

Original Research Article

Availability, practices and acceptance of postabortion contraceptive services in health facilities: A study in six states of India ^{☆,☆☆}



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ARTICLE INFO

Article history:

Received 6 May 2019

Received in revised form 12 October 2019

Accepted 30 October 2019

Keywords:

Abortion

Postabortion

Contraceptive services

Health facilities

India

ABSTRACT

Objective: To assess the availability of and practices around postabortion contraceptive services in health facilities, and document women's acceptance of postabortion contraception in six Indian states.

Study Design: We conducted a survey of 4001 public and private health facilities that provide abortion-related care in six Indian states. In this analysis, we assess the availability and range of contraceptive methods offered, the protocols and practices around postabortion contraceptive counseling, the extent to which facilities require women to adopt contraception, and contraceptive uptake among women.

Results: Although some contraceptive methods and information were available at a majority of facilities (75–97%), the range of methods was lacking and the information provided to women varied considerably by state. 8–26% of facilities required women seeking induced abortions to accept a modern contraceptive method. Only half to two-thirds of postabortion patients adopted a modern method.

Conclusion: The limited number of methods offered in facilities suggests that some women may not obtain the method they desire, or get information about the full range of methods that should be available. While contraceptive uptake should be voluntary, the requirement imposed by some facilities for women to adopt a modern contraceptive method in order to obtain an abortion must be addressed.

Implications: Some 15.6 million Indian women had an induced abortion in 2015. Understanding the provision of postabortion contraceptive services in health facilities, including counseling, is necessary to inform policies and practices to better enable women and couples to make informed decisions to prevent future unintended pregnancies.

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1. Background

Postabortion contraceptive care – including counseling and access to a full range of methods – is recommended as an essential part of comprehensive abortion care (CAC) [1]. Beyond the provision of information, counseling refers to a focused, interactive process through which women voluntarily receive support,

information and non-directive guidance related to their contraceptive needs [2]. Studies have shown that improving women's access to postabortion contraception may reduce the number of subsequent unplanned pregnancies as well as repeat abortions [3]. In 2015, nearly half (48%) of pregnancies were unintended in India, and an estimated 15.6 million induced abortions took place, indicating a clear need for improved contraceptive services to help women prevent unintended pregnancies, unwanted births and abortions [4].

In recent years, India's Ministry of Health and Family Welfare (MoHFW) released guidelines that encourage provision of voluntary contraceptive services to women undergoing abortion or being treated for postabortion complications [5–7]. In a recent technical update to the guidelines for postabortion family planning, the Government of India promoted access to postabortion contraception for all women, and explicitly stated that the full range of methods, including postabortion intrauterine devices (IUCD) and postabortion sterilization services, must be made available to women who have abortions in public facilities [8].

* Funding: This research was made possible by grants from the Government of UK Department for International Development (until 2015), the David and Lucile Packard Foundation, the John D. and Catherine T. MacArthur Foundation and the Ford Foundation. Support for this project was provided in part by the Guttmacher Center for Population Research Innovation and Dissemination (NIH grant 5 R24 HD074034). The views expressed are those of the authors and do not necessarily reflect the positions and policies of the donors.

** The author declares no conflict of interest.

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No recent large-scale study has documented the provision of postabortion contraceptive services in public and private facilities in India. Some existing small-scale studies have found that while many women want to adopt a postabortion contraceptive method, they often do not receive the services they need; and among the women who do adopt a method, many do not receive adequate counseling [9–13]. According to several state-specific studies, the postabortion contraceptive services provided, as well as women's uptake of postabortion contraception, vary widely by state, facility-type and abortion method; and in some cases, they vary by women's characteristics such as age, economic status and education level [12–21]. Little is known about postabortion practices in health facilities, including supply-side barriers affecting the availability and quality of postabortion contraceptive services offered to women. This study aimed to fill these gaps in the existing research.

2. Data and methods

This paper draws on data from the Unintended Pregnancy and Abortion in India (UPAI) study carried out by the International Institute for Population Sciences (IIPS), Mumbai; Population Council, New Delhi; and Guttmacher Institute, New York, in 2015. The study fielded a Health Facilities Survey (HFS) from March to August, 2015, which collected data from 4001 health facilities (2046 public and 1955 private) in Assam (196), Bihar (657), Gujarat (480), Madhya Pradesh (660), Tamil Nadu (786) and Uttar Pradesh (1222). These six states were selected on the basis of geographical representation, population size, and key sociodemographic characteristics [4]. Combined, about 45% of all women in India aged 15–49 years reside in these six states.

We sampled facilities in the HFS using a stratified random sampling strategy. First, in each of the six states, we selected a random sample of 70% of districts, and second, within these districts, we identified public and private facilities with the capacity to provide abortion-related services. Sampled facilities in the public sector were at or above the Primary Health Centre (PHC) level. Facilities in the private sector were included if they had basic operating theater capacity (i.e., are equipped to provide vacuum aspiration procedures) and reported that they provide abortion-related services. Data were collected using face-to-face structured interviews with senior staff who had worked in the facility for at least six months and were identified as the most knowledgeable about abortion and postabortion care provision at their facility. All procedures were reviewed and approved by the Institutional Review Boards of International Institute for Population Sciences (IIPS) and Guttmacher Institute.

Data for this analysis come from specific questions in the HFS regarding the availability of contraceptive methods and the range of methods offered; the timing, content and quality of the postabortion information given to women; the extent to which facilities require women to adopt a method as a condition for an abortion; the proportion of women who accept a method, and which methods are most commonly accepted among women who obtain abortion or postabortion services. The authors used SPSS Version 22 for univariate and bi-variate descriptive analyses on cleaned and weighted HFS data. All facilities which reported providing induced abortion or postabortion care services were included in the analysis. Additional detail on the methodology can be found elsewhere [22].

3. Results

3.1. Availability of contraception

A majority of facilities offering induced abortion or postabortion complications care in the six states reported having at least one contraceptive method available (84–97% in Assam, Bihar, Gujarat, Madhya Pradesh and Tamil Nadu; and 75% in Uttar Pradesh; Table 1). The most commonly available method was the intrauterine device, available in over half of facilities in all states, and in most facilities (78–92%) in Assam, Bihar, Gujarat, and Tamil Nadu. Female sterilization was the second most commonly available method in Bihar, Gujarat and Tamil Nadu (73–83% of facilities); but was only offered in 39–48% of similar facilities in Assam, Madhya Pradesh and Uttar Pradesh. Relatively high proportions of facilities in all states also offer oral contraceptives. Injectables and vasectomy were the least commonly available methods at facilities in all six states.

Between 53% and 78% of facilities in all six states offered at least three methods. Over 90% of public facilities in all states except for Uttar Pradesh (75%) offered a contraceptive method mix of three or more modern methods. In all states, public facilities more commonly offered a choice of methods compared to private facilities. Fewer facilities offered women a choice of five or more modern contraceptive methods – as low as 25% of facilities in Uttar Pradesh and as high as 45% in Bihar. The availability of multiple methods was generally more common in facilities located in rural areas compared with those in urban areas, (not shown).

Overall, the vast majority of facilities in all states offering at least one method of modern contraception reported that they had run out of at least one method in the past year (86–98%; Table 2). However, the specific methods reported to be in short supply varied across states. The injectable was not commonly

Table 1

Percent of facilities providing abortion-related services that have each type of contraceptive method, at least one modern method, at least three modern methods and at least five modern methods available, by state, India, 2015.

Contraceptive methods available	Assam	Bihar	Gujarat	Madhya Pradesh	Tamil Nadu	Uttar Pradesh
Oral contraceptive pills	70.3	66.2	59.1	63.0	73.6	56.0
Condom	70.3	57.4	53.4	56.4	45.3	46.7
IUCD	77.9	77.7	82.0	62.2	91.8	58.9
Injectable	7.7	38.0	32.6	32.9	21.3	25.7
Female Sterilization	48.2	75.3	72.5	45.4	83.1	38.6
Vasectomy	25.6	35.6	14.7	23.3	20.1	7.9
Emergency Contraception	54.4	45.1	42.7	43.4	44.6	39.0
Others	0.0	1.0	2.1	0.6	0.3	0.7
% of all facilities with at least one modern method	85.5	91.9	92.1	83.7	97.1	75.1
% of all facilities with at least 3 methods available	73.3	74.0	70.7	61.1	77.8	53.2
Public facilities	97.2	94.0	95.9	96.5	98.3	74.8
Private facilities	35.8	68.4	63.9	46.4	74.4	46.0
% of all facilities with at least 5 methods	31.2	44.7	35.5	34.0	37.8	25.3
Public facilities	44.3	57.9	44.2	58.4	73.2	33.3
Private facilities	10.5	40.9	33.2	23.9	31.9	22.7

Table 2
Percent of facilities that reported running out of contraceptive methods in the past year, among facilities that normally have that method available, by state, India, 2015.

Contraceptive methods	Assam	Bihar	Gujarat	Madhya Pradesh	Tamil Nadu	Uttar Pradesh
Oral contraceptive pills	34.3	54.6	48.4	34.2	25.7	36.5
Condom	35.3	60.1	57.8	42.9	55.7	46.0
IUCD	33.7	42.2	22.1	40.4	8.7	36.1
Injectable	95.3	75.0	70.9	72.0	80.7	71.7
Emergency Contraception	54.6	78.0	61.1	67.8	58.7	55.3
Any Modern Method	97.8	85.6	89.1	92.4	94.9	89.5

Table 3
Percent of women receiving abortion-related care that are given some information about postabortion family planning, by facility type and location, by state, India, 2015.

	Assam	Bihar	Gujarat	Madhya Pradesh	Tamil Nadu	Uttar Pradesh
<i>Type of Facility</i>						
Public	96.7	90.9	94.1	89.0	81.4	88.3
Private	100.0	88.1	93.6	85.5	80.9	85.9
<i>Location of the Facility</i>						
Urban	100.0	88.4	93.2	85.8	81.7	86.6
Rural	95.6	89.5	94.8	89.2	67.3	86.4
Total	98.0	88.7	93.7	86.5	81.0	86.5

available at all in any of the six states, and most facilities (71–95%) reported they had run out of it in the past year. More than half of all facilities, and 78% of those in Bihar, reported stock-outs out of emergency contraception. When stock-outs of any method occurred, most facilities provided women with a prescription that they could fill elsewhere (data not shown).

3.2. Contraceptive provision at facilities

Facilities in all states reported providing some information about family planning to the vast majority of women receiving abortion-related care varying from 81% of women in Tamil Nadu to 98% in Assam (Table 3). Within most states, the proportion of women receiving information did not vary by facility type, ownership or urban/rural location. However, in Tamil Nadu, only 67% of women who went to facilities in rural areas were given advice on family planning, compared to 82% of women at urban facilities.

The specific types of contraceptive information that facilities provided to women did vary by state (Fig. 1). When asked what topics were covered, more than half of facility respondents in all states reported typically covering information regarding the correct use of contraceptive methods, while fewer facilities covered the availability of different methods. Most facilities in Bihar, Gujarat and Uttar Pradesh reported providing information on the advantages and disadvantages of different contraceptive methods, but only 30% of facilities in Assam did so. Facilities generally did not cover what women should do in the case of method failure or incorrect method use: twenty-seven percent of facilities in Assam, and between 8% and 16% in the rest of the states.

3.3. Acceptance of and insistence for contraceptive use after abortion

On average, between 51% and 69% of women who receive abortion-related services in facilities adopted a modern contracep-

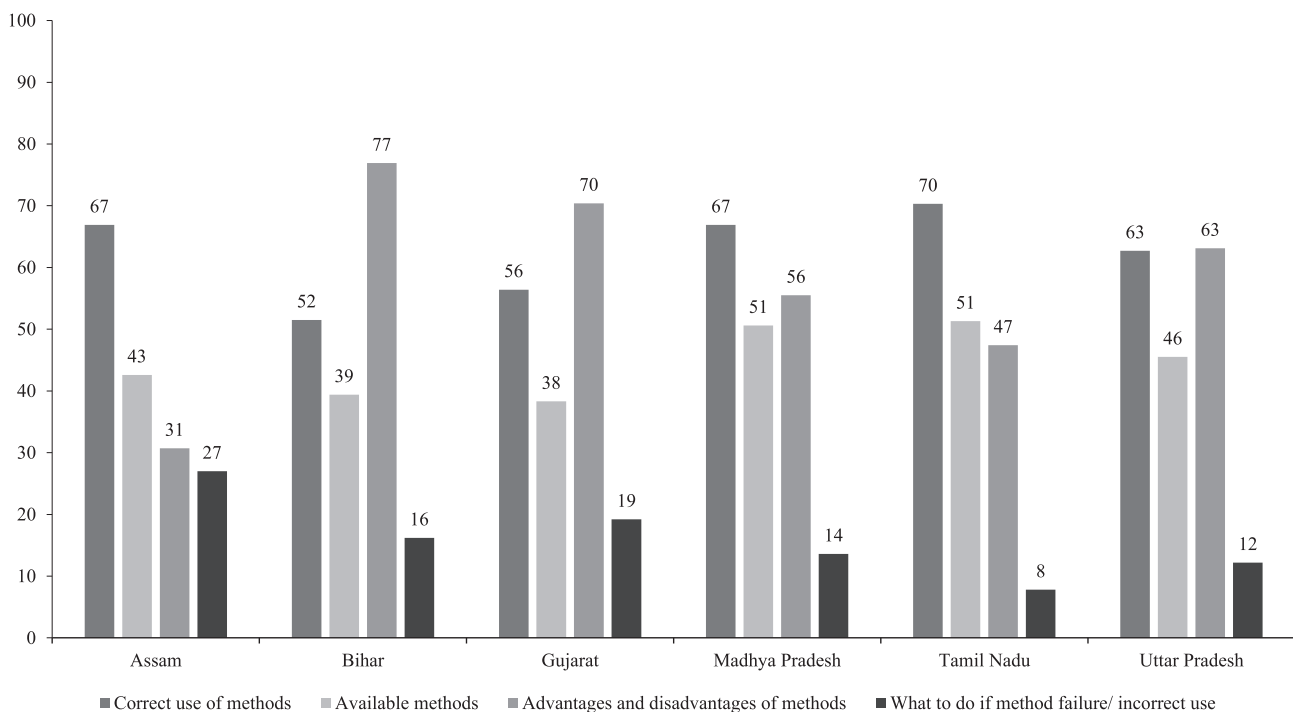


Fig. 1. Percent of facilities that provide each type of contraceptive information by State, India, 2015.

Table 4

Percent of facilities reporting each method as the most preferred method of family planning accepted by women who obtain induced abortions or care for postabortion complications in facilities, by state, India, 2015.

Contraceptive Method	Assam	Bihar	Gujarat	Madhya Pradesh	Tamil Nadu	Uttar Pradesh
Oral contraceptive pills	71.5	32.0	19.6	29.9	4.8	48.2
Condom	4.2	5.1	4.9	22.0	0.7	21.5
IUCD	20.5	26.0	68.9	19.8	81.0	22.6
Injectable	0.0	5.4	0.0	12.8	0.7	3.7
Female Sterilization	3.6	30.0	6.3	12.4	10.4	1.9
Vasectomy	0.0	0.5	0.3	0.1	1.4	0.0
Emergency Contraception	0.0	0.0	0.0	2.4	0.4	1.6
Others	0.2	1.0	0.0	0.5	0.6	0.4

Table 5

Percent of facilities offering abortion services that require some/all women to adopt a modern contraceptive method as a condition for receiving abortion, by facility type and location, by state, India, 2015.

	Bihar	Gujarat	Madhya Pradesh	Tamil Nadu	Uttar Pradesh
<i>Type of Facility</i>					
Public	14.2	31.2	23.4	20.6	15.9
Private	12.6	17.7	26.6	18.2	6.3
<i>Location of the Facility</i>					
Urban	11.4	16.6	27.5	18.7	6.8
Rural	18.1	31.0	14.8	13.8	11.6
Total	12.8	20.3	25.9	18.5	8.3

Note: For Assam, this question was worded differently and is therefore not comparable to the other states.

Table 6

Among facilities that require any women to accept a contraceptive method, percent that require different types of women to accept a contraceptive method as a condition for receiving abortion, by state, India, 2015.

Type of women	Bihar	Gujarat	Madhya Pradesh	Tamil Nadu	Uttar Pradesh
Women with many children/high parity women	69.1	28.0	42.9	71.8	46.9
Women who had a prior abortion	34.0	11.9	48.1	36.2	66.8
Women with history of contraceptive failure	18.7	20.6	23.8	20.2	7.8
Unmarried women	16.1	19.8	16.3	0.0	0.8
Women with a young child	40.3	49.5	52.9	24.0	55.2
All women requesting an abortion	37.9	19.3	20.9	27.8	52.7
Others	3.3	4.2	3.2	1.4	0.0

Note: For Assam, this question was worded differently and is therefore not comparable with the other states.

tive method according to facility respondents (not shown). Facility staff were asked which contraceptive method was most preferred by women who accept a method after receiving abortion-related services. The preferred contraceptive methods reported vary by state (Table 4). More than two-thirds (69%) of facilities in Gujarat and 81% of facilities in Tamil Nadu, compared with between 20% and 26% of facilities in the remaining states, reported that the intrauterine device was the method most women receiving abortion services preferred to accept, compared to other methods. In Assam, Bihar, Madhya Pradesh and Uttar Pradesh, most facilities reported that women more commonly adopt oral contraceptive pills. In Bihar, a relatively high proportion of facilities report that the most common contraceptive method adopted by postabortion patients is female sterilization.

Some facilities report requiring women to adopt a contraceptive method as a condition for obtaining abortion services. The proportion of such facilities in the five states ranged from 8% in Uttar Pradesh to 26% in Madhya Pradesh (Table 5). This requirement was especially common among public and/or rural facilities in Gujarat and urban public and private facilities in Madhya Pradesh. The types of women on whom providers imposed this requirement as a condition for abortion services vary across states (Table 6). For example, facilities requiring women to adopt a modern method of contraception most commonly required this of women they perceived to have many children (in Bihar and Tamil Nadu), women who had young children (in Gujarat and Madhya Pradesh), and

women who had a prior abortion (in Uttar Pradesh). More than half of facilities in Uttar Pradesh and nearly four in ten in Bihar that placed this condition on abortion services said that they required all women seeking abortion to adopt a modern contraceptive method before they provide the abortion services.

In all five states, among those facilities that required contraceptive uptake as a condition for abortion provision (8–26% of facilities), the intrauterine device was the method women were most commonly encouraged to adopt (72–91%; data not shown). In Madhya Pradesh, 66% of facilities which required women to adopt a method encouraged women to use condoms as their method of contraception. In Gujarat and Madhya Pradesh, around half of facilities requiring contraception encouraged women to use oral contraceptive pills. High proportions of such facilities encouraged women to undergo female sterilization in Bihar (48%) and Uttar Pradesh (47%), followed by Madhya Pradesh (31%), Gujarat (27%), and Tamil Nadu (17%).

4. Discussion and conclusion

Providing comprehensive contraceptive care to women receiving induced abortion and postabortion complications care is a critical service that has the potential to reduce future unintended pregnancies, unwanted births or abortions among a population of women at high risk for such outcomes. While postabortion contra-

ceptive services should include voluntary comprehensive counseling and a full range of methods [23,24], this study suggests that not all facilities provide these. Although most facilities offer contraceptive methods and information to women, there are gaps in specific method availability and in the contraceptive counseling provided. The availability of specific contraceptive methods varies by state, and the mix of contraceptive methods is limited in some facilities, which inhibits women's ability to choose methods that would best suit their family planning needs. The availability of five or more methods, which would provide women with a range of contraceptive method options, varies from 25% to 45% of facilities in the six study states, indicating much room for improvement.

Postabortion contraceptive services can theoretically be provided to women either on the day of her abortion, or during a follow-up visit, or both. However, given that some women may not return for the recommended follow-up visit, service providers should ideally provide sufficient information and offer methods, as appropriate, to women on the day of their abortion as part of the routine abortion service provision [25–28]. In other studies, concurrent contraceptive method uptake with abortion has resulted in high contraceptive acceptance and has been found to be both practical and effective [29]. The most commonly available methods in all states were the intrauterine device and the oral contraceptive pill, both of which can clinically be provided at the time of the abortion. Still, women may prefer other methods, which may not be available to them. For the increasing number of women who opt for medical methods of abortion, it is particularly important to discuss contraceptive options at the time of the abortion or treatment so that those who have interest in an intrauterine device can be given the necessary information and incentive to return for the follow-up appointment.

Nearly all facilities that offer abortion or postabortion care report providing information about family planning to the vast majority of women seeking abortion-related services. However, the type of information provided to women is not comprehensive and varies considerably by state. Information regarding the availability of different methods, advantages and disadvantages of particular methods and correct use of methods was covered with varying frequency across states; but notably, facilities in all states fell short of providing adequate information on what women should do in case of method failure or incorrect use. Method failure and incorrect use may be predictors of unintended pregnancy, so this highlights an important gap in the contraceptive counseling currently offered in facilities.

Despite having at least some contraceptive methods available, and providing some information, facilities report that, on average, uptake of a modern contraceptive method among women is limited, with approximately half to two-thirds of postabortion patients adopting a modern contraceptive method. It is disturbing that some facilities offering abortion-related services report requiring at least some women to adopt a modern contraceptive method as a prerequisite for obtaining an abortion. Enforcement of such requirements seems to be at the providers' discretion, and may be influenced by providers' biases and perceptions of women, for example if they believe the woman has too many children, if she has had a previous abortion, has a young child, or for any other reason. Contraceptive services should always be provided on a voluntary basis, should never be coercive, and should include accurate and adequate information so that potential users can make informed decisions that are right for them.

Future programs should address these shortcomings and resources should be allocated to ensure that facilities are adequately staffed and equipped to offer comprehensive services. The current programs should focus on the training of the staff in both contraceptive provision and counseling to address women's concerns and help them find a method that best fits their needs.

The Government of India has published guidelines on postabortion family planning [8], which should be fully disseminated and implemented at all levels of health facilities to strengthen women's access to and appropriate uptake of voluntary and comprehensive contraceptive care after an abortion.

References

- [1] Castleman L, Kapp N. *Clinical updates in reproductive health*. Chapel Hill, North Carolina: Ipas; 2018.
- [2] World Health Organization. *Ensuring human rights in the provision of contraceptive information and services*. Geneva: World Health Organization, https://apps.who.int/iris/bitstream/handle/10665/102539/9789241506748_eng.pdf?sequence=1; 2014 [accessed 15 May 2016].
- [3] Johnson BR, Ndhlovu S, Farr SL, Chipato T. Reducing unplanned pregnancy and abortion in Zimbabwe through postabortion contraception. *Stud Fam Plann* 2003;33:195–202.
- [4] Singh S, Shekhar C, Acharya R, Moore AM, Stillman M, Pradhan MR, et al. The incidence of abortion and unintended pregnancy in India, 2015. *Lancet Global Health* 2018;6:e111–20.
- [5] Ministry of Health and Family Welfare. *Comprehensive abortion care training and service delivery guidelines*. New Delhi: Government of India, http://tripuranrh.m.gov.in/Guidelines/Abortion_Care.pdf; 2010 [accessed 27 May 2017].
- [6] Ministry of Health and Family Welfare. *A strategic approach to reproductive, maternal, newborn, child and adolescent health (RMNCH+A) in India*. New Delhi, India: MOHFW, National Rural Health Mission, http://www.cghealth.nic.in/nhm/g/Informations/RMNCH/1_RMNCH_A_Strategy.pdf; 2013 [accessed 25 May 2017].
- [7] Ministry of Health and Family Welfare. *India's 'Vision FP 2020'*, New Delhi: Family Planning Division, Ministry of Health and Family Welfare, Government of India, <https://advancefamilyplanning.org/sites/default/files/resources/FP2020-Vision Document%20India.pdf>; 2014 [accessed 20 May 2017].
- [8] Ministry of Health and Family Welfare. *Post Abortion Family Planning: Technical Update*. New Delhi: Family Planning Division, Ministry of Health and Family Welfare, Government of India, http://nrhm.gov.in/images/pdf/programmes/familyplanning/guidelines/Post_Abortion_Family_Planning.pdf; 2016 [accessed 22 May 2017].
- [9] Ganatra B, Siddhi H. Induced abortions among adolescent women in rural Maharashtra, India. *Reprod Health Matters* 2002;10:76–85.
- [10] Agarwal S, Chauhan LN, Modi DA. Changing trends in MTP at SSG hospital, Baroda - a retrospective study. *J Indian Med Assoc* 2007;105:130–2.
- [11] Jejeebhoy S, Zavir AJF, Kalyanwala S. *Assessing abortion-related experiences and needs in four districts of Maharashtra and Rajasthan*, 2006. New Delhi: Population Council; 2010.
- [12] Kathpalia SK. Acceptance of family planning methods by induced abortion seekers: an observational study over five years. *Med J Armed Forces India* 2016;72:8–11.
- [13] Benson J, Andersen K, Brahmī 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* 2018;13:35–50.
- [14] Dhillon BS, Chandhiok N, Kambo I, Saxena NC. Induced abortion and concurrent adoption of contraception in the rural areas of India (an ICMR task force study). *Indian J Med Sci* 2004;58:478–84.
- [15] Banerjee SK, Andersen KL, Warvadekar J. Results of a Government and NGO partnership for provision of safe abortion services in Uttarakhnad, India: a pre- and post-intervention evaluation of Increasing Access to Safe Abortion Services (IASAS) Program. New Delhi: Ipas; 2009.
- [16] Navin D, Gulati S, Warvadekar J, Banerjee SK. Improving comprehensive abortion care services in Chhattisgarh through state government-Ipas partnership - a facility baseline assessment, 2010. New Delhi: Ipas; 2011.
- [17] Navin D, Warvadekar J, Gulati S, Banerjee SK, Aggarwal P. Improving comprehensive abortion care services in Meghalaya: a state government-Ipas partnership - a facility baseline assessment, 2010. New Delhi: Ipas; 2011.
- [18] Zavir AJF, Padmadas SS. Postabortion contraceptive use and method continuation in India. *Int J Gynaecol Obstet* 2012;118(1):65–70.
- [19] Banerjee SK, Andersen KL. Exploring the pathways of unsafe abortion in Madhya Pradesh, India. *Global Public Health* 2012;7:882–96.
- [20] Kalyanwala S, Acharya R, Zavir AJF. Adoption and continuation of contraception following medical or surgical abortion in Bihar and Jharkhand, India. *Int J Gynaecol Obstet* 2012;118:547–51.
- [21] 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. *Stud Fam Plann* 2015;46:387–403.
- [22] Supplement to: Singh S, Shekhar C, Acharya R, Moore AM, Stillman M, Pradhan MR et al. The incidence of abortion and unintended pregnancy in India, 2015. *Lancet Global Health* 2018;6:e111–e120.
- [23] High Impact Practices in Family Planning (HIP). *Postabortion family planning: strengthening the family planning component of postabortion care*. Washington, DC: USAID; 2012. <http://www.fphighimpactpractices.org/briefs/postabortion-family-planning/>.
- [24] Huber D, Curtis C, Irani L, Pappa S, Arrington L. Postabortion care: 20 years of strong evidence on emergency treatment, family planning, and other programming components. *Glob Health Sci Pract* 2016;4:481–94.

- [25] Iyengar K, Iyengar SD. Improving access to safe abortion in a rural primary care setting in India: experience of a service delivery intervention. *Reprod Health* 2016;13:54.
- [26] 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;79:216–20.
- [27] World Health Organization. Clinical practice handbook for safe abortion. Geneva: World Health Organization, https://apps.who.int/iris/bitstream/handle/10665/97415/9789241548717_eng.pdf?sequence=1; 2014 [accessed 26 May 2017].
- [28] World Health Organization. Safe Abortion: Technical and Policy Guidance for Health Systems. Geneva: World Health Organization, <https://apps.who.int/iris/bitstream/handle/10665/42586/9241590343.pdf?sequence=1>; 2003 [accessed 22 May 2017].
- [29] Mittal S. Contraception after medical abortion. *Contraception* 2006;74:56–60.