Published in final edited form as:

BJOG. 2017 April ; 124(5): 815–824. doi:10.1111/1471-0528.14413.

Contraceptive method preferences and provision after termination of pregnancy: a population-based analysis of women obtaining care with the British Pregnancy Advisory Service

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Abstract

Objective—To examine contraceptive choices among women seeking termination of pregnancy (TOP) and the provision of the chosen methods.

Design—Population-based study.

Setting—British Pregnancy Advisory Service (BPAS) clinics in England and Wales.

Population—Between 1 January 2011 and 31 December 2014, 211 215 women had a TOP at BPAS, were offered contraceptive counselling, and were eligible to obtain contraception at no cost.

Methods—We examined electronic records from BPAS and assessed the proportions of women who accepted contraceptive counselling and chose a contraceptive method, as well as the distributions of methods chosen, analysed by provider and by TOP type. We calculated the proportions receiving their chosen method and the methods chosen by women using no method at

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Disclosure of interests

ARAA, CEMA, and JT report no conflicts of interest. PAL is a Medical Director of BPAS and TF is a Nurse Manager for the telephone-based contraception and sexual health service at BPAS. The ICMJE disclosure forms are available as online supporting information.

Contribution to authorship

ARAA, PAL, and JT originated the study. ARAA, PAL, JT, TF, and CEA all contributed to the study design. ARAA conducted the analyses and prepared the tables and figures. ARAA, PAL, JT, TF, and CEA all contributed to the interpretation of the results. ARAA wrote the first draft of the manuscript. ARAA, PAL, JT, TF, and CEA all contributed to several rounds of manuscript drafting and approved the final version for publication.

Details of ethics approval

This project was exempt from review by the BPAS Research and Ethics Committee (REC) and the Institutional Review Board (IRB) at Princeton University on the basis that no identifying data were accessed and all data were pre-existing.

conception. We used logistic regression to examine the factors associated with choice of an intrauterine contraceptive (IUC) or implant.

Main outcome measures—Post-TOP contraceptive method choice. Receipt of chosen method post-TOP.

Results—Eighty-five per cent of women accepted contraceptive counselling and chose to obtain a method from BPAS rather than from a GP or contraception and sexual health clinic post-TOP. Among those who wanted to receive contraception from BPAS, 51% chose an IUC or implant and 19% chose oral contraceptives. Ninety-one per cent of women who obtained contraception from BPAS received their chosen method. Women were more likely to choose an IUC or implant if they obtained contraception from BPAS, had a surgical TOP, were parous, young, white, or had one or more previous TOPs.

Conclusions—The standards set for patient-centred TOP care should emphasise the need for a full range of contraceptive options to be offered and provided post-TOP.

Keywords

Contraceptive counselling; contraceptive preferences; contraceptive service provision; post-TOP contraception

Introduction

For many women, clinical interactions before and after termination of pregnancy (TOP) present a dual opportunity to discuss contraceptive options and to access methods.¹ Little is known about the contraceptive methods women choose during routine TOP care, however, or the extent to which their preferences are fulfilled. In light of guidance from the Royal College of Obstetricians and Gynaecologists (RCOG)², which recommends that all women should receive the contraceptive method of their choice following TOP, these understudied clinical outcomes are important benchmarks for measuring and improving service provision and for ensuring high-quality care.

Insight into women's contraceptive preferences and the fulfillment of those preferences is also important given the current debate surrounding the purpose of contraceptive counselling.^{3–5} A growing body of research focuses on contraceptive counselling as a means of increasing the uptake of long-acting reversible methods post-TOP.^{6–11} The potential for highly effective methods such as intrauterine contraceptives (IUCs) and implants to reduce unintended pregnancy has encouraged their promotion as 'first-line' contraceptives,^{12,13} and has focused attention on strategies to reduce barriers to their uptake.^{14,15} In Britain, healthcare commissioning bodies are increasingly setting post-TOP uptake targets for IUCs and implants; however, researchers and clinicians alike have expressed concern that prioritisation of IUCs and implants over other methods fails to reflect or acknowledge the range and diversity of women's contraceptive preferences,¹⁶ and does not offer a patient-centred approach to contraceptive counselling and provision.^{17,18} The extent to which method-specific uptake targets reflect women's preferences has not been assessed.

Approximately 185 000 TOPs are undertaken for women resident in England and Wales each year, 68% of which are provided by the independent sector under contract to the National Health Service (NHS).¹⁹ Contraceptive counselling and provision form part of NHS service contracts for TOP care.² The independent sector providers thus play a key role in contraceptive service delivery. Focusing on the British Pregnancy Advisory Service (BPAS), an independent, non-profit TOP provider of approximately one-third of all TOPs in England and Wales each year, we explored women's post-TOP contraceptive decisions in a setting where counselling covers the full range of options. Contraception is available free of charge to women resident in Great Britain, and methods are provided on the day of the TOP, where possible. Our objectives were to: (1) examine women's chosen methods of contraception, including by type of TOP and pathway to method provision; and (2) assess the fulfillment of contraceptive choices post-TOP.

Methods

We identified all of the women who obtained TOP and were offered contraceptive counselling at BPAS between 1 January 2011 and 31 December 2014. We excluded from our sample women who paid out of their own pocket for a TOP, and thus for whom contraception from BPAS was not free of charge. These are typically women who reside outside of Great Britain (mainly, but not exclusively, in Ireland or Northern Ireland), but a small minority are residents of Great Britain who wish to seek care from BPAS privately.

Care at BPAS is available up to the legal limit of 24 weeks of gestation at 58 clinics in England and at two clinics in Wales. Medical and surgical TOPs are provided in accordance with women's preference, the gestational age of the pregnancy, and medical eligibility. All women scheduling a TOP with BPAS are offered counselling regarding post-TOP contraception, which takes place either by phone beforehand or in person during the pre-TOP medical assessment. Counselling is provided by trained nurse practitioners and combines 'informed choice' and 'shared decision-making' approaches. If effectiveness is the most important characteristic of a contraceptive method to a woman, or if a woman is not sure what she is looking for in a method, a tiered effectiveness chart is used to guide the contraception discussion.²⁰ Women may choose a method at the time of counselling, on the day of their TOP, or at a later appointment with their GP or at a contraception and sexual health clinic. Women who choose a method at the time of counselling may receive the method from BPAS on the day of their TOP, or at a later time from their GP or at a contraception and sexual health clinic. BPAS provides all non-permanent contraceptive methods except for diaphragms, cervical caps, and training in the fertility awareness-based method (FABM). BPAS does not provide female sterilisation. When women opt to obtain contraception from BPAS, the aim is to provide it on the same day as the TOP. The sole exception to same-day provision is IUC placement after medical TOP, which is deferred until the TOP is verified to be complete, typically 1–2 weeks after treatment.²¹ Welsh health commissioning boards did not cover implants until the second year of the study period (2012). This anomaly may have prevented some women in our sample from obtaining their preferred method for free following TOP, although the number potentially affected is small. Women obtaining contraception from Welsh clinics in 2011 represent 1.02% of the sample.

We extracted data on uptake of contraceptive counselling, methods chosen, and methods received post-TOP from BPAS' electronic Booking and Invoicing System (BIS). Clinical and demographic information is entered into the database at the time of contraceptive counselling and the TOP procedure, either by nurses or by administrative staff. Data on receipt of counselling and methods chosen after counselling are available for all women, regardless of whether they decided to receive their chosen method from BPAS, or from their GP or contraception and sexual health clinic. Data on the methods received are available only for women who obtained post-TOP contraception from BPAS, however.

We also extracted information on type of TOP, gestational age, number of previous TOPs, previous difficulty obtaining contraception, and method used at the time of conception from BIS, along with demographic information including age, race/ethnicity, relationship status, parity, and postcode. We categorised type of TOP as medical (using mifepristone and misoprostol) or surgical (including dilation and evacuation, electric vacuum aspiration, and manual vacuum aspiration), and gestational age as 0–9 weeks, 10–15 weeks, and 16–24 weeks. We categorised the number of previous TOPs as 0, 1, or 2, and previous difficulty obtaining contraception as yes or no. Women who may have returned to have a subsequent TOP during the 4-year period could not be identified, as all women are assigned a unique identification number for each visit. We categorised the reported method used at the time of conception into four groups, according to typical-use effectiveness:²⁰ (1) IUC, implant, and female sterilisation; (2) injection, oral contraceptives, patch, and ring; (3) condoms, diaphragms, and FABM; and (4) no method. We categorised: age as 12–19 years, and thereafter in 5-year increments (beginning at 20–24 years) until the final grouping of 40–51 years; race/ethnicity as South Asian, black, East Asian, mixed, or white; relationship status as single, married, or divorced/separated/widowed; and parity as 0, 1, 2, and 3. No information on patient socio-economic status or level of education was available.

We examined the clinical and demographic characteristics of the sample according to the pathway selected for obtaining post-TOP contraception, and used the first four letters/digits of women's postcodes to determine the geographical distribution. We used chi-square difference of proportions tests to compare characteristics across and between groups. We examined contraceptive method choices among women who elected to obtain post-TOP contraception from BPAS and women who preferred to obtain contraception from their GP or from a contraception and sexual health clinic. We compared method preferences between women having medical versus surgical TOP using chi-square difference of proportions tests and examined post-TOP method choices among women who reported using no method at the time of conception. Using binary logistic regression models controlling for the clinical and demographic characteristics available in the data set, we assessed the factors associated with the choice of an IUC or implant. Finally, we assessed the degree to which post-TOP method preferences were fulfilled by calculating the proportions of women actually receiving their chosen method from BPAS. We conducted a sensitivity analysis to assess the impact of excluding women treated at Welsh clinics in 2011 when funding was not in place for IUCs and implants. We found no substantive or statistical changes to the results.

All analyses were performed using STATA 13.1. This study was performed as part of a provision of service evaluation for BPAS. The project was exempt from review by the BPAS

Research and Ethics Committee (REC) and the Institutional Review Board (IRB) at Princeton University on the basis that no identifying data were accessed and all data were pre-existing.

Results

Receipt of contraceptive counselling and chosen pathways to obtaining post-TOP contraception

In the 4-year period between 1 January 2011 and 31 December 2014, 211 215 women obtained a TOP and were offered contraceptive counselling from BPAS, and were eligible to obtain contraception free of charge (10 513 self-paying women were excluded from the sample). Women receiving care were geographically distributed across Great Britain. Most women were resident in England or Wales, but some had travelled from Scotland. Women fell into four main groups according to their decisions regarding post-TOP contraception (Table 1): 51% (106 889) received contraceptive counselling from BPAS and also chose to obtain contraception from BPAS following TOP (group 1); 33% (69 870) received counselling from BPAS but chose to obtain contraception from their GP or from a family planning clinic following TOP (group 2); 7% (14 656) received counselling from BPAS but did not require contraception for reasons including already having a contraception method to use post-TOP, not being sexually active, currently planning pregnancy, having a religious objection to contraception, and relying on partners' contraception (group 3); and 8% (17 527) declined counselling from BPAS or received counselling but declined contraception for an unknown reason (group 4). For the remaining 1% (2273 women), no information was available about whether counselling was received or whether a pathway to obtaining contraception was chosen.

Table 1 shows the characteristics of women in each of the four groups listed above. Women choosing to obtain contraception from BPAS (group 1) were more likely than women in any of the other groups to have received a surgical TOP (74 versus 52, 61, and 64% in groups 2, 3, and 4, respectively; $P < 0.001$), to be over 9 weeks of gestation (26 versus 18, 19, and 23%, respectively, $P < 0.01$), to be aged 12–19 years (18 versus 16, 13, and 15%, respectively; $P < 0.001$), to be single (83 versus 80, 77, and 78%, respectively; $P < 0.001$), to have had one or more previous TOPs (39 versus 35, 33, and 34%, respectively; $P < 0.001$), and to have had previous difficulty obtaining contraception (7 versus 5, 4, and 5%; $P < 0.001$). They were also less likely to be nulliparous (47 versus 51, 56, and 54%, respectively; $P < 0.001$). Women choosing to obtain contraception from a GP or from a contraception and sexual health clinic (group 2) were more likely to have had a medical TOP (48 versus 26, 39, and 36% in groups 1, 3, and 4, respectively; $P < 0.001$). Women who reported not requiring contraception (group 3) were more likely to have been using oral contraceptives, patches, rings, or injectables at the time of conception (37 versus 25, 26, and 19% in groups 1, 2, and 4, respectively; $P < 0.001$). Women who declined counselling or declined contraception for an unknown reason (group 4) were less likely to identify their racial/ethnic group as white (69 versus 77, 76, and 73% in groups 1, 2, and 3, respectively; $P < 0.001$), and were more likely to have been using no method at the time of conception (45 versus 36, 35, and 30%, respectively; $P < 0.001$).

Post-TOP method choice among women obtaining contraception from BPAS

Table 2 shows the distribution of methods chosen by women who received contraceptive counselling from BPAS and who also chose to obtain post-TOP contraception from BPAS (group 1). Information on the method chosen was missing for 283 of the 106 889 women in this group (0.3%). Among those remaining, 93% selected a method after counselling and 7% were still deciding which method they wanted after counselling. Implants were the most commonly chosen method (27%), followed by IUCs (24%) and oral contraceptives (19%). Twelve per cent chose injectables and 9% chose condoms. Small proportions (2% or fewer) chose patches, rings, emergency contraception (EC), diaphragms, FABM, or female sterilisation. Although these latter three methods are not provided by BPAS, women's preferences for them were still recorded. Method choice differed substantially by TOP type. Women who had a medical TOP were much less likely than those who had a surgical TOP to choose an IUC (5 versus 31%; $P < 0.001$), were less likely to choose an implant (22 versus 29%; $P < 0.001$), and were much more likely to choose oral contraceptives (31 versus 15%; $P < 0.001$). Smaller but statistically significant differences were also observed for the injection, condoms, patch, and ring: women who had a medical TOP were more likely to have chosen each of these.

Post-TOP method choice among women obtaining contraception from their GP or from a contraception and sexual health clinic

Table 3 shows the methods chosen by women who received contraceptive counselling from BPAS but who opted to receive contraception from their GP or from a contraception and sexual health clinic (group 2). Information on the method chosen was missing for 435 of the 69 870 women in this group (0.6%). Among those remaining, 47% selected a method after counselling and 53% were still deciding after counselling. Oral contraceptives were the most commonly chosen method after counselling (19%), followed by IUCs (10%) and implants (8%). Women in this group who had a medical TOP were more likely than those who had a surgical TOP to choose an IUC (15 versus 5%; $P < 0.001$), and were also more likely to choose an implant (10 versus 6%; $P < 0.001$). Women in this group who had surgical TOP were more likely to be undecided (57 versus 48%; $P < 0.001$). Minor but statistically significant differences were observed for oral contraceptives, condoms, and patch, all of which were slightly more likely to be chosen for use after surgical TOP by women in this group.

Post-TOP method choice among women using no method at the time of conception

Thirty-six per cent of women in the sample reported using no contraception method of at the time of conception. Of these, 86% chose to receive a method of contraception after their TOP: 53% from BPAS and 33% from their GP or from a contraception and sexual health clinic. Six per cent reported not requiring contraception, and 8% declined contraception or contraceptive counselling for an unknown reason. Among women who were not using a contraception method at conception and wanted a method from BPAS, 26% chose an implant, 23% chose an IUC, 21% chose oral contraceptives, and 11% chose the injection (Figure S1). Of the remaining 19%, 11% chose another method or needed more time to decide (8%).

Factors associated with choice of an IUC or implant

Among all women who chose to receive a method of contraception, either from BPAS or from a GP/contraception and sexual health clinic, the choice of an IUC or implant was more likely if they: had opted to obtain contraception from BPAS (odds ratio, OR = 4.3, $P < 0.001$); had a surgical TOP (OR = 1.8, $P < 0.001$); were aged 12–19 years (OR = 1.3, $P < 0.001$); were parous (one child, OR = 1.7, $P < 0.001$; two children, OR = 2.3, $P < 0.001$; three or more children, OR = 2.7, $P < 0.001$); identified their race/ethnicity as white (OR = 1.3, $P < 0.001$); had one or more previous TOPs (one previous TOP, OR = 1.2, $P < 0.001$; two or more previous TOPs, OR = 1.3, $P < 0.001$); had experienced previous difficulty obtaining contraception (OR = 1.2, $P < 0.001$); or reported using an IUC or implant at the time of conception (OR = 2.0, $P < 0.001$) (Table S1).

Post-TOP method receipt among women obtaining contraception from BPAS

Figure 1 shows the proportions of women who chose and received post-TOP contraception from BPAS. Information on method received was available for 88 250 of the 106 606 women for whom we have information on method choice (83%). Ninety-one per cent received their chosen method after TOP, with little variation across method type. The exceptions are female sterilisation, diaphragms, and FABM, none of which are provided by BPAS. Very few women in our sample chose these methods, and all received another method post-TOP, either as an alternative or as a bridging method until their preferred method could be arranged. The only prominent difference we observed in receipt of chosen methods by TOP type was for IUCs following medical TOP, where 75% of women having a medical TOP received their desired IUC versus 93% after surgical TOP ($P < 0.001$, results not shown). Among the 7560 women who were still deciding which method they wanted after counselling, all had chosen a method by the time of their TOP: 37% received an IUC, 29% received an implant, 20% received oral contraceptives, 11% received an injection, and 3% received another method.

Discussion

Main findings

In a population-based sample of women obtaining TOP from BPAS over a 4-year period, the vast majority chose to receive post-TOP contraception, either from BPAS or from their GP or contraception and sexual health clinic. Approximately 40% chose an IUC or implant, 20% chose oral contraceptives, 8% chose the injection, and the remainder were either undecided or chose another method. A high proportion of women who were using no contraception method at conception chose to receive contraception post-TOP, and among those who opted to obtain contraception from BPAS, half chose an IUC or implant.

Women who chose to receive contraception from BPAS were more likely to choose an IUC or an implant, as were those who had a surgical TOP, and were younger, higher parity, white, had one or more previous TOPs, or had previous difficulty obtaining contraception. A very low proportion of women receiving medical TOP at BPAS chose an IUC, and although this proportion was higher in the GP group, oral contraceptives were the most commonly chosen method among women obtaining medical TOP in both groups. Importantly, the vast majority

of women obtaining contraception from BPAS received their chosen method, regardless of method type.

Strengths and limitations

A key strength was our ability to assess contraceptive choices post-TOP, as well as actual method receipt, among a representative sample of women obtaining care at BPAS. Women accessing care at other independent sector providers are clinically and demographically similar,²² whereas those accessing care through the NHS are similar demographically but are more likely to have lower gestational ages.¹⁹ Additionally, we were able to assess women's post-TOP contraceptive choices and receipt in a sample where a range of methods is available for free, counselling follows a combined informed choice and shared decision-making model, rather than a directive approach, and methods are provided on the same day wherever possible. All of these factors increase our confidence that the methods women chose reflected their preferences.

The main limitation is that we lack information on the methods women received from GPs and contraception and sexual health clinics, and thus we are unable to assess the fulfillment of method choice in these settings. A lack of information on women's educational level or socio-economic status also means that we cannot account for the influence of these factors on choice of an IUC or implant. Additionally, we lack detailed information on whether and how women's contraceptive choices might have evolved between counselling and the day of their TOP, or the extent to which healthcare providers may have unduly influenced some women's choices. No follow-up data are available for women after receipt of their method of contraception, and thus we are unable to study adherence and continuation with chosen methods, or subsequent pregnancies and their outcomes.

Interpretation

Our findings have implications for other settings where contraceptive counselling is considered an integral part of TOP care. Previous research in the US, Europe, and New Zealand has emphasised the importance of exploring women's contraceptive needs and preferences in the peri-TOP setting.^{1,23,24} We demonstrate the possibility of high uptake of contraceptive counselling and post-TOP contraception, including among women not using a contraception method at conception. Moreover, in the absence of counselling that promotes IUCs and implants over other contraceptives, many women still chose these methods. The high rates of receipt of the chosen methods, regardless of type, is likely attributable to provider training, an emphasis on patient-centred, non-judgmental counselling, and same-day method provision.

The concept of examining contraceptive preferences, as opposed to simply contraceptive use, is relatively new. Only one previous study in the UK has examined women's contraceptive choices and their ability to obtain their preferred method.²⁵ Among women with unplanned pregnancies attending antenatal or TOP clinics, around one-third of those not using contraception reported that they were unable to obtain their preferred method, and around one-third who were using contraception reported that they were still not using their preferred method. One US study examined contraceptive preferences in the postpartum

period,²⁶ again finding substantial unmet demand for preferred methods and higher rates of subsequent unintended pregnancy when preferred methods were not provided.²⁷ These studies underscore the importance of eliciting women's contraceptive preferences and removing barriers to method provision. Other studies have highlighted how counselling that includes information about the full range of available methods can lead to a more varied method mix. A large study of women from Sweden, Russia, Israel, Ukraine, Czech Republic, Slovakia, Austria, Belgium, the Netherlands, Switzerland, and Poland found that among those who wanted to use combined hormonal contraceptives and received counselling about the full range of available delivery systems, almost half selected a different combined hormonal method than originally planned, with preferences for the patch and ring increasing dramatically.²⁸

Although the majority of women in our sample received their chosen method, we also identified potential barriers to choice. A very low proportion of women who had a medical TOP and opted to receive post-TOP contraception from BPAS chose an IUC. This finding may reflect difficulties returning to the clinic for a post-TOP check-up and IUC placement. Given the geographical dispersion of the sample, a second clinic visit may have been impractical or unfeasible for some.^{29,30} Others may simply have preferred to visit their GP or contraception and sexual health provider. Interestingly, although the proportion of women who had a medical TOP and chose an IUC was higher among those who opted to receive contraception from their GP/contraception and sexual health clinic, the majority of the women in this group chose oral contraceptives or were undecided at the time of counselling. Thus, although some women who had a medical TOP may have experienced logistical barriers to choosing an IUC, others may simply be less likely to desire one, perhaps because of the requirement for provider-dependent placement, perceptions of placement as surgery, or a greater comfort level with taking oral contraceptives. Alternatively, women who desire an IUC may choose surgical TOP in order to obtain one immediately following the procedure; however, although other national and international studies have also found higher IUC uptake after surgical as opposed to medical TOP,^{22,31–33} none has examined this particular possibility.

The high proportion of women who opted to receive contraception from their GP/contraception and sexual health clinic who were still deciding about a method following counselling may reflect a preference to talk with their regular GP or contraception and sexual health provider, or a preference to keep discussions about contraception separate from their TOP experience.^{34,35} In either case, this pathway is an important aspect of service provision.

Conclusion

The offer of contraceptive counselling and the provision of a full range of methods should be available to women presenting for TOP, aiming for a balance between reducing barriers to the most effective methods while respecting the choices of women whose preferences are for other methods, for no method, or for the receipt of a method at some later time. An acknowledgement of this balance is critical to setting realistic and patient-centred standards of care, and to shifting the focus from creating uptake quotas to removing barriers to choice

for all methods. The frequency with which women obtained their chosen methods suggests that same-day provision, lack of cost barriers, and counselling that elicits and accepts women's preferences play important roles in ensuring a high quality of service. Our findings highlight several important avenues for further research, including: the factors underlying women's post-TOP contraceptive preferences, including the characteristics that they find the most important when choosing a method; the quality of service provision at GP and contraception and sexual health clinics; contraceptive choices following medical TOP, including the extent of unfulfilled demand for IUCs; and women's subsequent continuation and satisfaction with their chosen methods.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

The authors thank Steve Cheung for excellent research assistance.

Funding

Support for this research was provided in part by an infrastructure grant for population research from the Eunice Kennedy Shriver National Institute of Child Health and Human Development of the National Institutes of Health P2C HD047879 (ARAA and JT).

References

1. Cameron S. Postabortal and postpartum contraception. Best practice & research Clinical obstetrics & gynaecology. 2014; 28(6):871–80. [PubMed: 24951405]
2. Royal College of Obstetricians & Gynaecologists. Best practice in comprehensive abortion care. Best Practice Paper No 2. 2015. <https://www.rcog.org.uk/globalassets/documents/guidelines/best-practice-papers/best-practice-paper-2.pdf>. Accessed 21st May 2016
3. Glasier A. Should healthcare professionals be advocating long-acting reversible contraception? Women's health. 2009; 5(1):1–4.
4. Madden T, Mullersman JL, Omvig KJ, Secura GM, Peipert JF. Structured contraceptive counseling provided by the Contraceptive CHOICE Project. Contraception. 2013; 88(2):243–9. [PubMed: 22959396]
5. Gold, R. Guarding against coercion while ensuring access: a delicate balance. Guttmacher Policy Review. 2014. <https://www.guttmacher.org/about/gpr/2014/09/guarding-against-coercion-while-ensuring-access-delicate-balance>. Accessed 21st May 2016
6. Schunmann C, Glasier A. Specialist contraceptive counselling and provision after termination of pregnancy improves uptake of long-acting methods but does not prevent repeat abortion: a randomized trial. Human reproduction. 2006; 21(9):2296–303. [PubMed: 16751644]
7. Stewart H, McCall SJ, McPherson C, Towers LC, Lloyd B, Fletcher J, et al. Effectiveness of peri-abortion counselling in preventing subsequent unplanned pregnancy: a systematic review of randomised controlled trials. The journal of family planning and reproductive health care / Faculty of Family Planning & Reproductive Health Care, Royal College of Obstetricians & Gynaecologists. 2016; 42(1):59–67.
8. Yassin AS, Cordwell D. Does dedicated pre-abortion contraception counselling help to improve post-abortion contraception uptake? The journal of family planning and reproductive health care / Faculty of Family Planning & Reproductive Health Care, Royal College of Obstetricians & Gynaecologists. 2005; 31(2):115–6.
9. Rose SB, Lawton BA. Impact of long-acting reversible contraception on return for repeat abortion. American journal of obstetrics and gynecology. 2012; 206(1):37e1–6. [PubMed: 21944222]

10. Cameron ST, Glasier A, Johnstone A. Comparison of uptake of long-acting reversible contraception after abortion from a hospital or a community sexual and reproductive healthcare setting: an observational study. *The journal of family planning and reproductive health care / Faculty of Family Planning & Reproductive Health Care, Royal College of Obstetricians & Gynaecologists*. 2015 Online ahead of print.
11. Cameron ST, Glasier A, Chen ZE, Johnstone A, Dunlop C, Heller R. Effect of contraception provided at termination of pregnancy and incidence of subsequent termination of pregnancy. *BJOG : an international journal of obstetrics and gynaecology*. 2012; 119(9):1074–80. [PubMed: 22703553]
12. Secura GM, Madden T, McNicholas C, Mullersman J, Buckel CM, Zhao Q, et al. Provision of no-cost, long-acting contraception and teenage pregnancy. *The New England journal of medicine*. 2014; 371(14):1316–23. [PubMed: 25271604]
13. Peipert JF, Madden T, Allsworth JE, Secura GM. Preventing unintended pregnancies by providing no-cost contraception. *Obstetrics and gynecology*. 2012; 120(6):1291–7. [PubMed: 23168752]
14. Aiken AR, Creinin MD, Kaunitz AM, Nelson AL, Trussell J. Global fee prohibits postpartum provision of the most effective reversible contraceptives. *Contraception*. 2014; 90(5):466–7. [PubMed: 25212061]
15. Ricketts S, Klingler G, Schwalberg R. Game change in Colorado: widespread use of long-acting reversible contraceptives and rapid decline in births among young, low-income women. *Perspectives on sexual and reproductive health*. 2014; 46(3):125–32. [PubMed: 24961366]
16. Dehlendorf C, Levy K, Kelley A, Grumbach K, Steinauer J. Women's preferences for contraceptive counseling and decision making. *Contraception*. 2013; 88(2):250–6. [PubMed: 23177265]
17. Gomez AM, Fuentes L, Allina A. Women or LARC first? Reproductive autonomy and the promotion of long-acting reversible contraceptive methods. *Perspectives on sexual and reproductive health*. 2014; 46(3):171–5. [PubMed: 24861029]
18. Higgins JA. Celebration meets caution: LARC's boons, potential busts, and the benefits of a reproductive justice approach. *Contraception*. 2014; 89(4):237–41. [PubMed: 24582293]
19. Department of Health. Abortion Statistics, England and Wales: 2015. Published May 17th 2016: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/523623/Abortion_Stats_2015.pdf. Accessed 21st May 2016
20. Trussell, J., Guthrie, KA. Choosing a Contraceptive: Safety, Efficacy, and Personal Considerations; and Trussell J, Contraceptive Efficacy. In: Hatcher, RA.Trussell, J.Nelson, AL.Cates, W.Kowal, D., Policar, MS., editors. *Contraceptive Technology: Twentieth Revised Edition* Ardent Media. 2011. p. 45-74.
21. Faculty of Sexual & Reproductive Healthcare Clinical Guidance Intrauterine Contraception. Clinical Effectiveness Unit. 2015. <http://www.fsrh.org/pdfs/CEUGuidanceIntrauterineContraception.pdf>. Accessed 23rd May 2016
22. Bury, L. Factors associated with unintended pregnancies and post-abortion contraceptive uptake among young women: a quantitative survey. Marie Stopes International. 2013. http://www.open.ac.uk/health-and-social-care/main/sites/www.open.ac.uk.health-and-social-care.main/files/files/ecms/web-content/research-web-content/MSI_quantreport_final_10-15000000000.pdf. Accessed 23rd May 2016
23. Rose SB, Lawton BA, Brown SA. Uptake and adherence to long-acting reversible contraception post-abortion. *Contraception*. 2010; 82(4):345–53. [PubMed: 20851228]
24. Thompson KM, Speidel JJ, Saporta V, Waxman NJ, Harper CC. Contraceptive policies affect post-abortion provision of long-acting reversible contraception. *Contraception*. 2011; 83(1):41–7. [PubMed: 21134502]
25. Bexhell H, Guthrie K, Cleland K, Trussell J. Unplanned pregnancy and contraceptive use in Hull and East Yorkshire. *Contraception*. 2016; 93(3):233–5. [PubMed: 26519645]
26. Potter JE, Hopkins K, Aiken AR, Hubert C, Stevenson AJ, White K, et al. Unmet demand for highly effective postpartum contraception in Texas. *Contraception*. 2014; 90(5):488–95. [PubMed: 25129329]

27. Potter JE, Hubert C, Stevenson AJ, Hopkins K, Aiken AR, White K, et al. Barriers to Postpartum Contraception in Texas and Pregnancy Within 2 Years of Delivery. *Obstetrics and gynecology*. 2016; 127(2):289–96. [PubMed: 26942356]
28. Bitzer J, Gemzell-Danielsson K, Roumen F, Marintcheva-Petrova M, van Bakel B, Oddens BJ. The CHOICE study: effect of counselling on the selection of combined hormonal contraceptive methods in 11 countries. *The European journal of contraception & reproductive health care : the official journal of the European Society of Contraception*. 2012; 17(1):65–78.
29. Cameron ST, Berugoda N, Johnstone A, Glasier A. Assessment of a ‘fast-track’ referral service for intrauterine contraception following early medical abortion. *The journal of family planning and reproductive health care / Faculty of Family Planning & Reproductive Health Care, Royal College of Obstetricians & Gynaecologists*. 2012; 38(3):175–8.
30. Stanek AM, Bednarek PH, Nichols MD, Jensen JT, Edelman AB. Barriers associated with the failure to return for intrauterine device insertion following first-trimester abortion. *Contraception*. 2009; 79(3):216–20. [PubMed: 19185676]
31. Benson J, Andersen K, Brahmi D, Healy J, Mark A, Ajode A, et al. What contraception do women use after abortion? An analysis of 319, 385 cases from eight countries. *Global public health*. 2016:1–16.
32. Goldstone P, Mehta YH, McGeechan K, Francis K, Black KI. Factors predicting uptake of long-acting reversible methods of contraception among women presenting for abortion. *The Medical journal of Australia*. 2014; 201(7):412–6. [PubMed: 25296065]
33. Banerjee SK, Gulati S, Andersen KL, Acre V, Warvadekar J, Navin D. Associations Between Abortion Services and Acceptance of Postabortion Contraception in Six Indian States. *Studies in family planning*. 2015; 46(4):387–403. [PubMed: 26643489]
34. Matulich M, Cansino C, Culwell KR, Creinin MD. Understanding women’s desires for contraceptive counseling at the time of first-trimester surgical abortion. *Contraception*. 2014; 89(1):36–41. [PubMed: 24161475]
35. Cansino C. Contraceptive counseling at the time of first-trimester abortion: what do women want? *Contraception*. 2015; 92:359–414.

Tweetable abstract

Uptake targets for long-acting reversible methods do not reflect women's post-TOP contraceptive preferences.

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Figure 1.

Proportions of women receiving their chosen method of contraception following termination of pregnancy (TOP) among those choosing to obtain contraception from BPAS ($n = 88\ 250$).

The small proportions of women ($<2\%$) who chose methods not provided by BPAS (diaphragm, FBAM, and female sterilisation) are not included.

Table 1
Descriptive characteristics of women by preference for obtaining contraception following termination of pregnancy (TOP) (*n* = 208 942)

Characteristic	Frequency (%)			<i>P</i>
	Group 1 Contraception obtained from BPAS (<i>n</i> = 106 889)	Group 2 Contraception obtained from GP/FP Clinic (<i>n</i> = 69 870)	Group 3 Contraception not required (<i>n</i> = 14 656)	Group 4 Contraception/counselling declined (<i>n</i> = 17 527)
Type of TOP				
Medical	26.2	47.7	39.4	35.7
Surgical	73.8	52.3	60.6	64.3
Weeks of gestation				
0–9	74.4	81.8	80.8	77.0
10–15	19.5	13.7	14.7	17.4
16–24	6.1	4.5	4.5	5.6
Age				
12–19 years	18.4	16.4	13.4	15.4
20–24 years	31.0	29.0	26.6	27.3
25–29 years	22.6	23.1	23.4	23.5
30–34 years	15.1	16.8	18.7	17.1
35–39 years	9.0	10.2	12.1	11.6
40–51 years	4.0	4.6	5.8	5.1
Parity				
0	47.0	51.1	55.5	53.9
1	21.4	20.1	18.2	19.6
2	18.9	17.5	16.6	16.5
3 or above	12.7	11.4	9.7	10.0
Relationship status				
Married	13.6	16.0	19.0	18.0
Single	83.1	80.3	77.0	77.7
Divorced/Separated/Widowed	3.3	3.7	4.1	4.3
Race/ethnicity				
White	76.6	75.7	72.6	69.0

Characteristic	Frequency (%)				P
	Group 1 Contraception obtained from BPAS (n = 106 889)	Group 2 Contraception obtained from GP/FP Clinic (n = 69 870)	Group 3 Contraception not required (n = 14 656)	Group 4 Contraception/counselling declined (n = 17 527)	
South Asian	6.4	8.9	9.8	10.8	
Black	8.9	7.8	8.4	10.5	
East Asian	1.1	1.5	2.1	2.1	
Mixed/Other	6.9	6.1	7.1	7.5	<0.001
Previous TOPs					
0	61.0	64.6	67.3	65.8	
1	29.4	27.4	26.2	26.5	
2 or more	9.7	8.1	6.5	7.7	<0.001
Contraceptive access issues					
No	93.4	95.1	96.4	94.7	
Yes	6.6	4.9	3.6	5.3	<0.001
Method use at conception					
IUC/implant/female sterilisation	3.2	2.3	2.6	2.2	
Injection/OCP/ring/patch	24.8	25.9	36.5	18.9	
Condom/diaphragm/FABM	35.6	36.9	31.2	34.1	
No method	36.4	34.9	29.7	44.8	<0.001

Table 2

Methods chosen after counselling among women choosing to obtain post-abortion contraception from BPAS, overall, and by type of termination of pregnancy (TOP)

Method chosen	Frequency (%)			<i>P</i>
	Total population (<i>n</i> = 106 606)	Medical TOP (<i>n</i> = 27 755)	Surgical TOP (<i>n</i> = 78 851)	
Implant	27.1	21.8	29.0	<0.001
Intrauterine contraceptive	24.0	5.0	30.7	<0.001
Oral contraceptive pill	18.7	30.5	14.6	<0.001
Injection	12.0	16.6	10.3	<0.001
Condoms	8.8	12.9	7.3	<0.001
Still deciding	7.1	9.4	6.3	<0.001
Patch	2.0	3.4	1.5	<0.001
Ring	0.1	0.3	0.1	<0.001
Emergency contraception	0.1	0.1	0.1	0.395
Diaphragm	0.04	0.03	0.05	0.239
Fertility awareness-based methods	0.03	0.04	0.03	0.850
Female sterilisation	0.03	0.04	0.03	0.850
Total	100.0	100.0	100.0	

All figures are percentages. *P* values are based on chi-square difference of proportions tests by type of TOP for each contraceptive method.

Table 3

Methods chosen after counselling among women choosing to obtain contraception following termination of pregnancy (TOP) from a GP or family planning clinic, overall, and by type of TOP

Method chosen	Frequency (%)			<i>P</i>
	Total population (<i>n</i> = 69 435)	Medical TOP (<i>n</i> = 32 881)	Surgical TOP (<i>n</i> = 36 554)	
Still deciding	52.6	48.2	56.6	<0.001
Oral contraceptive pill	19.0	17.8	20.1	<0.001
IUC	9.7	14.7	5.2	<0.001
Implant	8.1	10.3	6.1	<0.001
Condoms	5.1	3.8	6.2	<0.001
Injection	2.1	2.4	1.8	<0.001
Female sterilisation	1.7	1.3	2.1	<0.001
Patch	1.3	1.2	1.4	0.008
Ring	0.2	0.2	0.2	0.928
Diaphragm	0.2	0.2	0.2	0.851
Fertility awareness-based methods	0.04	0.05	0.03	0.346
Emergency contraception	0.02	0.01	0.02	0.069
Total	100.0	100.0	100.0	

All figures are percentages. *P* values based on chi-square difference of proportions tests by type of TOP for each contraceptive method.