 Cooper M. Expanding access to postpartum long-acting reversible contraception (LARC): how can we deliver? *BMJ Sex Reprod Health* 2020;46:75–7.