Original Research Article

Status of family planning service delivery for people living with HIV at public hospital settings in Maharashtra: opportunities and challenges

Beena N. Joshi¹*, Bhushan A. Girase¹, Ragini N. Kulkarni¹, Shahina Begum²

¹Department of Operational Research, ²Department of Biostatistics, National Institute for Research in Reproductive Health, ICMR, Mumbai, India

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*Correspondence:
Dr. Beena N. Joshi,
E-mail: nirrhdor@yahoo.co.in

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ABSTRACT

Background: HIV testing and treatment of seropositive pregnant mothers is a much focused and efficiently managed programme as part of convergence plan between National AIDS Control Program and Reproductive and Child Health services under National Health Mission. This paper aims to depict the level of convergence that exists for another most important reproductive health service namely family planning (FP) for PLHIV at public healthcare settings in Maharashtra.

Methods: Participatory observations of HIV, FP and STI facilities and key informant interviews of providers at these facilities located in selected secondary (two district hospitals) and tertiary (two teaching hospitals) public hospitals in Maharashtra were conducted as part of larger intervention study.

Results: Insufficient health workforce with inadequate knowledge about PLHIV’s eligibility for contraception and discriminated service delivery (25%) was prominent. Only half (50%) key informants were conversant about FP counseling to PLHIV. One-fourth (27%) informants presumed contraceptives as either harmful or contraindicated to PLHIVs. Indenting and supply of FP commodities was extremely inopportune and irregular. More than half of the respondents highlighted many constraints such as no guidelines on convergence, lack of appropriate counseling skills; low staff motivation; inadequate IEC material on dual protection; lack of FP indicators in MIS; over-occupied staff hours; and inadequate M&E for HIV-FP linkages.

Conclusions: Despite challenges, sensitizing and training health workforce to eliminate stigma discrimination; reduce delay in service delivery; and improving monitoring of inter-sectoral convergence activities are needed to improve access to reproductive health services for PLHIVs.

Keywords: HIV, Family planning, Convergence, PPTCT, Dual protection

INTRODUCTION

Sexual and reproductive health (SRH) services are crucial for people living with HIV (PLHIV). Availability and accessibility to quality SRH care including family planning (FP) services is cornerstone for prevention and control of HIV infection. Evidences on increase in the number of pregnancies together with high levels of unmet needs for contraception have been reported among HIV positive women in India.¹,² Prong-2 of Prevention of Parent-To-Child Transmission (PPTCT) program outlines the importance of preventing unintended pregnancies among HIV infected women by providing FP services and thus reduces vertical HIV transmission to the next generation. Poor FP indicators, over last one decade, put entire family welfare program on the back foot. Compared to national TFR of 2.3,³ Maharashtra state has
achieved fertility rates to replacement level however its TFR is stagnated around 1.8 since 2011.\(^4\) Maharashtra has witnessed decrease in use of any modern contraceptive method (62.6% in NFHS-4, 64.9% in NFHS-3) and gradual increase in total unmet need (19% in DLHS-4 13.6% in DLHS-3).\(^5,6\) If this is the scenario overall, then vulnerable populations would be worst affected such as those infected with HIV.

In India, National AIDS Control Organization (NACO) and State AIDS Control Society are providing technon managerial and administrative support in implementing National AIDS Control Program (NACP) interventions through designated facilities- Antiretroviral Treatment (ART) centers, Integrated Counseling and Testing Centers (ICTC), PPTCT centers and STI clinic [henceforth referred as NACP facilities] at teaching hospitals and primary health care system.\(^7\) Establishment of District AIDS Prevention and Control Units (DAPCU) have decentralized these interventions at district level in coordination with mainstream public health system.\(^8\) In parallel, state Department of Health and Family Welfare (DOHFW) and National Health Mission (NHM) is implementing various National Health Programs including Reproductive and Child Health (RCH) services. Many a times the beneficiaries are common to both programs and they would most benefit if these services are provided in an integrated fashion.

Recently, a National Summit on Family Planning, organized by Government of India (GOI) in April 2016, has demonstrated its renewed interest to advocate FP as it forms the basis for good health of mother and child.\(^9\) Newer contraceptive methods- Injectable, Centchroman and POPs have been introduced in the national family planning program along with newer IEC strategies for advocacy. A Medical Eligibility Criteria (MEC) Wheel for contraceptive use has also been adapted from WHOs MEC wheel- 2015 update, to guide FP providers in recommending safe and effective contraceptive methods for women with various clinical manifestations.

The Indian Public Health Standards (IPHS) for district hospitals distinguishes FP, ART, ICTC, PPTCT and STI services under Essential services (Minimal Assured Services) category. However, overall quality of care and minimum service delivery standards has been a challenge at many facilities. India needs to strengthen health systems response through the NHM to achieve overarching Sustainable Development Goals which targets ending HIV epidemic and universal access to SRH services including FP by 2030.

The paper outlines the existing Family planning services in the context of service delivery mechanism, health workforce and their trainings, physical infrastructure and supplies; and information system for PLHIV at secondary and tertiary care public hospitals. The opportunities and challenges in providing linked HIV-FP services were explored.

**METHODS**

A mixed-method approach was conducted in teaching hospitals in Mumbai city between 2011-2012; and district hospitals of Pune and Parbhani districts of Maharashtra, India in June 2016. Data pertains to the key informant interviews of health providers and participatory observations through facility surveys conducted at NACP facilities and at Obstetrics and Gynecology department (OBGY) where FP services are delivered [henceforth referred as RCH facilities]. Data also relates to the experiences shared by health providers during training workshops conducted as a part of larger study. Study sites were selected based on performance indicators of NACP-III i.e. ICTC performance indicators in terms of HIV testing, linkages with ART centers and spouse testing and RCH performance indicators of DLHS-3. Mumbai and Pune were good performing districts and covered tertiary and secondary facilities while Parbhani district was in the poor performing category and included secondary facility.

**Table 1: Nature of data collection and sample size.**

| Data Collection Techniques | Participant | Sample size |
|---------------------------|-------------|-------------|
| Key Informant’s Interview (KII) | Medical Officers | 7 | 10 |
|                           | Counselors  | 6 | 20 |
|                           | Nurses      | 2 | 3 |
| Facility survey/ Participatory Observations | NACP facilities | 8 | 8 |
|                           | RCH facilities | 2 | 2 |

The respondents of key informant’s interview (Table 1) were identified using a purposive sampling technique. Total 20 facilities were surveyed- 10 each affiliated to tertiary and secondary care providing hospitals; among these 16 were NACP facilities and remaining four were RCH facilities. 46 key informants- 33 and 15 from tertiary and secondary care public hospitals respectively were interviewed. 73% informants were female, half (54%) were counselors, one-third (35%) were doctors and 11% were staff nurses.

Interviews of key informants were conducted preferably in English and Marathi using a pretested semi-structured tool adapted from Rapid Assessment Tool for SRH and HIV linkages.\(^10\) Tool captured knowledge and attitude of health providers about HIV-FP services, their counselling skills, record keeping and constraints of HIV-FP linkages. A survey checklist was developed to observe physical infrastructure, supplies, performance indicators, referral linkages, availability of IEC and national guidelines at facilities. Information gathered was further classified into six building blocks of health system (Table...
2) identified by World Health Organization.11 With this, we delineated the situation of FP services for PLHIVs at public hospitals and its linkages between NACP and RCH facilities.

Table 2: Health system categorization.

| Categories         | Thematic area                                      |
|--------------------|----------------------------------------------------|
| 1. Service Delivery| HIV testing, HIV care and support, Pre and post HIV test counseling, PPTCT services, condom promotion, RTI/STI, family planning, abortion care, |
| 2. Workforce       | Human resources and training                       |
| 3. Supplies        | Material resources, FP commodities, HIV safety kits, IEC materials, patient welfare resources and physical infrastructure |
| 4. Information     | Management Information System                      |
| 5. Governance      | Overall stewardship and health administration at public institutions |
| 6. Finance         | Data not collected                                  |

Statistical Package for Social Sciences (SPSS) version-19 was used for descriptive statistics. Information obtained was triangulated to understand the supply side constraints of FP service delivery for PLHIV. A written informed consent was obtained from all the respondents prior to interviews maintaining anonymity of the respondents while analyzing data.

RESULTS

All the informants were academically qualified and experienced enough, satisfying recruitment criteria as per government guidelines. Their experience of working in public health system varied from less than a year to 27 years of service. All respondents had received initial induction training related to their respective terms of reference of their job.

Service delivery mechanism and Governance

All the HIV care facilities were providing counseling, testing, free ART drug distribution, and support services as per their given mandate. Although condom promotion activities encompass its free distribution; the demonstration of condom usage depended on patient’s demand mainly to prevent horizontal transmission of STI/HIV with less emphasis on contraceptive benefit. About 58% and 44% respondents were engaged in providing FP services and post-abortion FP counseling respectively. Respondents confirmed about availability of FP services on all OPD working days (67%) and MTP/sterilization services on all specific OT days (58%). Male clients were not allowed to enter in OBGY OPD and female clients who sought advice for FP methods were neither provided condoms nor counseled on correct and consistent condom use. PLHIVs, after completing their HIV care related formalities, usually found it very difficult to seek SRH services within stipulated working hours in morning OPD and were not motivated to avail services at evening OPD as contraception is not a health emergency. 73% key informants of tertiary care hospitals mentioned about existing mechanism to see whether clients act on referrals; in contrast, 80% respondents from district hospitals revealed that no such mechanism existed. They assumed that clients usually return on their own will. Routine referrals from ART center were exclusively for seropositive pregnant women unless anyone demanded any specific service.

Discriminating PLHIVs at FP facilities was more pronounced at district hospitals (60%) than that of tertiary care hospitals (9%). Health providers, due to apprehensions of contracting HIV, routinely advised many unwarranted laboratory investigations e.g. RFT, LFT, X-ray chest, USG along with routine complete blood count to clients who availed spacing methods like OCpills/IUCD. Denial of UICD services prejudicing it as unsafe for seropositive women irrespective of history of sexual behaviour or signs symptoms of RTI/STI was also reported. Health providers of RCH facilities at district hospitals felt the dubious need of using extra-long gloves or HIV safety kits in OPD for IUCD insertion procedure on PLHIV. Participants of training workshop narrated an incident of discrimination and denial of female/male sterilization to one PLHIV, which resulted in life-threatening grave action by the stigmatized victim.

District AIDS Prevention and Control Committee (DAPCC), though functional, lacked facilitating linkages between HIV-FP services.

Health workforce and trainings (including their perceived KAP)

Except one facility at district hospital all other facilities were having adequate staff in service. All the in-service staff had received either induction or refresher trainings as per the government guidelines. 58% and 24% respondents at tertiary and secondary care hospitals respectively reported that FP counseling was part of their training program however all desired further refresher trainings.

Half of the respondents presumed that condom use alone is sufficient to prevent pregnancies however two-fifth of them suspected correct and consistent use is highly subjective. 18% and 47% of providers at tertiary and secondary hospitals respectively perceived contraceptives to be either harmful or contraindicated for PLHIVs. Likewise, increase in repeated pregnancies/abortions among PLHIVs was reported by 44% respondents in all. Hardly any respondents were aware about current
mother-to-child transmission rate at their respective facilities.

**Physical infrastructure and supplies**

Less than half the respondents mentioned about same location (same building, same floor) of NACP and RCH facilities; however, one-fourth of the respondents from secondary hospitals and two-fifth from tertiary hospitals revealed that facilities were located in different buildings but within same campus of one secondary and one teaching hospitals. ICTC functioning was supervised by OBGY department at district hospitals unlike the teaching hospitals set up where the Microbiology department monitored these services. The visual and auditory privacy during FP counseling at RCH facilities was compromised.

Indenting and supply of FP commodities was extremely inopportune and irregular. Instead of free accessibility, demand-driven condom supply was noted at almost all facilities. Combined Oral Contraceptive (COC) pills, despite available at the pharmacy of district hospital, were not supplied to respective RCH facilities. However Emergency Contraceptive Pills (EZY-Pills) were unavailable at all hospitals. Even the emergency facility/casualty did not have EC EZY-Pills tablets in the set of emergency medicines where cases of sexual abuse such as rape are reported and handled. All the facilities were well-equipped for IUCD and permanent sterilization services. However, no laparoscopic tubal ligations were performed at the district hospitals.

IEC material on FP services for PLHIV was limited to condom promotion with complete lack of dual methods of contraception. Condom demonstration model, flip-charts and pamphlets for demonstration and counseling aid were unevenly available at more than half of the facilities. Around 75% of key informants mentioned that unavailability of IEC material was an important constraint in linking HIV and FP services.

At both the secondary and tertiary hospitals, availability of various national guidelines on FP was subjected to the core domain of respective facilities. Many of the operational guidelines or reference manuals such as PPIUCD-2010, male/female sterilization, oral contraceptive pills and MEC for contraceptives were unavailable at the NACP facilities. Guideline on condom promotion was available at 11 out of 20 facilities.

**Information system and M&E**

All the NACP facilities (n=16) were maintaining patient and program monitoring records with periodic reporting recommended by NACO. Patient’s White Card maintained at ART center, ICTC register for general clients and PPTCT line-list have provisions to record contraceptive history, pregnancy-abortion history, condom usage, condom counseling and demonstration, dual protection usage. Nevertheless, these documents were not updated with FP indicators including number of condoms distributed, the reason being not emphasized to report in monthly MIS.

A few registers pertaining to different RCH programs were found at RCH facilities (n=2) at district hospitals. These inventories include registers for OPD services, IUCD, PPIUCD, ANC line listing, high risk pregnant women etc. Indicators pertaining to FP services such as method advised by provider, method accepted by client, reason if ineligible for any method, expected date of follow-up, and reason of discontinuing any method were not listed in registers. Moreover, seropositive status of FP acceptors was not mentioned.

![Figure 1: Perceived constraints in providing HIV-FP linked services.](image-url)
Providers’ perspectives on constraints in establishing linkages

Figure 1 illustrates the constraints in providing linked services perceived by health providers in the backdrop of any clear guidelines from the program. Differentiated analysis of secondary and tertiary hospitals reveal that majority of the providers at tertiary hospitals presumed that inappropriate knowledge and counseling skills (74%), overloaded working hours (74%), inadequate IEC material (89%), and complexity of current MIS (80%) as major constraints whereas providers at secondary hospitals pointed low staff motivation (60%) and inopportune supplies (53%) more challenging. Nevertheless, almost all the informants (96%) felt the need of establishing linkages between HIV and FP services along with clear guidelines and monitoring and 88% of them believed that they could facilitate such linkages within their existing constraints.

DISCUSSION

Unsafe sexual practices and risk of unintended pregnancies owing to poor SRH is attributed to HIV infection. In India, SRH services including FP, STI and HIV care, irrespective of seropositive status of a woman, come under the purview of RCH programme and are catered discretely through general public health system. It is clearly evident that PLHIVs are usually unable to access quality SRH services including FP. This study reported on the supply side barriers in providing FP services to PLHIVs such as provider’s bias in assessing contraceptive eligibility, lack of conducive environment at facilities to involve men in contraceptive counseling and decision making, stigmatizing attitude of health providers with incompetent counseling skills and poor knowledge about contraceptives, lack of IEC materials etc. at secondary and tertiary care level public hospitals with clear guidelines or monitoring by the program.

Since inception in 2002, National PPTCT program in India has evolved mainly around Universal HIV screening of all pregnant women and enrolling detected seropositive pregnant women in government’s ART programme.12,13 Despite overarching goal of delivering PPTCT services through existing RCH program, system clearly lacks significant programmatic focus on prong-2. The existing essential package of PPTCT services clearly misses a larger proportion of non-pregnant fertile HIV positive women who remain at high risk of unintended pregnancies as they don’t get information about fertility, safe sex, and sexuality; birth spacing/limiting; safe services for FP (including dual protection), abortion and delivery. The guidelines advocates discussing birth spacing, dual protection with consistent condom use, motivating men for sterilization, and pre-conception counseling during long term follow-up of HIV positive pregnant women and at every mother-baby pair follow-up visit, however in reality, there is no accountability of such activities. The ongoing NACP-IV has strategized to intensify and consolidate prevention services; to build capacities at national, state, district and facility level through cross-cutting themes of Integration. In the wake of that, NRHM and NACP has recognized the required intra-sectoral convergent action plan to harness optimal utilization of resources within the health system towards a comprehensive and effective response to HIV through existing NACP and RCH services.14

Study has revealed that delivery of contraceptive services to PLHIVs is defunct and majorly limited to condom promotion activities with negligible emphasis on family planning aspects. Lack of dedicated facilities and experts for FP services, inactive HIV-FP linkages with poor mechanism to ensure act-on-referral, and above all apprehension/resistance among health providers to provide services to HIV clients makes the service delivery more dilapidated. Public hospitals in India have no stock of EZY-Pills complementing the analysis of HMIS data over eight years since 2008 which has shown multiple-fold rise in over-the-counter sale of ECPs in many states of India.15 Few evidences suggest that negative staff attitude; lack of coordination between different health departments and facilities; confining services to their respective core domains are responsible for poor service delivery.8,16,17 This highlights the level of stigma/discrimination towards PLHIV when they seek FP services.

As seen in our study, half of the respondents were unapprised about FP counseling through their various training programs. Poor knowledge and fear of contracting HIV disease leads to bias and discrimination of PLHIVs by health providers. The existing GOI guidelines for provision of various FP methods do not stipulate any specific recommendations related to various laboratory investigations for contraception except for permanent sterilization which are restricted to routine Haemoglobin, and urine examination.18,21 Despite, the study observed that majority of the respondents were practicing at odds and advising unwarranted investigations for known seropositive clients. Study observed that health providers, not complying to GOI guideline for IUCD, intentionally imposed seropositive clients to avail IUCD insertions only on fifth day of their menstrual cycle.22 Furthermore, technical reasons were given to deny or postpone IUCD services for the clients who adhere to fifth day menstrual cycle policy. This clearly points that awareness and translating knowledge to action is extremely low among health providers. Stigma around the HIV disease affects attitude, morale, motivation and overall performance of providers.23 Thoughtful continuing medical education (CME) programs to address misconceptions, reservations and knowledge gap among providers,24 especially in assessing medical eligibility of PLHIVs for contraception is profoundly needed for wider reach of FP services.

Contraceptive usage majorly depends on spousal agreement, perhaps in Indian context it is heavily
influenced by male partners. However as pointed earlier, denying men from accessing RCH facilities for contraception was echoed in other studies endorsing various issues such as men’s ego, their negative attitude, high patient load and low staff time, privacy issues. 25

Contrasting, a cross-sectional survey in Uttar Pradesh indicated that providers didn’t provide FP information to women due to their less autonomy in decision-making. 25

Challenge of maintaining privacy in overloaded RCH facilities with overburdened staff indicates an opportunity for NACP facilities and their staff to address male clients for FP services. Developing gender equitable interpersonal communication skills and capacity building initiatives by integrating human and material resources of NACP and RCH program could bridge the HIV prevention activities. 16, 27

Limitations

The study was limited to selected hospitals in the state and convenient sampling was used to interview respondents thus limiting the generalizability of the findings although authors believe that the situation may be more or less same at any public health facility.

CONCLUSION

Public health system is not adhering to IPHS in terms of functional requirements to cater FP services especially PLHIV. There lies a hidden opportunity of utilizing existing resources more efficiently through systematic implementation of convergence strategy between NACP and NHM. There is need for operational guidelines on providing linked services along with evidence-based knowledge update and skills building of various stakeholders in public health system regarding stigma reduction and developing holistic approach in providing careful counseling regarding contraception, timely spacing and limiting family to minimize the risks of mother to child transmission. Addressing the unmet need for contraception among PLHIV could go a long way in achieving 0% transmission of HIV and improving maternal and child health.

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