

# Quality of Care in Provision of Female Sterilization in Bihar: A Summary Report



## INTRODUCTION

At the International Conference on Population and Development (ICPD) held in Cairo in 1994, many countries including India recognized that a woman's right to sexual and reproductive choices were central to her overall health. It was also noted that the right to access family planning knowledge, information and services were key to making these choices. More recently India re-affirmed this stance when it signed the FP2020, which emphasizes an individual's right to decide without coercion whether, when and how many children to have.

Yet, women worldwide continue to lack access to family planning services that provide high-quality information, counseling and care. In India, this was recently highlighted when 16 women died at a sterilization-camp in Chhattisgarh due to negligence around care and counseling (PFI, 2014). Such incidents are extremely unfortunate because they cost valuable human life and undermine the cause of family planning. Negative experiences stop women from returning for follow-up services and also from advocating family planning to their peers.

In this context the International Center for Research on Women (ICRW), with funding support from the Packard Foundation, conducted a study in Bihar to understand the existing quality of care being provided and women's experience with the same. With 103 million people, Bihar is struggling to reduce its high fertility rate of 3.7 (RGI 2011; RGI, 2010). There is a high unmet need for modern family planning methods. Yet, contraceptive use is low and female sterilization serves as the dominant family planning method. According to a statewide large-scale survey, the contraceptive prevalence rate is 33 percent, the sterilization rate is 26 percent and unmet need is 36 percent (DLHS-3).

The caliber of services related to female sterilization and IUD were assessed using the Bruce and Jain (Bruce, 1990) framework which uses the following parameters:

- The state of preparedness, in terms of supplies and logistics, to provide the required services.
- The adequacy of information given to clients to enable an informed choice.
- Level of pre-and post-operation/insertion counseling provided to the clients.
- Level of knowledge about sterilization/IUD among providers.
- Standards of privacy and confidentiality.
- Clients' experiences of receiving sterilization/IUD services.

*This research brief presents findings and recommendations specific to female sterilization.*

## ANALYTICAL FRAMEWORK

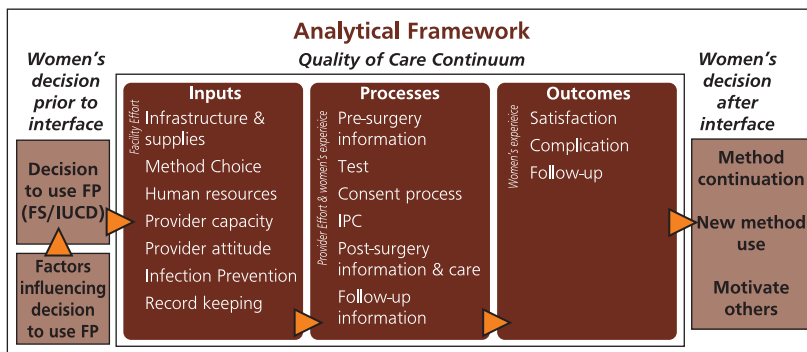
The analytical framework for this study is pivoted on the quality of care continuum. It recognizes that the care continuum is a continuous engagement process between the delivery system and the client and shapes the latter's experience. The quality of

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this interaction determines whether or not women will return to the facility or advocate family planning to their peers.

This care continuum is a sum of many factors - the physical condition of the health facilities, the attitude and skill of the providers, the quality of counseling as well as medical services provided and the post-procedure care.

Very often the hyperbolic reports filed by the providers are at odds with women’s low expectations of quality. This contributes to a complacent understanding of quality of care concerns (Santhya, 2003; Williams, 2000; and Nanda, et. al, 2011).



Women and community members are seldom educated on what defines quality care at health facilities. They know little of what they should expect in terms of infrastructure, services, manpower and outcomes. As a result it takes very little for the providers to meet their expectations; in the process the accountability of the entire service delivery chain is significantly reduced.

A woman’s actual experience with the entire care sequence is therefore the critical lens in this framework. It acts as the important link between the efforts of the provider and the actual quality of the services being provided.

## DATA AND METHOD

ICRW conducted this study in 79 public and private facilities in five districts of Bihar - *Katihar, Nawada, Purvi Champaran Samastipur and Rohtas* – using multiple data collection tools. ICRW conducted facility audits, interviewed health care providers and held interviews with women who had been sterilized the previous week.

- » The **facility audit** included both structured as well as open-ended questions and observations. Questions were specifically asked on the provision of different family planning methods, the presence of adequately trained health providers including counselors and the availability of essential functional equipment and drugs. The audit also included a clinic walk through the registration, waiting and examination/consultation areas to assess cleanliness, seating arrangements, privacy, water supply and lighting in each. The audit also noted how the flow of clients was managed during counseling, examination, while waiting for a procedure, during surgical procedures, after surgery, during post-operative care and finally during discharge.
- » **Interviews with sterilization clients** included questions around their comfort and privacy, recall of information on methods, their perceptions on the appropriateness of the information, levels of satisfaction and their willingness to follow up or return to the facility. It was difficult to interview women leaving facilities immediately after sterilization hence they were interviewed at their homes, four to eight days after the procedure.
- » **Interviews with health care providers** (doctors, nurses, ANMs and family planning counselors) to learn about their knowledge of family planning methods, their training, the topics covered during counseling, adherence to protocols, family planning methods available in their facilities, provider barriers and integration of family planning with delivery and abortion or post-abortion care services.

**Table 1: Sample Size**

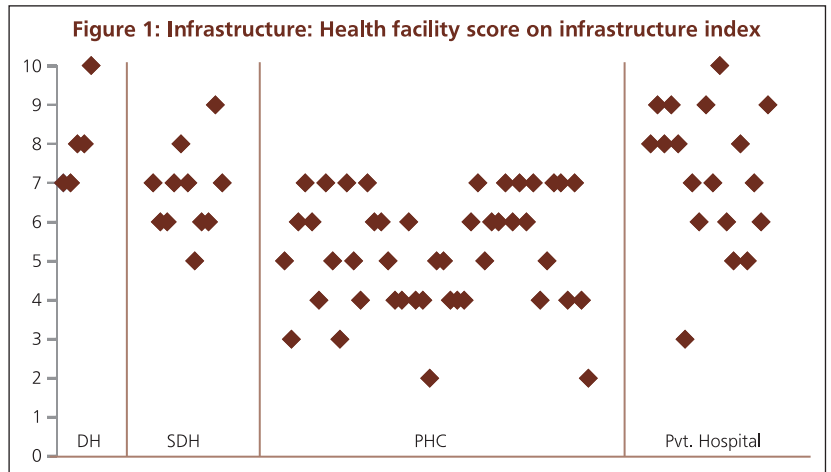
Health facility	Facility audit	Provider interview	Interviews with FS clients
District Hospital	5	25	20
Sub-Divisional hospital	11	42	46
Primary Health Centre	45	134	154
Private Hospital	18	55	42
<b>Total</b>	<b>79</b>	<b>256</b>	<b>262</b>

## STATE OF PREPAREDNESS TO PROVIDE FAMILY PLANNING SERVICES

**Physical Infrastructure – While certain aspects of physical infrastructure had improved in the health facilities, there was a gap in critical spaces for waiting, counseling, examination and recovery.**

The lack of basic infrastructure significantly affects the quality of service and care being provided. The study developed an index using 10 basic infrastructure items required to provide female sterilization: waiting area with a clear seating arrangement; separate FP counseling room; separate examination room/area; a working generator; a functional Operating Theatre (OT); running water in the OT; blood and urine testing facility; separate toilet for female clients; beds for sterilized clients; and running water throughout the day. Scores for each of the facilities are presented in Figure 1. The study showed that while certain aspects like water and electricity had improved in the health facilities, certain critical gaps remained:

- » Only two facilities, a District Hospital (DH) and a private hospital, had all 10 items. Most of the Primary Health Centers (PHCs) had only four to seven.
- » A third of the facilities did not have areas designated exclusively for examination or counseling. In the absence of auditory and visual privacy, the consultations were quick and often cursory.
- » Being counseled or examined in public view is bound to make women uncomfortable and impair the process of receiving and processing information. It is also likely to hamper the provider-client relationship.



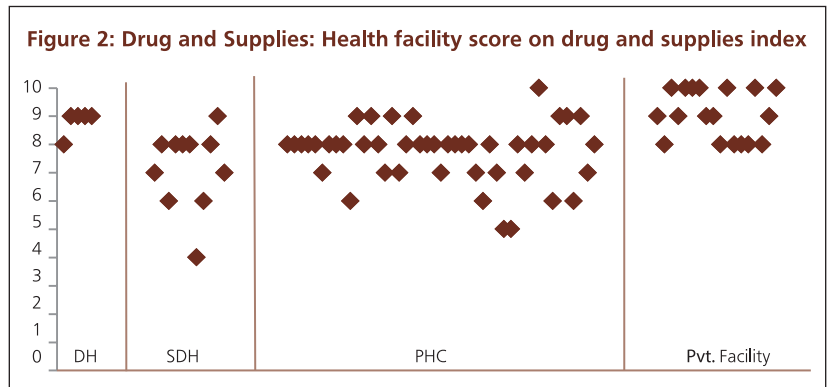
- » Another aspect highlighted the lack of gendered perspective to care, such as the fact that fewer than half of the facilities had separate functional toilets for women despite the high number of female patients.
- » Demand for female sterilization and delivery outpaced the bed strength. Several public facilities including DHs did not have enough beds to accommodate all the sterilization clients. The situation was particularly grave in the PHCs, as most of these facilities had only six to nine beds. After surgery, many clients were made to lie down on mats and sheets, which did not meet basic hygiene standards.

**Equipment, drugs and supplies – Only a few facilities had the minimum-required supply of drugs and equipment to effectively provide sterilization services.**

The study drew up a bare minimum list of equipment and drugs needed for sterilization services. The list was sketchier than the national guidelines, yet most facilities failed to stock this minimum inventory. Some lacked simple essentials, such as scissors and narrow forceps. Gloves, dry gauze/cotton swabs and urine pregnancy test kits were also out of stock in some of the facilities at the time of the survey. There were also critical gaps in the availability of emergency and post-operative drugs in some facilities.

*Basic minimum equipment:* Mini-laparotomy kit, autoclave/boiler, blood pressure apparatus with a stethoscope, narrow forceps, scissors, spotlight and puncture-proof boxes for needles.

- » Only 3/5 DHs, 4/11 Sub Divisional Hospitals (SDH), 35 percent PHCs and 7/18 private facilities had the basic minimum equipment.
- » Some facilities did not have critical equipment, such as an autoclave/boiler and a mini-laparotomy kit.



- » Necessary items such narrow forceps were available in only 6/11 SDHs and 75 percent of the PHCs.

*Basic minimum drugs and supplies:* anesthesia drugs (Inj. Ketamine or Inj. Diazepam), post-operative drugs (antibiotics, anti-inflammatory and analgesic), emergency drugs, dry gauze/cotton swabs, gloves, bleaching powder, Providine Iodine, surgical blade, silk/cotton thread and catgut chromic.

- » Only one PHC reported having all the 10 listed items, most had between seven and nine. The DHs had eight or nine items.
- » Apart from a few PHCs, all hospitals had anesthesia drug for surgeries. However, simple but important items such as bleaching powder and Providine Iodine, which are necessary to ensure aseptic procedure, were unavailable in three of the 11 SDHs. Only 62 percent of PHCs reported having bleaching powder.
- » There were gaps in emergency and post-operative drugs; 10/18 private hospitals and 7 percent PHCs had a supply of such drugs but no DH or SDH did. Fewer than half of the PHCs and only 1/11 SDH reported having post-operative drugs.
- » The shortages were particularly stark for anti-inflammatory and analgesic drugs.

During the study, the providers said that they receive INR 100 per client to buy the necessary drugs (at a prescribed rate). But because the drugs are expensive in the open market they are unable to purchase them and ask the clients to do so instead. Given that these drugs are easily available in market at a low price it is important to look into this feedback.

**Human Resources – Shortage of trained doctors to carry out female sterilization. Districts had mobilized trained doctors and staff from other facilities to meet demand, but this had its own challenges.**

National guidelines on sterilization require a trained doctor to conduct a mini-laparotomy, while obstetricians or trained surgeons are permitted to conduct laparoscopic sterilizations. All DHs had at least one such trained doctor, but only 7/11 SDHs and two-thirds of PHCs had such manpower.

**Record keeping:** Sterilization case records are kept more for financial accounting than for medical purposes.

This had not, however, affected delivery of sterilization procedures because the district authorities were mobilizing providers from other facilities to make up for the shortfall. But patients had to wait for long hours for these doctors. And if there were fewer than nine patients on a day, surgeries were cancelled and patients were asked to return on the subsequent scheduled day.

Some public facilities stated they did not have doctors trained to do post-partum sterilization even though no separate training is required for this. This could be either because of the lack of information or because the practitioners were not confident enough to perform post-partum sterilization.

Only one SDH and two PHCs had Auxiliary Nurse Midwives (ANMs) or staff nurses around the clock. ANMs and staff nurses are important to ensure post-procedure care and also scale up services. It emerged that public facilities, particularly PHCs, did not have enough manpower to ensure in-patient care. The staff shortage was being met by deputing ANMs from Sub-Centers (SCs). Such arrangements are not viable because they affect the services at the SCs and impair the ability of the staff being called upon to work extra hours. An ANM shared that after doing night duty at the PHC she went directly to her own Sub-Center for routine immunization sessions. Workers also cited several other challenges: the lack of or limited space for a night stay, long working hours and inadequate or no security for ANMs staying overnight at PHCs.

With the introduction of the Janani and Bal Suraksh Yojana<sup>1</sup>, a large number of women are coming to PHCs for delivery. This is an excellent opportunity to reach out to them with family planning information and services. However, many public facilities including DHs and SDHs do not have family planning counselors. At the time of the survey, 4/5 DHs, 8/11 SDHs, 8/18 private hospitals and only 11 percent PHCs had family planning counselors. Some of these facilities with counselors did not have a separate room to provide their clients privacy during their counseling sessions.

**Providers’ knowledge and adherence to protocols and guidelines – a majority were not aware of the eligibility criteria including minimum age and parity and the consent process for sterilization.**

Updated reference material like *Standards on Female and Male Sterilization* are important for medical officers and nursing staff, as are the national guidelines on processes and procedures. They serve as a knowledge resource and can also help keep providers abreast of the latest guidelines.

**Table 2: Knowledge of Providers**  
Distribution of health providers involved in providing FS by their knowledge of guidelines and eligibility criteria to provide FS by provider type in public and private facilities, Bihar, 2013-14

		Public Facilities			Private Facilities		
		Doctor (%)	ANM/ Nurse (%)	FP Counselor (No.)	Doctor (%)	ANM/ Nurse (%)	FP Counselor (No.)
Require a partner’s consent for providing FS		86.8	94.7	17	90.9	92.3	7
Minimum age for providing FS	<22yrs	16.2	4.4	0.0	18.2	0.0	0
	22yrs	10.3	8.0	5	4.5	11.5	3
	>22yrs	73.5	87.6	12	77.3	88.5	4
Minimum no. of children	No min	1.5	0.9	1	0.0	0.0	0
	1 child	23.5	10.6	1	9.1	3.8	1
	2+ children	75.0	88.5	15	90.9	96.2	6
<b>Number of providers</b>		<b>68</b>	<b>113</b>	<b>17</b>	<b>22</b>	<b>26</b>	<b>7</b>

<sup>1</sup> A government of India scheme to incentivize institutional delivery and post-natal care

- » Only 5/11 SDHs, 48 percent of PHCs and 7/18 private hospitals had a hard copy of the standard protocols and guidelines available in the facility. There was a parallel lacuna in the knowledge of providers.
- » Guidelines on the consent process have changed and spousal consent is no longer required. Yet most of the health providers, including doctors and counselors, considered partner consent necessary for sterilization. A majority were also unaware of the eligibility criteria related to age and parity. For voluntary sterilization, a woman should be between 22 and 49 years-old and have at least one child over one year old (GoI, 2006). When asked about these criteria, two-third or more providers mentioned minimum parity to be two. This knowledge gap was present in both the private and public facilities and is critical, as it can stop eligible and interested clients from being able to access sterilization services.
- » Among the 253 providers interviewed, 68 doctors had conducted sterilization surgeries. 80 percent mentioned that they would delay surgery if the woman were pregnant; only 30 to 50 percent mentioned that they would do so if she had irregular menstrual bleeding or puerperal sepsis or if she currently had a sexually transmitted disease or pelvic inflammatory disease (PID).

***Hygiene, safe waste disposal and infection prevention practices were often compromised, due to absence of simple practices.***

The Government of India has issued operational guidelines to manage biomedical waste for different facilities under the Infection Management and Environment Plan (IMEP). These guidelines provide information on how to segregate, collect, transport, treat and dispose of different types of biomedical waste. However, maintaining cleanliness continues to be a big challenge in public facilities, particularly in DHs where the caseload is high. The lack of hygiene made the environment vulnerable to infection and contamination, especially in the operating and recovery areas.

- » In 3/5 DHs, the walls and floors were stained with blood or bodily fluid. In comparison, 9/11 SDHs and 73 percent of the PHCs were clean.
- » Most of the health facilities used landfills to dispose of medical waste, followed by outsourcing to a waste management agency. Only one private facility used an incinerator. Despite this, hospital waste such as syringes, cotton and bandages were scattered in at least 30 percent of the facilities.
- » Most of the SDHs and PHCs had broken windows and doors. In some facilities the windows of the OTs were also broken.
- » In several facilities it was noted that doctors and paramedical staff were moving in and out of the OT in their regular shoes. Family members were being called inside the OT to help transfer women to the recovery room, staff with injuries were attending to women after surgery and used surgical instruments were being washed with only hot water in an open area.

## **WOMEN'S EXPERIENCE WHILE AVAILING FAMILY PLANNING SERVICES**

***Knowledge and previous use of FP methods – A majority of clients were not knowledgeable about contraception beyond sterilization – only 30 percent had used any method before.***

- » Most women were not making informed choices about their fertility and sexual health. Nearly all of those who came to a facility had already decided to go ahead with sterilization. This is because at the community level, ASHA workers mobilize women for family planning. They give basic information about various methods and motivate the women to go to the facilities for further guidance. However the facilities lack the mechanisms to provide the information and counseling needed to make an informed choice. Many therefore choose a method based on their interaction with the ASHA workers who may not be equipped to help them make the best choice.
- » Around 60 percent of women spontaneously mentioned the pill and IUDs; 39 percent had heard about condoms and a quarter knew about injectable and male sterilization.
- » The majority chose sterilization because they felt their family was complete and did not want more children (90 percent), one-fifth also said they thought sterilization was an effective method and around 15 percent felt that sterilization was also their partner's choice.
- » Recently, the Bihar Government recruited and placed a few family planning counselors at DHs and SDHs. However, they require specific training and a designated area to effectively help the clients make a choice.

### **Women who participated in the survey**

A total of 262 women participated in the survey. More than half of them were in age group 25 to 29 years and most had three or more children. A significant number of these sterilization seekers were poor and marginalized; 47 percent reported having a Below Poverty Line card; half had never been to school and only 16 percent had more than eight year of schooling.

**Pre-surgery information and care – Women were motivated and came forth for sterilization but the level of pre-surgery counseling and care given at the facility was minimal**

National guidelines call for providers to inform women about possible minor and major post-surgery issues: nausea, vomiting, pain, fainting, fever and bleeding or pus discharge from the incision. They are required to educate clients about which of these symptoms require medical attention at the facility, when they should come to get the stitches removed and the importance of follow-up visits.

Across facilities, almost all women were told that sterilization was a permanent method but fewer than one-third were told about the problems that could occur post surgery (as prescribed in the national guidelines).

Fewer than a third of women in public facilities (only 10 percent in DHs) and only about half the women in private facilities were told that they would need to revisit if they faced problems related to sutures or experienced pain and bleeding after surgery. While the private facilities spent more time providing the necessary information, there was a gap across the board in providing accurate and adequate information to clients.

**Tests and check-ups** – Blood and urine tests are mandatory before conducting sterilization surgery. Three-fourths of the women at DHs, almost all at the SDHs and private facilities and 88 percent at PHCs recalled undergoing these tests. However, only 38 percent overall were informed about their results. This might be a missed opportunity, as the act of sharing the results with clients can build confidence and enhance interpersonal interaction.

**Table 3: Pre-Surgery Counseling**  
Percentage distribution of clients who received pre-surgery information and talked in privacy by the facilities they accessed for FS, Bihar, 2013-14

	District Hospital	Sub-Divisional Hospital	Primary Health Centre	Private Hospital	Total
Client knew or was told that sterilization is a permanent method	100.0	100.0	99.4	95.2	98.9
Told about minor problems related to surgery (nausea, headaches, etc.)	20.0	39.1	21.4	23.8	24.8
Told about need for a follow-up visit	50.0	61.4	77.3	78.6	73.7
Told about medical conditions which would require a revisit to the facility	10.0	37.0	37.0	52.4	37.4
Talked in private	35.0	17.4	34.4	26.2	30.2
<b>Number of clients</b>	<b>20</b>	<b>46</b>	<b>154</b>	<b>42</b>	<b>262</b>

**Consent process** – As with all surgeries, clients must give their consent in writing prior to the procedure and must understand what they are agreeing to. Ninety percent of sterilization clients at public facilities and 98 percent at private hospitals recalled receiving a consent form for their signature. Only a small fraction (less than a third), particularly at the DHs, read or asked someone to read the consent form before signing it or putting their thumb impression on the form. This clearly demonstrates that the whole purpose of the consent process is undermined.

**Interpersonal interactions** – Encouraging clients to ask questions and giving attention to their concerns are some of the ways to put them at ease prior to a procedure. However, in only a few cases (16 percent) did the providers encourage questions from women prior to surgery and only half of the women felt comfortable asking questions. Around 60 percent of women visiting SDHs, PHCs and private hospitals reported asking questions, while 40 percent at DHs did so. Among those who asked questions in SDH, PHC and private hospitals, about 90 percent mentioned that the provider responded to their questions.

**Post-surgery information and care – There were gaps in post-surgery information and care. Many women were not checked before being discharged. Most were not given basic information on rest, bathing and follow-up visits.**

Before discharging a client, the health provider is expected to examine her and give her basic advice on care at home: rest after surgery, keeping the stitched area clean and dry and returning for the removal of stitches.

- » While more than 90 percent of the women were discharged well after they had regained consciousness, providers checked only half of them before discharge. This was especially true at PHCs.
- » In the majority of cases the providers did not give the basic advice on post-surgical care to the clients. Only half of the women at public facilities and

**Expenditure**  
Women spent between Rs. 30 to Rs. 2000 in availing sterilization services at public facilities, which is expected to be free.

**Access**  
For 85 percent of women, the facility was easily accessible.

two-thirds at the private clinics were told to keep the stitched area clean and dry. Less than a quarter of the women were told to rest for two days.

- » Only 29 percent of the women, who had undergone sterilization, were told not to bathe for a day after surgery.

The extent of medical problems clients experience after surgery is an important indicator of the quality of surgical and post-surgical care.

- » Around half of the women who went to DHs reported experiencing wound sepsis, problems with sutures or fever. In comparison, 17 percent from private hospital, 9 percent from SDH and 4 percent from PHC reported the same.
- » National guidelines specify that the first follow-up contact be made within 48 hours of surgery, either at home by a visiting female health worker or at the clinic. In two-thirds of the cases, a health worker (ASHA or ANM) did visit the clients at home. More clients of PHCs were visited than of DHs and private hospitals.

At the time of the survey, 18 percent of women reported that they had visited a health facility for follow-up, while 90 percent mentioned that they would do so in the near future mainly for removal of stitches

**Client satisfaction – A majority of the women reported that providers were friendly; expressed their intent to revisit the facility; and said they would recommend it to others. But they also suggested that cleanliness, waiting time and care by doctors need to be improved.**

Despite obvious gaps in infrastructure, information access, counseling and post-procedure care, the clients were satisfied with the services they received.

- » 93 percent were satisfied with the behavior of the provider and 86 percent were satisfied with the time given to discuss their procedure.
- » 80 percent women felt that they had received the right amount of information for their needs. Satisfaction levels of women who specifically visited DH and SDHs were lower - 70 percent and 63 percent, respectively.
- » Over 90 percent of the women said they intended to visit the health facility in the future and encourage friends and relatives to do the same.

This data brings an interesting fact to the surface, which is that any system is most likely to deliver only as much as is demanded of it. People in India expect little of the public health system and the system obliges likewise. One of the reasons for this low expectation is that communities are not aware of their rights and entitlement. Women need to be better educated on what defines quality care in health facilities and be empowered to ask for it. This will raise the standards of the delivery system and also make the system more accountable.

Some of the suggestions for improvement that were made by the clients were:

- » *Reduced waiting time:* While overall about 61 percent of clients were satisfied with the waiting time, almost half of the clients who visited a PHC felt the wait had been too long. The length of the waiting time prior to surgery and the place in which women were made to wait were also important considerations. A fourth of the clients reported waiting for three to four hours, while a fifth waited for seven or more hours for sterilization. As clients are required to come for the surgery on an empty stomach, long waiting hours with limited infrastructure is inconvenient and reflects in their responses regarding the appropriateness of waiting time.
- » *Improved sterilization services:* These ranged from improving cleanliness (35 percent) to reducing waiting time (29 percent) and improved services by doctors (25 percent). Notably, a far higher proportion of clients who had visited a DH made these suggestions, with half of them recommending that doctors should provide better care and 45 percent said that a cleaner environment with less waiting time were needed.

Interestingly, privacy was not a big consideration for a majority of the clients; only a small proportion (2.7 percent) suggested this aspect could be improved.

## RECOMMENDATIONS

Based on the aforementioned findings and consultations with state- and national-level stakeholders, the following short- and medium-term interventions are critical to improving the quality of care:

1. Every health facility must provide designated waiting areas. It is also imperative to provide hygiene and privacy during counseling, examination and surgery. Separate toilets for women also need to be built. Strengthening infrastructure

- will require increased investment and the exploration of possible alternative options, such as public-private partnerships, community ownerships and social auditing as mechanisms for upkeep and the maintenance of a public health system that is responsive to women's needs and expectations.
2. Procurement and supply chains at both the state- and district-level need to be strengthened. This should be complemented with better management of the inventory of drugs and equipment at the facility level. Existing good practices around vaccine procurement and supplies can be leveraged for this. Further, computerized indent and supply chains, and regular tracking could streamline the process and address gaps in availability of drug, equipment and supplies.
  3. It is vital to build a gendered perspective of care among health workers while building their capacity to deliver. This will help them appreciate the rights and entitlements of women, understand why women need family planning information and why providing method-specific counseling is essential in aiding women's ability to make informed choices about their reproductive health. This will also help strengthen interpersonal relation between client and provider.
  4. Reference material like *Standards on Female and Male Sterilization* for medical officers and nursing staff should be made accessible to health providers at all relevant facilities in the local language.
  5. The expectations and experiences of women need to be included in the monitoring of quality of care. This could be done through periodic exit interviews and/or observation. Involving civil society organizations to conduct external monitoring, and enabling facility level discussion and planning can be a concrete step in this direction.
  6. Women and community members need to be better educated on what defines quality care at health facilities. They should know what they are entitled to, the manner in which these services are delivered and be able to rate the facilities and make the system more accountable. Strengthening community- and facility-level committees (village health and sanitation committees and *rogi kalyan samities*) with greater women's involvement is a tangible way to increase people's participation in the health care they receive.
  7. Vacant family planning counseling positions need to be filled on a contractual or regular basis to effectively address women's family planning needs, which is not occurring at present.

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The International Center for Research on Women (ICRW) carried out a study with funding support from the Packard Foundation to assess quality of female sterilization and IUD services provided at public and private health facilities in Bihar; identify gaps and provide recommendations to address those. This report presents summary of the findings and recommendations related to female sterilization.

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