

## Providing Quality Abortion Care: Findings from a Study of Six States in India

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### Abstract:

Although abortion has been legal in India since 1971, and the provisions for obtaining an abortion are fairly liberal, many women obtain illegal and potentially unsafe abortions. Past research shows that women often go to legal abortion providers as the last resort, because of concerns over the quality of abortion service provided, such as the care not being women friendly, respectful and confidential. Very little research currently exists on the issue of quality of abortion service provision in India, and the few that are there, focus on women's perceptions of care quality. While this is valuable in providing insights on what women want by way of quality care, assessing the capacity of facilities to provide quality care is also important. Using new data from a 2015 survey of six Indian states, we examine the quality of abortion service provided in health facilities. We first examine the basic issue of access to services, by looking at the proportion of facilities in each state that provide legal abortion services, and for these facilities, we examine whether they are able to provide abortions using approved medical technologies that are in line with the recommendations made by the World Health Organization. We also examine whether the facilities are able to provide confidential and respectful care to women, and their ability to provide other abortion related reproductive health services, such as postabortion contraceptive care. Our results show that access to services remains low, with less than half of facilities in most states providing abortion services. Moreover, about three-quarters of these facilities use D&C, an outdated and invasive technology, to provide abortions. Further, in violation of both the law and women's right to confidentiality, more than half of facilities took consent for an abortion from the husband in addition to the woman, and a smaller proportion did not seek the woman's consent at all. Overall our show that there remain serious gaps in quality abortion service provision in India.

### Introduction

Abortion has been legally available in India since 1971. The law permits registered allopathic medical practitioners at certified facilities to provide abortion - or medical termination of pregnancy (MTP) as it is known in India -- to save a woman's life, to preserve her mental or physical health, due to economic or social necessity, rape, incest, fetal impairment, and for married women in the event of a contraceptive failure. Pregnancies beyond 20 weeks may be terminated in cases of a danger to life. According to the MTP Act of 1971, facilities must be registered to provide legal abortions, and that abortions take place in safe and hygienic conditions at registered facilities and be performed by a certified provider. Providers of induced abortion must be certified allopathic medical practitioners.

The 1971 MTP Act was amended in 2002-03 to accommodate advances in abortion technology, and especially the advent of medication abortion methods. Amendments were passed that allowed for the use of such methods, known as medical methods of abortion (MMA) in India, up to seven weeks' gestation by doctors certified for abortions, and in facilities not specifically approved to offer abortions, conditional

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upon such facilities having referral linkages to another facility approved to provide abortion, for prompt action in case of complications [1, 2, 3]. The amendments also included changes to the process of registering private facilities for abortion provision, by shifting the responsibility from the state governments to district level committees. In 2008, the combination pack (or combi-pack), which contains 200mg of mifepristone and 800mcg of misoprostol, was approved in India [4], and in 2010, the National Comprehensive Training and Service Delivery Guidelines indicated, that MMA up to 63 days gestation is safe [5].

Despite fairly liberal provisions for obtaining abortions legally, a large proportion of Indian women still obtain illegal and potentially unsafe abortions that might jeopardize their health and even lead to their death [6]. The problem begins with poor access to health facilities that provide safe, legal abortion care. For example, despite having the largest population of all states in the country, the state of Uttar Pradesh also has the lowest number of facilities providing abortion services per capita [7]. Further, women in Uttar Pradesh, had to travel longer distances to obtain safe abortion services, compared with wealthier states like Gujarat and Maharashtra. In rural areas, access was found to be worse than in urban areas [7]. Issues with poor access has also been reported in other states such as Gujarat, Maharashtra and Tamil Nadu, where it was found that between 20% to 60% of licensed facilities did not actually provide abortion [8].

Poor access to safe abortions in health facilities is compounded by issues like some women being turned away from facilities, for reasons such as being unmarried or being too young [9]. Previous research has found that because many certified facilities insisted upon women getting sterilized as a precondition for receiving an abortion, women were put off from going to such facilities, and preferred to go to informal providers instead [10]. Studies show that often women obtain abortions from legal providers as the last resort, preferring to go to unapproved providers instead, because of concerns over quality of care, such as legal care not being women friendly [11].

A study from a district in southern Indian state of Tamil Nadu, showed that the respondents were critical of abortion services at government facilities and considered services to be of average or even poor quality [12]. They preferred to seek abortions in the private sector instead [12]. However, because the abortion services in the private sector are inadequate or inaccessible to poorer women and in rural areas, many women obtained abortions from untrained abortion providers, under potentially unhygienic conditions [1, 13, 14].

Studies have shown that the methods used by informal providers ranged from sticks and herbs to bovine oxytocin and even dilatation and curettage or D&C [15, 16]. The use of D&C even among trained providers, appears to be widespread in India, although it is an outdated method, and no longer approved by the World Health Organization [16, 17]. When such invasive methods are used by untrained, informal providers however, the risk of complications increases.

Estimates of maternal mortality from unsafe abortions are unknown for India as a whole, but a study from Tamil Nadu shows that about 6% of maternal deaths were due to abortion related complications. Tamil Nadu is among the better-off states in India, and has the advantage of a robust health infrastructure. Despite this, the state has abortion related maternal mortality. Studies show that in poorer states like Bihar, abortion related complications are a major contributor to maternal mortality and morbidity [18].

Prior research on the central Indian state of Madhya Pradesh shows that women who visited public health facilities to seek abortion were mainly poor, and many did not receive access to correct information and services. This in turn led women to seek out unsafe providers with aggravated risk of postabortion complications [19]. Another study from the same state revealed that improved access to safe induced abortion services, increased community awareness of the abortion law and of safe abortion methods, and a larger pool of approved providers are all necessary to reduce morbidity associated with unsafe abortion [20].

These studies underscore a problem highlighted in global research, that despite having a legal framework that permits safe abortion services, access and utilization of such services is hindered by multiple factors [21]. In India, there are issues with lack of trained healthcare providers, lack of services in rural areas, lack of transportation, and unnecessary administrative barriers, such as providers turning women away for discretionary reasons, and imposing preconditions, such as adoption of sterilization, before providing service.

The lack of quality abortion service provision, can seriously compromise women's health outcomes and contribute to maternal mortality and morbidity [22]. Recognizing these gaps and the impact they can have on women's health, the Government of India in 2014 issued guidelines under the purview of the Medical Termination of Pregnancy Act, for program managers and service providers to provide woman-centric comprehensive abortion care at public health facilities. This included service that was non-judgmental, valued privacy and confidentiality, and provided in clean and hygienic surroundings. The guidance also covered postabortion contraception and equipment requirements.

While a client-centric approach is important for the delivery of all health-care services, it is particularly important for a stigmatized issue like abortion [11]. A study found that although expanding the coverage of services related to family planning, abortion and other maternal health issues, led to increased utilization of services, person-centered care was lacking [22]. The provision of high quality legal abortion services is therefore key to ensuring women's health, and preventing unsafe abortions and associated maternal morbidity and mortality [23, 24].

A review of global research on measurement of the quality of abortion service provision identified various indicators that have been used in the literature to assess the quality of abortion care [25]. The review groups these indicators into three levels: structure, process and outcomes. Structure focuses on the setting in which the service is provided, and examines themes such as infrastructure and laws and policies. Process looks at what is being done on the ground to give and receive care, and includes themes such as technical competence, client-provider interactions, support, decision making, ancillary services, and information provision. Outcomes look at what happens after the care has been provided, and how it affects health status. The broad themes here include client and community knowledge, demographic trends in abortion, and client morbidity and mortality.

A study by Hyman and Castleman outlined the key aspects of abortion service provision, prioritizes the 'process' aspect of quality service provision, and emphasizes tailoring a woman's care to her circumstances and needs; providing accurate and appropriate information and counseling to enable her to make informed choices; using internationally recommended medical technologies; offering post-abortion contraceptive

care; providing women with (or referring them to) other reproductive health services such as STI screening and treatment; and ensuring women's confidentiality, privacy and respect at the health facility [24].

While existing research on abortion services in India sheds some light on the quality of abortion care, there is nevertheless a crucial gap in the current literature. Research is lacking on a health facility's capacity to provide quality care. Additionally, most of the existing research in this topic is from small-scale studies of a specific area or a district in a state. In this paper, we propose to bridge this research gap. Using data from a new representative survey of health facilities across six states in India we will compare and contrast facilities providing abortion services, to assess the quality of abortion services they provide.

Since assessing quality of care can potentially include every aspect of abortion service provision and practice, for this paper, we have focused more narrowly on the following aspects: availability of abortion services in public and private facilities, the certification status of facilities providing such care, and the accessibility of such care; the availability of approved abortion medical technologies in the facilities; availability of infrastructure and practices to ensure privacy and confidentiality of the client; and the availability of other abortion related reproductive health services such as quality contraceptive care.

The choice of these dimensions is related both to the availability of data, and to their importance in the Indian context. This framework is closely related to the one outlined by [25] and Hyman and Castleman [24]. They cover both the 'structure' and 'process' aspects of abortion service provision, and are key to assessing the quality of abortion service provision in India.

### **State context**

The six states in which the survey was conducted are Uttar Pradesh, Madhya Pradesh, Bihar, Assam, Tamil Nadu, and Gujarat. These states vary greatly in their sociodemographic indicators and in their capacity to provide quality health care. Uttar Pradesh, Bihar, Madhya Pradesh and Assam are among the poorest states in India. In 2011, their per-capita income ranged from a low of about \$188 per year for Bihar to about \$330 per year for Madhya Pradesh [26]. About 30% of the population in these states is classified as poor, that is, living on less than a dollar a day, and a greater proportion of the poor live in the rural areas of the states [27].

Gujarat and Tamil Nadu with a per-capita income of about \$758 and \$730 respectively in 2011, are the more prosperous states in the country [27]. According to the 68th round of the NSS, about 17% of Gujarat's and 11% of Tamil Nadu's population is classified as poor [27]. Both states are also more urbanized than the other states. According to the most recent wave of the National Family Health Survey, 44% of the reproductive age women in Gujarat live in urban areas, while Tamil Nadu is the most urban state in the country, and 51% of the reproductive age women in the state live in urban areas [28, 29, 30].

Tamil Nadu is also among the few states in India which ranks highly on indicators related to women's status and women's socio-demographic outcomes. Most of the state's reproductive age women (80 %) are literate and its maternal mortality ratio (MMR) is 79 per 100,000 live births, which is among the lowest in the country. It also has one of the lowest total fertility rates (TFR) in the country, at 1.7, which is below replacement. The indicators for Gujarat, though better than the other states, lag those of Tamil Nadu's.

Among the other four states, the literacy rates for women of reproductive age range from about 50% for Bihar to about 72% for Assam. The MMRs range from 300 for Assam to 208 for Bihar. Bihar also has the highest TFR of the four states, at 3.4, while Assam's is the lowest at 2.2, which is just above replacement.

The wanted fertility rates for all the states are at or below replacement, except Bihar, which has a wanted TFR of 2.5. The state also has a high unmet need for contraception. The gap between wanted and actual TFRs, coupled with high unmet need for contraception is likely to lead to higher incidence of unintended pregnancy, which in turn may lead to a greater demand for abortions.

The rationale of the study is that improved and recommended quality of care reduces illegal and potentially unsafe abortions. Improving quality of care would require addressing barriers to access to such care, which if removed would reduce health and life risks to pregnant women seeking an abortion.

## **Data**

### **Survey design**

The survey of the health facilities in the six states -- Uttar Pradesh, Tamil Nadu, Bihar, Gujarat, Madhya Pradesh, and Assam – was conducted in 2015. The intent of the survey, known as the Health Facility Survey (HFS), was to obtain data on the availability and use of induced abortion services and postabortion complications care. The states were chosen to represent distinct Indian regions - North, South, East, West, Central, and the North-East. The HFS collected data from 4001 public and private health care facilities using a comprehensive and representative sample design. Additional data were obtained from numerous sources, including data on the numbers of women receiving abortions from large NGOs, from other government surveys and data collected from the District Level Health Survey (DLHS), National Fertility and Health Survey (NFHS), the Ministry of Health and Family Welfare (MoHFW), census and the National Sample Survey (NSS).

The HFS was administered through face-to-face interviews with senior health care professionals, who were knowledgeable about the provision of abortion-related services in their facility. Typically, the respondents were the director or head of the facility or of the obstetrics and gynecology department. In lower-level facilities, the interview was sometimes administered to a nurse, midwife, facility-in-charge or other professional knowledgeable about services at the facility. The HFS collected extensive information on reproductive and abortion related services offered at each facility, including the types of services offered, the numbers of women who presented for abortion-related care, the availability of trained staff and the types of postabortion complications treated.

In order to select the HFS sample, we first obtained a random sample of about 70% of districts in each state, and then, within these districts, we identified public, private and NGO facilities. Most public health facilities were sampled using lists obtained from the Ministry of Health and Family Welfare (MoHFW) and included 75% of district hospitals, 62% of sub-divisional hospitals and 52% of community health centers (CHCs) in the sample districts. An eleven percent sample of primary health centers (PHCs) was selected from among those PHCs linked administratively to the sampled CHCs. All qualifying medical colleges, whether public or private, were included in the sample.

To represent the private and NGO sectors, and to identify types of public facilities not listed by MOHFW, we conducted a listing exercise to list facilities with the capacity to provide abortion services in both rural and urban areas. Inclusion was not limited to those registered to provide such services. In rural areas, the listing exercise was conducted within the catchment areas of a representative sample of CHCs. In urban areas, the listing exercise was conducted within a representative sample of urban wards. The total number of urban wards sampled across the six states was designed to represent approximately 3% of the all India urban population (about 7.5% of the urban population in the five states).

In both the selected rural and urban areas, the goal of the listing exercise was to list all private and NGO facilities (including hospitals, nursing and maternity homes, and clinics) and other public facilities not listed by the MoHFW (such as urban family welfare clinics) providing abortion-related services.

### **Data used in this paper**

The HFS data has a lot of comparable information collected from health facilities across the six surveyed states. In order to understand our research question, we intend to focus on the following:

*Abortion services availability, safety, and access:* The HFS survey has data on whether the sampled facility offers abortion services, and whether the services are offered around the clock or only at specific times. It also asks whether the facility is in the public or private sector, and whether the facility is certified or approved to provide abortion services. Certification status is relevant only to the private sector, since all public facilities are automatically certified for abortion service provision.

*Availability of recommended abortion technologies:* The HFS data includes information on the types of abortion methods used by the sampled facilities. This includes the use of medication abortion technologies (MMA), vacuum aspiration methods, dilatation and curettage (D&C) and dilatation and evacuation (D&E). Of these only MMA and vacuum aspiration are approved for first trimester abortions by the WHO, while D&E is approved for second trimester abortions. D&C is not approved for abortion service provision by the WHO [17].

*Infrastructure availability and facility practices:* The HFS dataset has information on whether the facility is able to provide a woman with visual and auditory privacy when she comes in for a service. It also asks the facility respondents about their procedures for obtaining consent before providing abortion services. As per the government of India's laws, the facility only requires the woman's consent prior to providing an abortion, and the aim of the question is to check if facilities comply. The question asks if consent is asked only from the woman, or whether consent is also sought from others such as husbands, or in-laws and guardians.

*Provision of related reproductive health services:* The HFS survey asked the respondents about the contraceptive care they provide to women who seek abortion services. It asks about the type of contraceptive facilities prescribe and stock, the type of counseling they provide, and whether adoption of a method by the woman is a requirement to being provided with abortion services. We will use these data for our analysis.

### **Methods**

In this paper we present the results of bivariate analyses, and provide proportions of various groups and categories of facilities providing abortion services. We have also provided the associated standard errors for these estimates. Using these standard errors, we calculated significance tests to check if the proportions were significantly different from each other. The results of the significance tests are not shown in the paper, but are however presented in the results. All estimates were weighted, and the analysis includes all facilities that reported providing abortion (MTP) services. We used SAS version 9.4 to perform the data analysis in this paper.

## **Findings**

### ***Availability, safety and accessibility of MTP services***

Table 1 shows the availability of safe abortion services, or MTP, in the six surveyed states. With the exception of Madhya Pradesh, the results show that fewer than half of all facilities in the other states offer safe abortion services. Within each state, a higher proportion of private facilities offer MTP services than the public sector facilities. Madhya Pradesh and Tamil Nadu have the highest proportion of private facilities offering MTP services (67% and 65%), and the corresponding numbers in the public sector for these states is 36% and 17%. Uttar Pradesh has the lowest proportion of private facilities offering MTP services (23%). However, only 11% of the public sector facilities in the state offer MTP.

---Table 1 about here---

With the exception of Assam, where only about 37% of the facilities offering MTP, are open 24x7, in all the other states, at least half of all facilities provide MTP services 24x7. The highest proportions are in Tamil Nadu and Uttar Pradesh (73% and 70%). Further, with the exception of Assam and Madhya Pradesh, no other state showed a significant difference between the public and private sector in the proportion of facilities that were open 24x7. In Assam a higher proportion of private facilities were open for service 24x7 (54% vs. 22%), while in Madhya Pradesh a higher proportion of public facilities were open 24x7 (68% vs. 50%).

### ***Availability of WHO recommended abortion technologies:***

Table 2 shows the proportion of facilities that offer different types of abortion procedures. The results show that over 80% of all facilities that offer MTP, in all the states offer medication abortion or MMA. In Madhya Pradesh and Tamil Nadu, it is higher at about 95%.

---Table 2 about here---

Significantly lower proportions of facilities offer vacuum aspiration compared with those that offer MMA in all states, except Assam, where there was no significant difference. In Uttar Pradesh and Tamil Nadu, less than half of all facilities offer vacuum aspiration, while proportions of facilities offering D&C, a method no longer recommended by the WHO, is higher in both states (about 76% in Tamil Nadu and 70% in Uttar Pradesh), and in the other states, the proportions offering D&C is on par with those offering vacuum aspiration. About three-quarters of facilities in most surveyed states offer D&C, and in Assam it is the highest at 89%. In all six states, except Uttar Pradesh, significantly higher proportions of private facilities offer D&C compared with public facilities. A greater proportion of private facilities across all states also

offer D&E, a procedure recommended by the WHO for second trimester abortions, compared with public facilities. D&E provision is low across many states, and in Madhya Pradesh, Tamil Nadu, and Uttar Pradesh, less than half of all facilities offer D&E.

Although D&C is no longer recommended by the WHO for provision of safe abortions, given that it is an invasive technique, the procedure does require the use of general anesthesia. D&E in contrast typically uses electric vacuum evacuation (EVA) to evacuate the fetus. However, facilities often use instruments to evacuate the fetus instead. The latter procedure is called dilatation and extraction, and requires the use of general anesthesia. It is also often confused with the D&E that uses vacuum aspiration. Since it is unknown whether the facilities use vacuum aspiration or extraction when they report using D&E, we examined the facilities that offer D&C or D&E, to see what proportion of them report commonly using general anesthesia. We found that a majority of facilities in this group, across the states of Assam, Tamil Nadu, and Uttar Pradesh, report commonly offering local anesthesia alone or in combination with an analgesic, a sedative or vocal anesthesia, compared with general anesthesia. In Bihar and Gujarat, a majority of facilities offering D&C or D&E offer general anesthesia, whereas in Madhya Pradesh, more facilities offer either local anesthesia or no anesthesia for such procedures compared with general anesthesia.

---Table 3 about here---

#### ***Availability of infrastructure at facilities that supports confidentiality and respect***

Across most of the six states, over 90% of facilities reported having the ability to offer the client visual privacy. The only exception was Bihar, but even here over three-quarters of facilities reported having suitable infrastructure for this. Higher proportions of private facilities reported having this ability than public facilities. Similarly, a large majority of facilities across all states, reported having the ability to offer the client auditory privacy (at least three quarter across all states), and a greater proportion of private facilities reported having this ability.

---Table 4 about here---

We also examined if facilities follow the Indian law in seeking consent for the abortion from the woman alone or if they sought consent from others in addition to the woman, or even instead of the woman. While seeking consent from women was nearly universal across states, the proportion of facilities getting the woman's consent alone was small. It was as low as 6% in Tamil Nadu and Bihar, while the highest was 21% in Gujarat and 26% in Madhya Pradesh. Over half of facilities across all states prefer taking the consent of her husband as well. This includes facilities that took consent from another person, in addition to the woman and her husband. The proportion of facilities that took consent from the husband in addition to the woman, ranges from 58% of facilities in Madhya Pradesh to nearly 80% in Assam. Thirty-two percent of facilities in Bihar, 19% in Uttar Pradesh and 17% in each Madhya Pradesh and Tamil Nadu reported to sought consent from others but not from woman before providing her abortion service.

#### ***Provision of abortion related reproductive health care***



A greater proportion of facilities offering MTP, in all states prescribe and stock spacing methods such as the pill, condom, IUD, and injectable, to women who sought an abortion, compared with limiting methods such as male and female sterilization. However, limiting methods are offered in at least half of all facilities across all states, and the highest is in Tamil Nadu, where about 85% of all facilities offer a limiting method. A little over half of facilities offering abortion offer some spacing method of contraception in Madhya Pradesh, Uttar Pradesh, and Assam.

---Table 5 about here---

About 70% of facilities offering MTP in Assam, Madhya Pradesh, Tamil Nadu and Uttar Pradesh provide counseling and advice on the correct use of contraceptive methods. Fewer facilities offer advice on the availability of methods, and proportions range from 40% to 50%. Except Assam, at least half of facilities in the other states offer advice on the advantages and disadvantages of the different methods. In Assam, only about 36% of facilities offer this service.

Provision of counseling and advice on what to do in case of contraceptive failure is low across all states, but it is the lowest among facilities in Tamil Nadu and Uttar Pradesh, where between 8%--10% of facilities provide such advice. Across states, many facilities require women to adopt a contraceptive method as a precondition for receiving an abortion. In most states, between 8%--26% of facilities require women to adopt a method before providing an abortion.

## **Discussion**

Despite a liberal abortion law, India continues to struggle with high levels of unsafe abortion [31]. The quality of abortion service provision in facilities approved for this service has been found to be problematic, with lack of attention paid to confidential and respectful care. This has led to many women seeking illegal abortion from providers who may use unsafe and unhygienic methods of abortion. Recognizing this problem, the Government of India in 2014, issued guidelines to program managers and service providers emphasizing person-centric, quality abortion care in public facilities, especially respectful, non-judgmental care [32].

In this paper, we examined the capacity of health facilities in India to provide quality abortion care or MTP as it is known in India. Using a 2015 survey of health facilities across six Indian states, and a framework outlined by Hyman and Castleman [24] and Dennis et.al. [25], we examined different variables that measure quality abortion care. These include the proportion of public and certified private facilities that provide safe abortion services, the proportion of such facilities that are open 24x7, the availability of WHO recommended technologies among facilities offering MTP, and whether the facilities have the infrastructure to provide basics like visual and auditory privacy. We also examine whether the facilities follow the law by seeking consent from the women only, and whether they provide postabortion reproductive health services such as contraceptive services.

Our results show that less than half of all facilities across most states provide MTP services, though more than half of these are open 24x7. Further, although availability of medication abortion is virtually universal across these facilities, about three-quarters of facilities offering MTP services offer dilatation and curettage

or D&C, which is an outdated method, no longer recommended by the WHO. In two states, Tamil Nadu and Uttar Pradesh, the proportions offering D&C is much higher than those offering vacuum aspiration. More worryingly though, our analysis shows that most facilities that offer D&C, across four of the six states don't offer general anesthesia, which is the recommended anesthesia for such procedures. Most rely on local anesthesia, vocal anesthesia, or even no anesthesia. Our analysis also shows that the availability of visual and auditory privacy is nearly universal across all facilities. However, although the law requires facilities to only obtain the woman's consent before providing the abortion, a majority of the facilities sought in addition at least the husband's consent, and sometimes also consent from another family member. A small proportion of facilities across states did not take the woman's consent at all, and instead sought consent from other family members only. Our results also show that while most facilities provide contraceptive services and counseling, many require a woman to adopt a contraceptive method as a precondition to receiving an abortion.

Overall, our results show that in India, much work remains to be done in terms of improving the quality of abortion service provision. Policy makers need to first work on improving access to MTP services in all states. This is especially true of the state of Uttar Pradesh, where about one-sixth of India's population resides, and where access to abortion services is dismally low. The technology used to provide abortions needs to be upgraded urgently. Given the universal availability of medication abortion, which is safe and preferred by women [33] there should be no need to use D&C. Vacuum aspiration too should be promoted instead. Similarly, urgent steps need to be taken to ensure that facilities follow the law and seek consent from the women only when providing an abortion. Seeking consent from other family members, which is often done in order to avoid trouble [34], is a violation of the woman's rights and confidentiality, and may further deter women from seeking abortions in facilities. Providers also need to be sensitized to not forcing women to adopting contraceptive methods in order to receive an abortion.

If the government is resource strapped to make these changes happen, a study in Bihar shows that public-private partnerships can be used to ensure quality abortion services to women [35]. Regardless of whether the government does it alone, or with the help of the private sector, there can be no doubt that various logistical and bureaucratic hurdles need to be addressed in order to make safe abortion provision a reality for all women.

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Table A. Comparison of the six survey states, by various sociodemographic indicators from the last 5 years

State	Fertility rates <sup>1</sup>		Unmet need for contraception	Maternal mortality ratio <sup>2</sup>	Literacy rate among women age 15-49 years <sup>1</sup>
	Total	Wanted			
Assam	2.2	1.8	14.2	300	71.8
Bihar	3.4	2.5	21.2	208	49.6
Gujarat	2.0	1.5	17.0	112	72.9
Madhya Pradesh	2.3	1.8	12.1	221	59.4
Tamil Nadu	1.7	1.5	10.1	79	79.4
Uttar Pradesh	2.7	2.1	18.1	285	61.0

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**AVAILABILITY, SAFETY AND ACCESSIBILITY OF MTP SERVICES**

Table 1. Percent of all facilities providing MTP, percent private certified, percent facilities open 24X7, by ownership, states in India 2015

	Assam		Bihar		Gujarat		MP		TN		UP	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Percent facilities providing MTP	24.3%	0.031	36.9%	0.030	36.4%	0.020	56.1%	0.029	47.1%	0.020	18.7%	0.015
Percent of all public providing MTP	18.3%	0.025	10.7%	0.012	16.4%	0.018	36.3%	0.028	16.5%	0.010	10.9%	0.007
Percent of all private providing MTP	40.7%	0.046	56.1%	0.044	50.1%	0.025	66.9%	0.018	65.1%	0.020	23.1%	0.020
Percent of private providing MTP that are certified	87.6%	0.059	78.9%	0.053	81.6%	0.019	89.5%	0.012	88.4%	0.021	72.7%	0.023
Percent facilities open 24X7	36.5%	0.053	68.6%	0.015	65.8%	0.026	53.8%	0.050	73.2%	0.027	70.4%	0.018
Percent of all public open 24X7	22.3%	0.035	68.0%	0.027	64.9%	0.061	67.8%	0.037	73.6%	0.035	66.6%	0.040
Percent of all private open 24X7	54.1%	0.057	68.6%	0.018	66.0%	0.023	49.7%	0.053	73.1%	0.027	71.5%	0.013

**AVAILABILITY OF WHO RECOMMENDED ABORTION TECHNOLOGIES**

Table 2. Among facilities offering MTP, types of abortion procedures offered, by method, states in India 2015

Percent facilities offering:	Assam		Bihar		Gujarat		MP		TN		UP	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
MMA	83.7%	0.032	86.2%	0.009	88.1%	0.016	95.0%	0.006	93.7%	0.010	89.0%	0.015
Public	80.6%	0.037	69.5%	0.043	84.1%	0.044	97.2%	0.007	82.9%	0.031	90.5%	0.014
Private	87.6%	0.002	88.5%	0.008	89.1%	0.006	94.4%	0.007	95.3%	0.010	88.6%	0.011
Vacuum Aspiration	88.6%	0.020	72.0%	0.034	68.5%	0.032	81.2%	0.032	49.4%	0.033	47.1%	0.022
Public	82.1%	0.023	53.0%	0.047	66.9%	0.046	80.0%	0.018	84.3%	0.014	41.1%	0.044
Private	96.7%	0.008	74.6%	0.037	68.8%	0.031	81.6%	0.028	44.2%	0.037	48.7%	0.014
D&C	89.4%	0.023	83.3%	0.027	76.0%	0.026	79.6%	0.020	76.2%	0.017	70.0%	0.022
Public	80.8%	0.035	72.5%	0.041	51.4%	0.059	69.7%	0.032	66.1%	0.037	65.5%	0.054
Private	100%	0.000	84.8%	0.027	81.5%	0.019	82.6%	0.018	77.7%	0.018	71.2%	0.018
D&E	83.5%	0.036	65.5%	0.027	79.3%	0.027	30.9%	0.023	32.0%	0.017	42.9%	0.023
Public	78.9%	0.046	46.5%	0.049	50.0%	0.054	28.9%	0.031	23.6%	0.032	36.0%	0.044
Private	89.2%	0.002	68.2%	0.027	85.9%	0.022	31.5%	0.027	33.3%	0.017	44.8%	0.019

**AVAILABILITY OF WHO RECOMMENDED ABORTION TECHNOLOGIES**

Table 3. Among facilities offering D&amp;C and D&amp;E, percent that have access to general anesthesia, other anesthesia such as local anesthesia or no anesthesia, states in India 2015

State	Anesthesia used by facilities offering D&C						Anesthesia used by facilities offering D&E					
	General Anesthesia	SE	Local * anesthesia alone or in combination	SE	No anesthesia	SE	General Anesthesia	SE	Local * anesthesia alone or in combination	SE	No anesthesia	SE
Assam	11.3%	0.014	84.9%	0.020	3.8%	0.016	11.3%	0.048	84.6%	0.049	4.1%	0.019
Bihar	64.0%	0.022	28.9%	0.031	7.1%	0.018	65.5%	0.029	30.5%	0.032	4.0%	0.010
Gujarat	62.4%	0.023	24.5%	0.023	13.1%	0.011	64.9%	0.019	22.1%	0.020	13.0%	0.011
Madhya Pr	19.8%	0.023	46.8%	0.050	33.4%	0.048	25.0%	0.029	66.0%	0.036	9.0%	0.010
Tamil Nadu	27.9%	0.038	56.7%	0.043	15.4%	0.010	34.2%	0.060	49.0%	0.062	16.9%	0.024
Uttar Prad	17.3%	0.018	65.7%	0.021	17.0%	0.015	24.7%	0.022	59.3%	0.021	16.0%	0.021

\*Local anesthesia was either used alone or in combination with an oral analgesic, sedative, or vocal anesthesia where the provider keeps the clients attention diverted by talking to them during the procedure.

**AVAILABILITY OF INFRASTRUCTURE AND FACILITY PRACTICES THAT PROVIDE CONFIDENTIALITY AND RESPECT**

Table 4. Among facilities offering MTP, percent with infrastructure and practices that respect women's privacy and confidentiality, by ownership, states in India 2015

Percent facilities:	Assam		Bihar		Gujarat		MP		TN		UP	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
With exam room with visual privacy	94.3%	0.057	76.6%	0.234	94.5%	0.055	94.3%	0.057	97.6%	0.024	88.6%	0.114
Percent of all public with this facility	89.7%	0.103	64.4%	0.356	94.0%	0.060	91.7%	0.083	92.3%	0.077	81.8%	0.182
Percent of all private with this facility	100.0%	0.000	78.3%	0.217	94.6%	0.054	95.0%	0.050	98.3%	0.017	90.4%	0.096
With exam room with auditory privacy	83.2%	0.168	74.1%	0.259	89.0%	0.110	92.8%	0.072	95.6%	0.044	87.7%	0.123
Percent of all public with this facility	72.3%	0.277	52.0%	0.480	87.1%	0.129	88.5%	0.115	88.0%	0.120	78.4%	0.216
Percent of all private with this facility	96.7%	0.033	77.1%	0.229	89.4%	0.106	94.1%	0.059	96.7%	0.033	90.3%	0.097
That take consent from:												
Woman only	13.3%	0.013	5.5%	0.009	21.3%	0.029	25.9%	0.018	6.3%	0.008	8.4%	0.015
Woman plus husband/partner	70.2%	0.024	37.5%	0.040	58.4%	0.030	51.4%	0.020	57.2%	0.016	53.2%	0.025
Woman plus husband/partner plus others <sup>1</sup>	9.0%	0.029	25.0%	0.030	10.8%	0.014	6.2%	0.008	19.5%	0.014	19.3%	0.015
Others but not woman	7.5%	0.014	31.9%	0.043	9.6%	0.019	16.6%	0.020	16.5%	0.017	19.1%	0.013
No one	0.0%	0.000	0.0%	0.000	0.0%	0.000	0.0%	0.000	0.6%	0.003	0.0%	0.000

1: 'Others' includes guardians and in-laws

**PROVISION OF ABORTION RELATED REPRODUCTIVE HEALTH CARE**

Table 5. Among facilities offering MTP services, percent providing contraceptive services, percent requiring women adopt a method as a condition for abortion, by service type, states in India 2015

Percent facilities:	Assam		Bihar		Gujarat		MP		TN		UP	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Prescribing and stocking:												
Spacing methods	81.5%	0.037	90.6%	0.013	85.5%	0.028	81.4%	0.022	97.3%	0.007	88.3%	0.011
Limiting methods	57.7%	0.047	82.4%	0.027	78.2%	0.022	52.2%	0.024	84.6%	0.014	57.6%	0.023
Providing instructions/advice on the following:												
Correct use of methods	68.3%	0.062	53.2%	0.029	59.3%	0.045	69.3%	0.025	70.7%	0.013	67.9%	0.016
Availability of methods	46.6%	0.084	39.0%	0.020	42.8%	0.033	47.7%	0.025	51.0%	0.012	49.0%	0.028
Advantages/disadvantages of methods	36.4%	0.025	76.7%	0.023	70.2%	0.016	54.3%	0.021	49.5%	0.029	67.9%	0.052
What do in case of method failure/incorrect use	26.3%	0.069	17.3%	0.017	17.6%	0.020	14.9%	0.015	8.2%	0.010	10.9%	0.018
Requiring women to use modern methods as a precondition for an abortion	†	†	12.8%	0.020	20.3%	0.035	25.9%	0.032	18.5%	0.018	8.3%	0.012

† Data from Assam were not comparable with the other states

**Short Abstract:**

Although abortion has been legal in India since 1971, however, many women obtain illegal and potentially unsafe abortions. Very little research currently done on the issue of quality of abortion services. To fill this gap, this paper examines whether the quality of abortion is in line of the WHO's recommendations by analyzing the Health Facility Survey, Unintended Pregnancy and Abortion Incidence in India, 2015 data gathered from six major Indian states representing different regions. It finds that except Madhya Pradesh, fewer than half of facilities in the other states offer safe abortion services. Within each state, a higher proportion of private facilities offer MTP services than the public. Less than half offer WHO recommended manual vacuum aspiration method. Only between 6-26% facilities across states seek women's consent alone for providing abortion. Against the WHO recommendation, between 8-26% facilities across states also require to adopt some method of contraception before providing abortion.