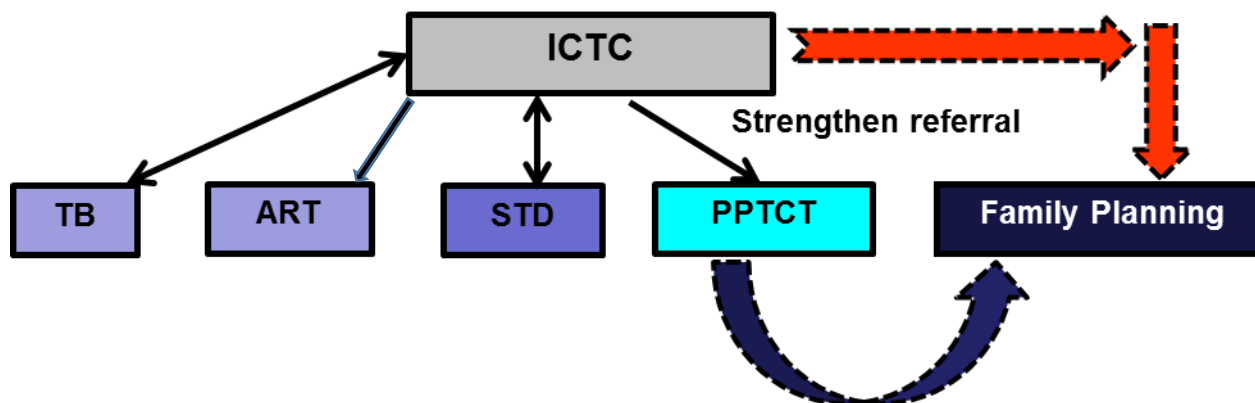


***Strategies to improve HIV –Family Planning
programmatic linkages for prevention of
unwanted pregnancies among women living
with HIV/AIDS in Mumbai, India***



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HIV status in India

- Adult (15- 49 years) HIV prevalence at national level declined from 0.41% in 2001 to 0.27% in 2011 (ANC-0.35%)
- Mothers receiving PPTCT prophylaxis increased from 18% in 2007 to approximately 32% by 2011
- Nearly 49,000 pregnancies occur among WLHIV every year
- 14,500 children are infected every year through parent-to-child transmission
- Fertility ratio of HIV positive women is higher than non infected women in the younger age group
- HIV Prevalence increasing in states with high unmet need for contraception and poor reproductive health indicators

Ministry of Health and Family Welfare



Dept. of Health and Family Welfare



National AIDS Control Organization



State Health departments



ICTC – Microbiology, OBGYN
ART Centers-Medicine
STI clinics

Background

- Unplanned repeat pregnancies was significantly higher in HIV-positive (70%) than HIV-negative (36%) women (OR=4.1, CI: 2.0-8.7). (Suryavanshi *et al.*, 2008)
- Majority (57%) were using only condoms and only half of them were using it regularly. 31% were using other methods along with condoms and 12% were using other methods but not condom (Chitlange *et al.*, 2009)
- One third of men and one fourth of women reported inconsistent condom use with regular sexual partners (Chakrapani V *et al.*, 2010)
- 30% were counselled on family planning or pregnancy planning. 85% had no intentions to have any more children. Unmet need for contraception -18% in males and 14% in females (Beena Joshi *et al.*, 2011)

Objectives

- ❑ Assess existing status of linkages between HIV (ICTC/PPTCT) and FP services - facility survey and provider's interview
- ❑ Operationalize a strategy for providing linked services
- ❑ Pilot test the interventions in a sample of HIV positive women after assessing their unmet need
- ❑ Compare impact of intervention at the end of stipulated period of the implementation of the strategy with a control group

- **Ethical clearances**

Methodology

- **Situation analysis**

Facility survey and KI interviews

Exp - X1 Intervention X2

Control -X3 X4

Randomly selected

- **Sample size:** All eligible women attending services over 9 months
- **Inclusion criteria:** Married women Living with HIV, Currently sexually active and in child bearing age, not undergone permanent sterilization, currently non pregnant, not using any method/using only condom, do not want to have a child for at least one year
- Enrollment over 9 months and follow up for 1 year every 3 months

Situation Analysis

7 Hospitals –Program Managers, Doctors, Nurses, Counselors

Program/Policy level

- PPTCT Guidelines are focused mainly on the pregnant women
- No Operational framework on HIV-FP linkage
- MIS does not capture data on abortion/contraceptive use
- Missed opportunities to address FP issues at ICTC, ART and by ORW at PPTCT

Facility level

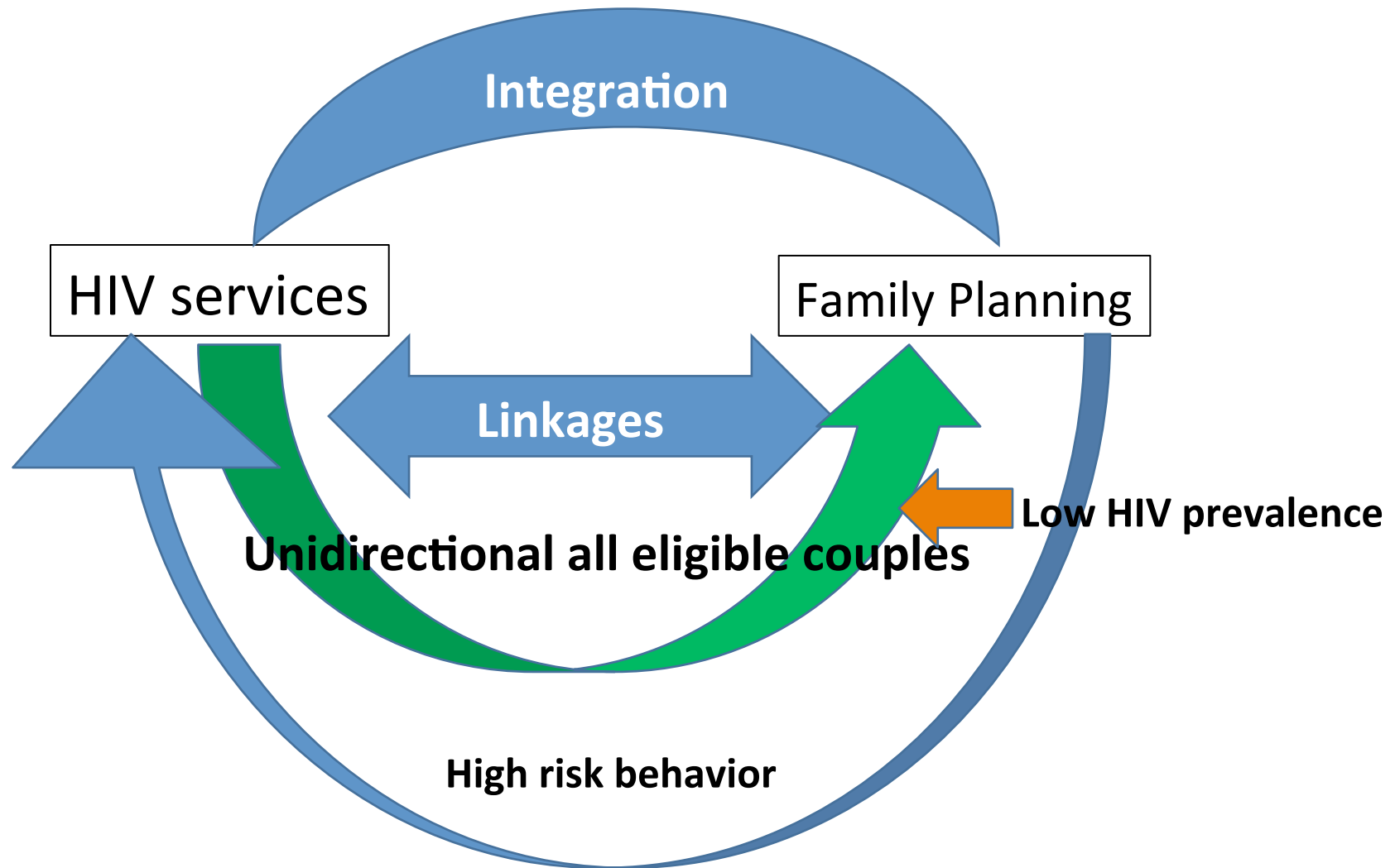
- ICTC and FP centers in separate buildings, no documentation of referrals, registration procedures were not uniform
- IEC material explaining condom for dual protection - very sparse

Service Provider level

- FP not a mandate at ICTC/ART
- Referrals on demand
- Myths, misconceptions prevail on use of other methods by PLHIV
- Repeat pregnancies on rise and women report late

All providers agreed that FP linkage is needed and useful . Their involvement would need support : training, manpower, IEC material, documentation and monitoring

Strategies to provide contraception to PLHIV



Linkage Strategy

ICTC/
PPTCT

Assessment of current contraceptive
use, future fertility desire

Counselling and eligible clients referred to
FP clinic, provision of referral slip

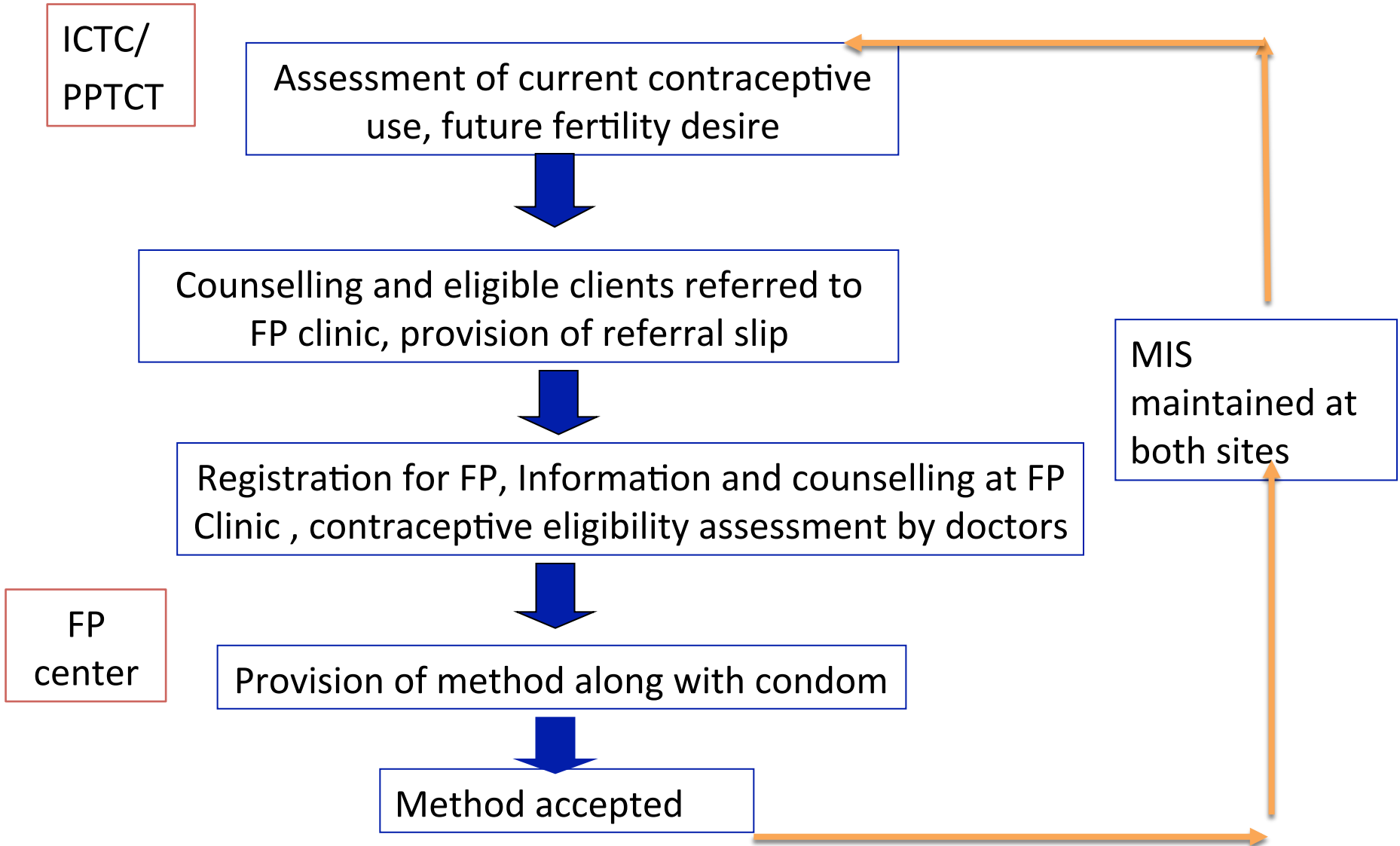
Registration for FP, Information and counselling at FP
Clinic , contraceptive eligibility assessment by doctors

FP
center



Provision of method along with condom

Method accepted

MIS
maintained at
both sites



Training

- ## Medical eligibility criteria for contraceptive use
- 
- The image shows the WHO Medical Eligibility Criteria for Contraceptive Use, a circular chart. The chart is divided into four concentric rings, each representing a different level of medical eligibility. The outermost ring is labeled 'Medical Eligibility' and contains the following categories: 'Medical Eligibility Category 1: No restriction for use', 'Medical Eligibility Category 2: Use with caution', 'Medical Eligibility Category 3: Use with caution', and 'Medical Eligibility Category 4: Do not use'. The inner rings provide more detailed information about the criteria for each category, including specific medical conditions and the corresponding contraceptive methods. The chart is titled 'WHO Medical Eligibility Criteria for Contraceptive Use' and includes the WHO logo and the text 'For contraceptive use'.
- emergency contraception: POCS Patch
Male surgical sterilization Ring: ECPs
COCs Barrier methods: IUDs Fertility awareness-based methods: Lactational amenorrhea Patch Female surgical sterilization: Intrauterine devices: COCs Coitus interruptus: Copper IUD for emergency contraception: POCS Patch
Male surgical sterilization Ring: ECPs
-  World Health Organization



Poster

LTM MEDICAL COLLEGE & HOSPITAL, SION, MUMBAI
HBV (ICTC/PPTCT) and Family Planning Linkage
Referral Slip for Family Planning

Date: _____

Client PID no _____

Study enrollment no: _____

Referred from: 1. ICTC ☐ 2. PPTCT ☐

Name of Client: _____

Age: _____

Address: _____

Current treatment: 1. ART ☐ 2. TB ☐ 3. PPTCT ☐

Reason for referral: _____

Referred by:

Name of ICTC counselor: _____

Signature: _____

[illegible]

Socio-demographic Characteristics and HIV status

Characteristics	Control (n=150)	Experimental (n=150)
Age (Mean±SD)	28.4 ±4. 3	28.9±4.7
Literate (%)	77.3	72
Concordant (%)	72.7	72
Disclosed status (%)	98.7	100
On ART	42	43.3
No of living children (Mean± SD)	1.8 (±0.95)	2.0 (±1.0)

At the end of 1 year

LFU-10

Deaths -4

Widows-9

Accessed Family Planning Services

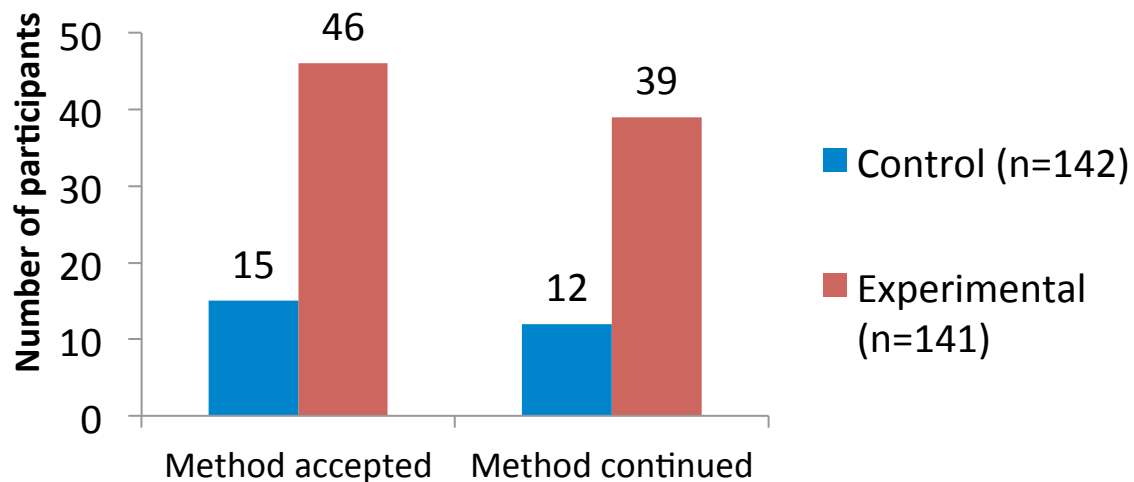
- 60% reached FP centers as against 8% in control

Clients did not reach FP center

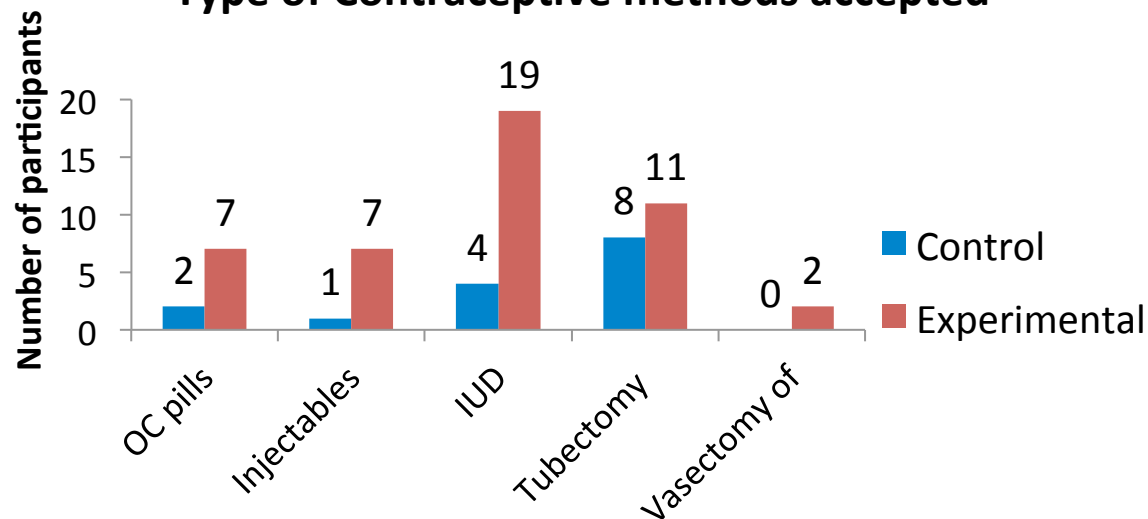
- psychologically not prepared to think of family planning after hearing their test result for the first time (13.7%)
- needed time to decide (32.6%)
- happy with only condom use/having infrequent sexual act(20%)
- priority was illness and medicines (2%)
- decision depended on spouse or other family members (15.7%)
- if they felt it was not ideal time of menstrual cycle to start using contraceptives (5%)
- A few preferred to visit health facilities close to their homes due to time and financial constraints (11%).

Acceptance of dual methods

Dual methods accepted and continued



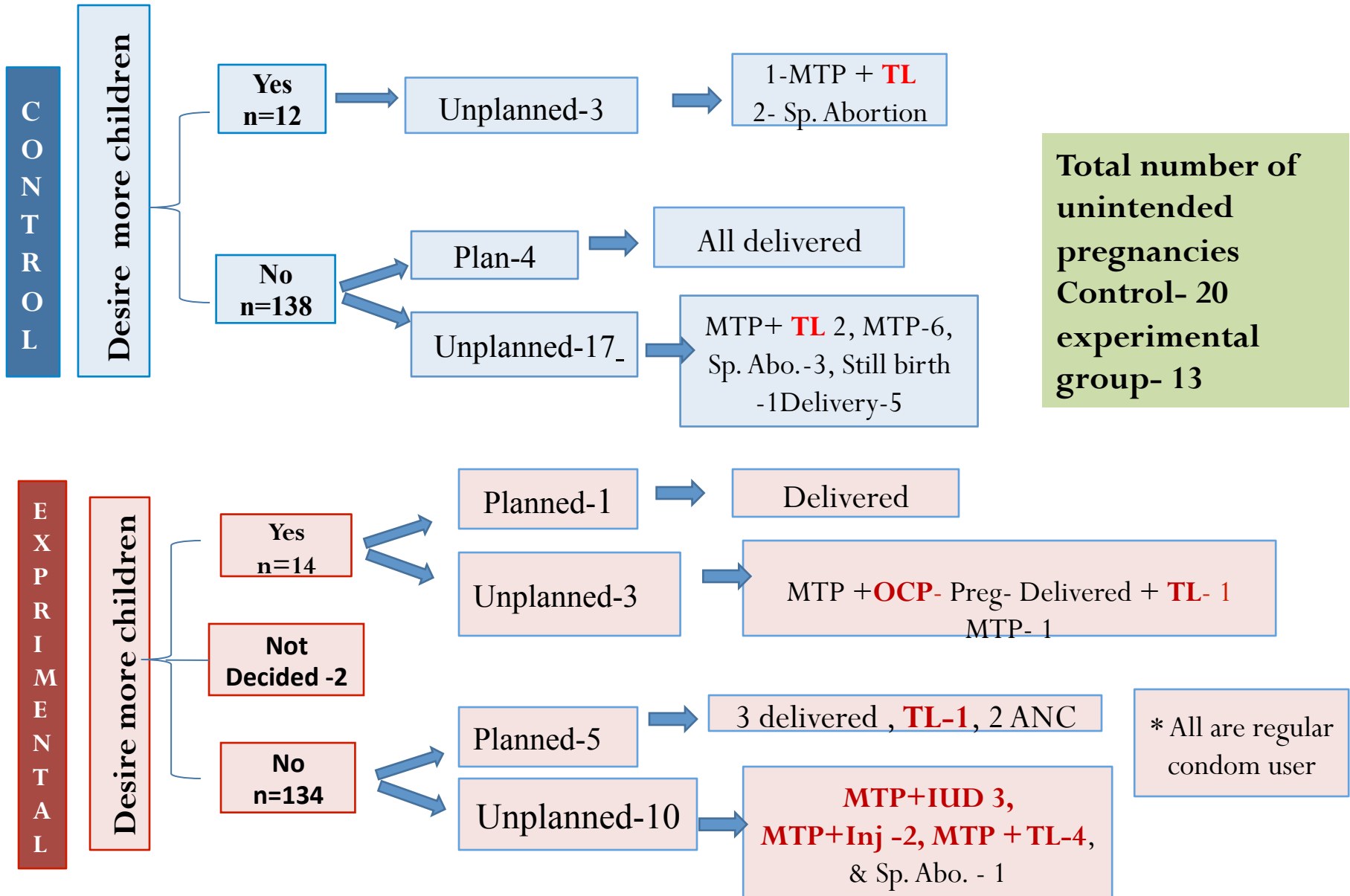
Type of Contraceptive methods accepted



Consistent Condom Use (%)

Time	Control	Exp	P value
Enrol.	76.8%	86.3%	0.887
	n=121	n=110	
1 FU	88%	89.%	0.003
	n=120	n=119	
2 FU	80%	93.4%	0.01
	n=111	n=122	
3 FU	81.2%	94.2%	0.001
	n=107	n=120	
4 FU	82%	96.3%	0.014
	n=117	n=111	

Fertility Desire and Pregnancies



Protection offered due to intervention

- The Cumulative contraceptive protection offered by use of dual methods due to intervention was 8.5% more in the experimental group compared to control
 - The relative risk of unintended pregnancies in control group was 1.528 ($p=0.2$)
 - Number needed to treat was 21
 - 36% (AR %) of unintended pregnancies in the control group could be attributed to not being exposed to interventions i.e. counseling and access to family planning services.
- ✓ **Scaling up of the interventions and measuring its impact at district hospital settings is initiated**

Need to draft National Guidelines

- **Delivery of linked services**
- **Medical Eligibility guidelines for providing contraception to PLHIV**

Acknowledgement

- **ICMR, NACO**
- **Project investigators**
 - Dr. Gajanan Velhal, Dr. Sanjay Chauhan, Dr. Ragini Kulkarni, Dr. Shahina Begum
- **Site investigators**
 - Dept of OBGYN and Microbiology, Sion and Nair Hospitals, Mumbai
 - ICTC/PPTCT staff
- **Project Team**
 - Nitya, Suman, Manisha, Vasundhara, Praveen and Renuka
- **PLHIV**
- **NGOs**
- ❖ **GMNCH organisers**

THANK YOU



Elements of PPTCT Strategy

Prong 1

Prevention of HIV infection among individuals planning to have children

Prong 2

Prevention of unintended pregnancies in HIV+ women

Prong 3

Prevention of transmission from an HIV+ woman to their newborns

Prong 4

Support for HIV infected mother and family

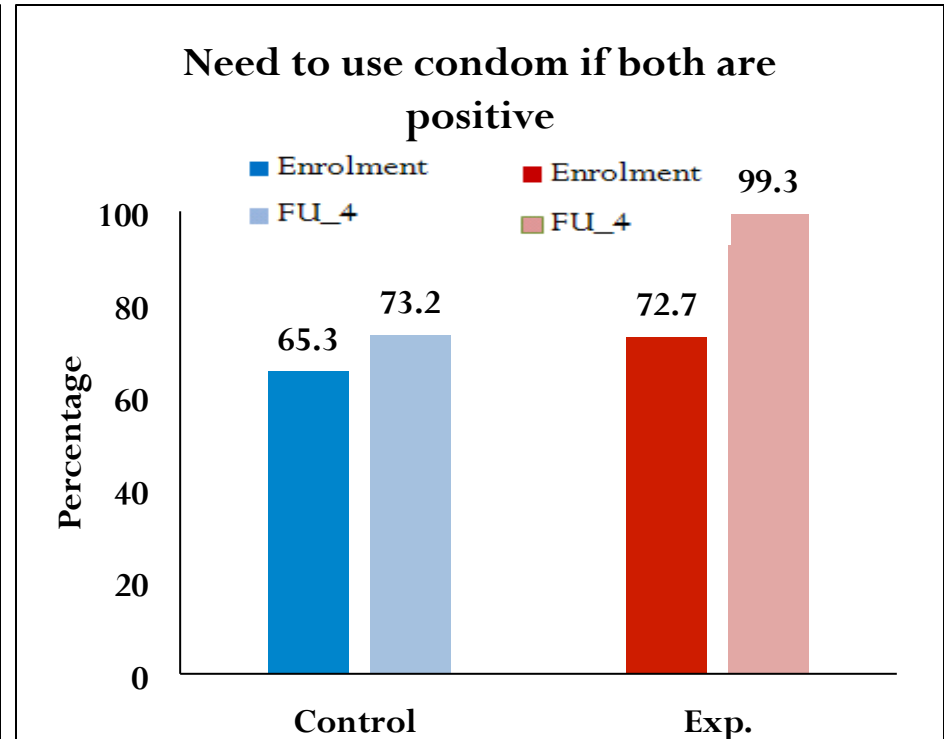
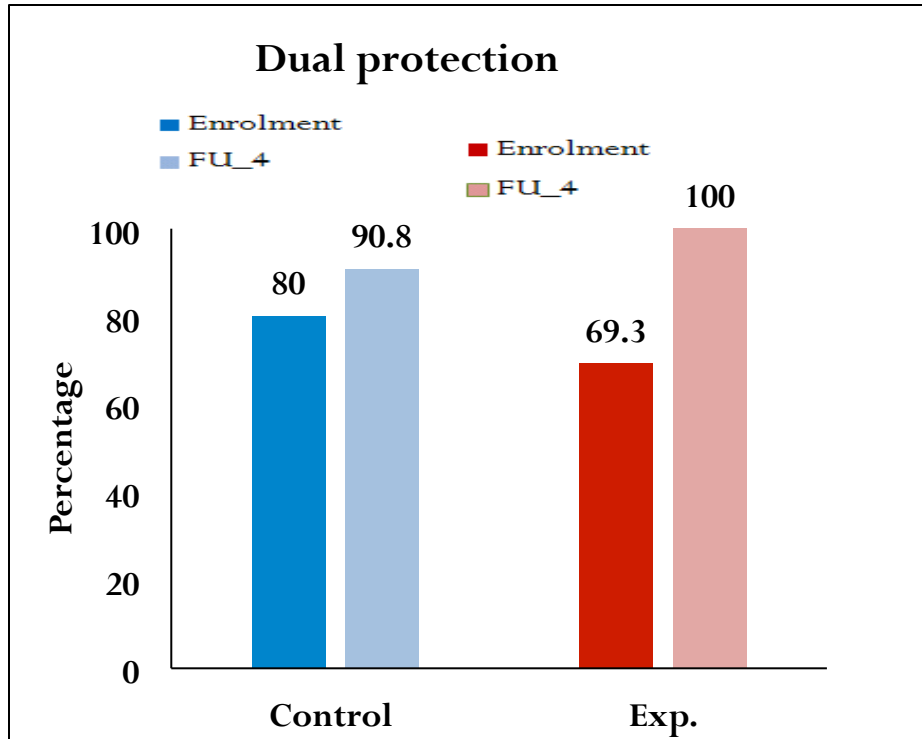


Condom promotion



Moved from SdNVp to
Option B plus since 2014

Impact of Intervention on Awareness/ Knowledge



Challenges

1. Since there are no policy directives for linkages there were administrative challenges to roll out the strategy for linked services, maintain and monitor the MIS and sustain the linkages
2. Providers use different cut offs of CD4 count to decide on eligibility of client to use a method or fitness to undergo operative procedure.
3. Women need repeated reminders to get motivated to use additional method. This is the limitation at ICTC as there is no scope for follow-up visit. This could be better done at ART centers.

Recommendations

1. Uniform national guidelines to provide family planning services to HIV positive people need to be formulated.
2. A broad framework needs to be developed and operationalised to provide comprehensive reproductive health care to PLHIV

Pregnancies Averted

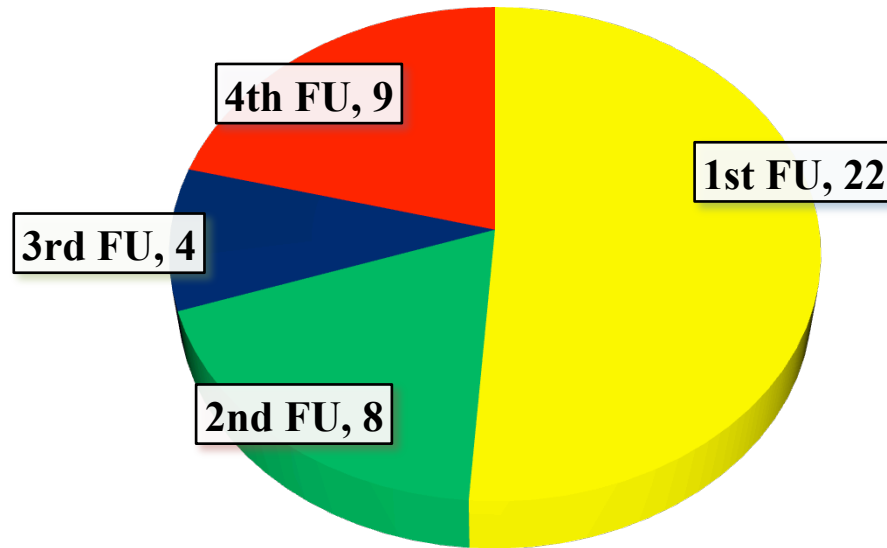
Due to intervention the cumulative failure rate of contraception in the experimental group reduced and prevented 12 women from risk of pregnancy in one year of dual method use

		Experimental		Control	
Method	Failure rate A	No. of users B	Total failure rate $C = (A*B/100)$	No. of users	Total failure rate
Regular condom use	3	68	2.04	90	2.64
Irregular condom use	15	3	0.45	0	0
OC pills	0.3	3*	0.009	1	0.003
Injectable	0.3	4*	0.108	0	0
IUD	0.6	18*	0.012	4	0.024
Tubal ligation	0.5	12*	0.002	7	0.035
Vasectomy	0.1	2*	0.06	0	0
Non users	.85	1	0.85	15	12.75
Cumulative failure rate			3.53		15.51

Difference- 12

Role of ART Centers/ORWs

METHODS ACCEPTED DURING FOLLOW UPS IN EXPERIMENTAL GROUP

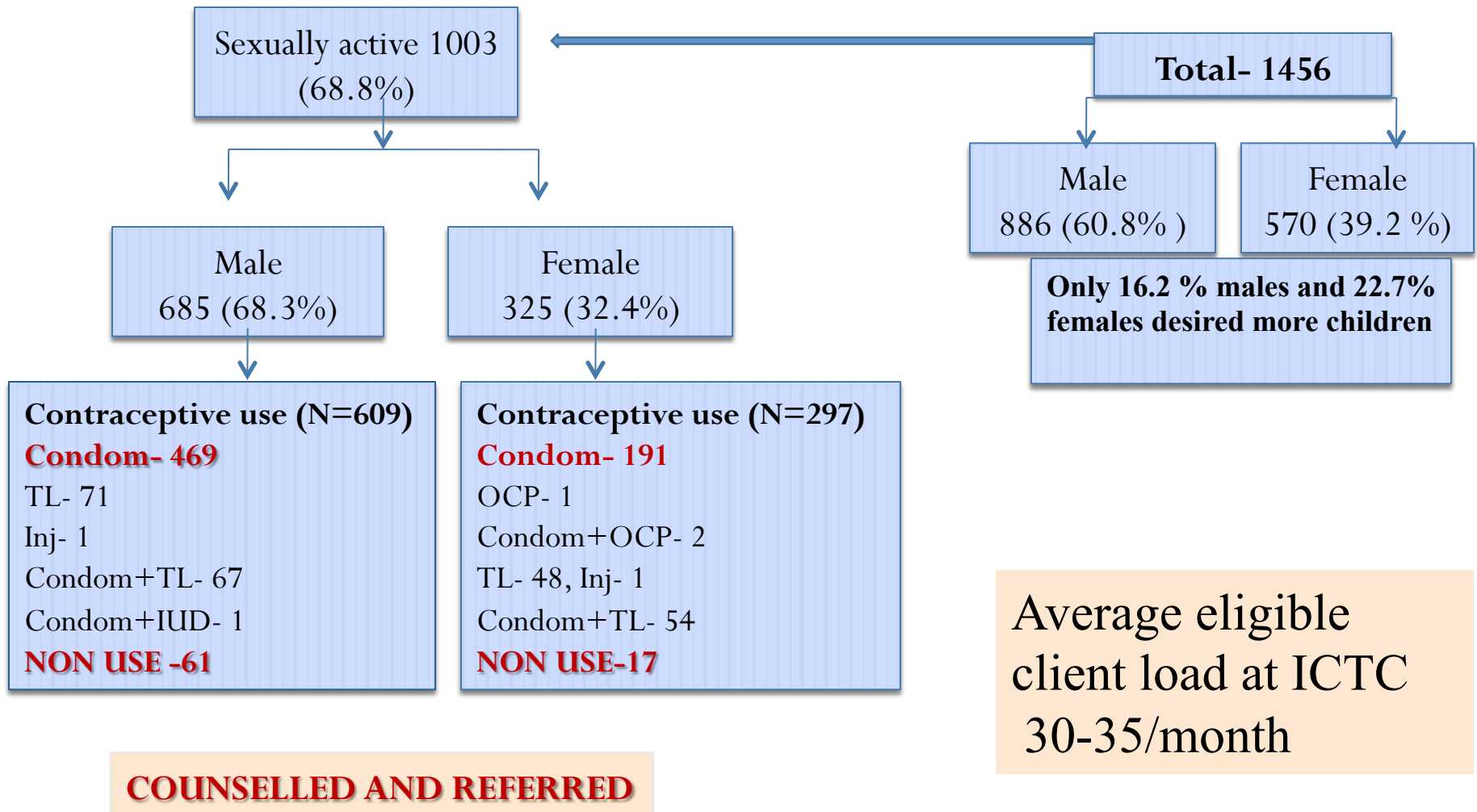


Publications

Accepted

- Beena Joshi, Srabani mukherji, Anushree Patil, Ameya Purandare, Sanjay Cahuhan and Rama Vaidya “A cross sectional study of Polycystic Ovarian Syndrome (PCOS) among adolescent and young girls in Mumbai, India“ India Journal of Endocrinology and Metabolism
- Rama Vaidya and Beena Joshi, “Adolescent Obesity and PCOS: A dual emergence during childhood and /or pubertal transition” a book chapter in Obesity and PCOD ,An IJCP publication

MIS being maintained at ICTC (Jan 12-Sept 13)



Discontinuation and pregnancies

- Injectable users (7) followed by OC pill users (5)
- Injectable users discontinued after 2 injections (6mths) while OC pill discontinued after 2-3 months
- Fertility desires changed over time due to a number of reasons such as family pressure, newly detected status of the previous child, health status
- Pregnancies reported in both groups control (24) and experimental (19)
- Unplanned pregnancies were reported more in control (20) compared to experimental (13)
- However unplanned pregnancies in experimental group reported early and underwent abortions (90%) compared to control (60%)
- Acceptance of methods after abortions

Details of acceptors

- 83- reached FP center (Sion 61, NGO-11, BMC-7, Pvt -4)
- (37/83 who reached FP center but did not accept) 9 only condom use, 5 fear about side effects, 3 felt not fit and healthy to use other methods, 2 declared unfit by MO, 16 wanted to undergo TL at a later date, 1 no support from family and 1 needed time to decide Unplanned 13 – only condom (12) irregular pill and condom use (1)
- All planned were regular condom use
- Discontinue
- OC pill –side effects and ill health (2), irregular use (3)
- Injectable- side effects (2), ill health (1) planned pregnancy (1) , cannot afford(1)
- IUD- PID (1)

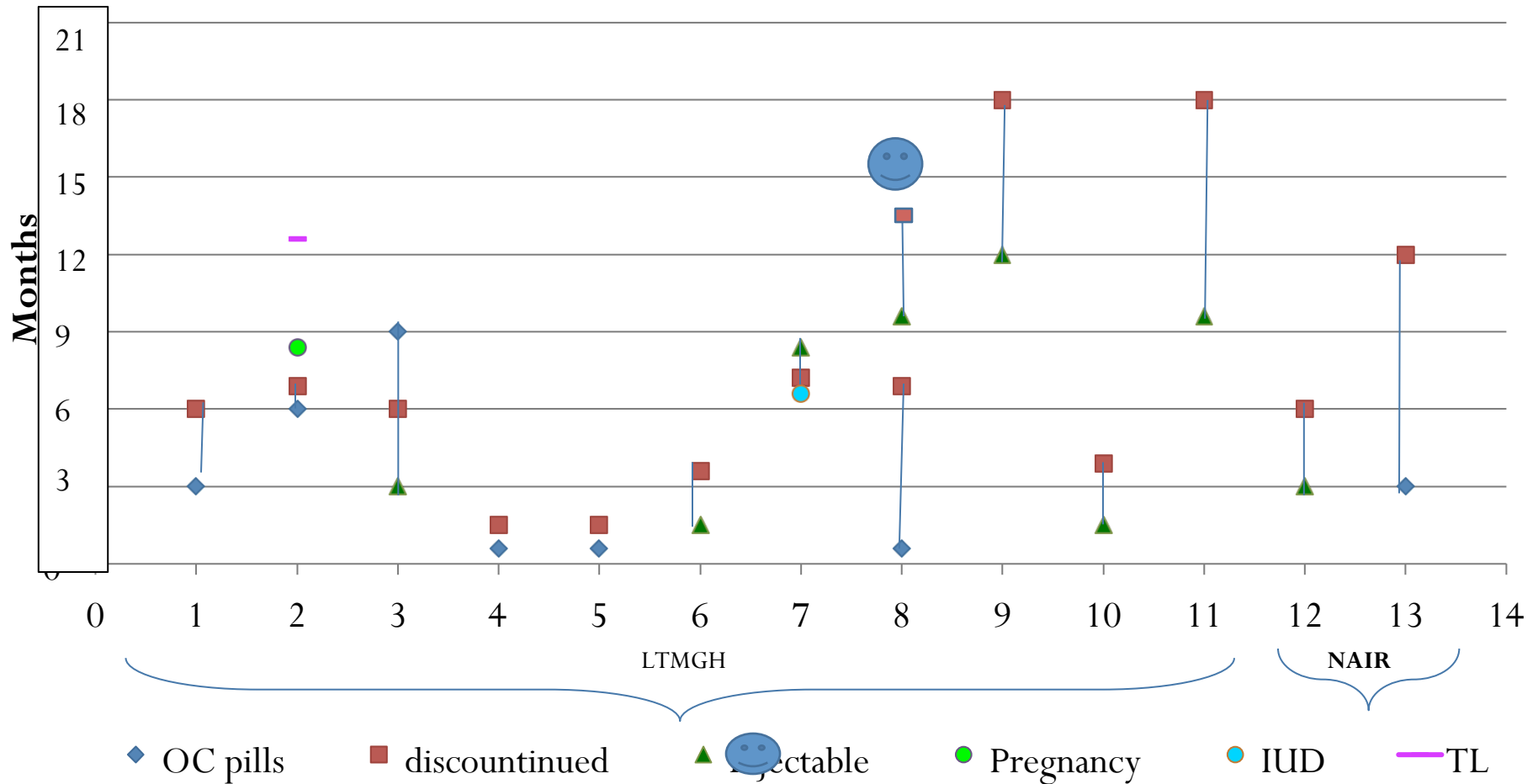
Summary

- Intervention effective in improving use of dual methods along with consistent condom use
- Women with HIV have similar socio cultural issues that affect contraceptive decision making coupled with HIV related health morbidities – Choice limited
- Abortion/Sterilisation procedures at tertiary care very time consuming
- Cost incurred- training, IEC material, incorporation of FP referral on the existing slip, inclusion in MIS
- Support group meetings - involvement of ORWs and NGOs
- Guidelines for assessing client eligibility if positive (CD4)
- Role of multiple HIV service delivery sites in promoting contraception
- Injectable and Emergency Contraception availability
- Supportive supervision and inclusion in MIS
- Need for conducting further implementation research in different settings with varying HIV prevalence and contraceptive prevalence rate

Recommendations

1. Outline of Service Delivery Package for effective HIV- FP linkages
 - Identifying cases with unmet need for contraception at ICTC /PPTCT and promotion of dual methods along with consistent use of condoms at all HIV service sites
 - Develop MIS to capture information on pregnancies, abortions and contraceptive use
 - Develop advocacy IEC material on dual method use and flip charts for counseling
 - Make referrals to Family Planning services through referral slips and ensure easy access to services
 - Trained providers to assess eligibility of positive people to use contraceptives
 - Strengthen cross talk between HIV and Family planning providers and check cross referrals
 - Repeated counseling and promotion of dual method use at ART centers and Outreach workers
2. Uniform national guidelines to provide family planning services to HIV positive people need to be formulated.
3. Conduct an implementation research project to test the results in larger and different setups

Accepted methods and discontinued



Reasons

Side effects, ill health, Can't afford injectables, , PID, irregular use

Extrapolating the results

Population of Mumbai	12,478,447
Adult HIV prevalence	0.3%
Total infected people in Mumbai	37,435
Adult prevalence (93%)	34,814
Infected Females- 39%	13,577
Women in the age group 15-45 (89%)	12,083
Unmet need for contraception (13%) at risk of unwanted pregnancies	1,570
If intervention given to these women , the number of women who would be protected from risk of pregnancy	125

Challenges

HIV -TB linkage	HIV –FP Linkage
Referral slip gives direct access to services	Seperate OPD paper
TB is a disease where patient is motivated to access care	Family Planning is not a dire emergency and is least on their mind at ICTC
Immediate health benefits	Indirect health benefits not very visbile
Compulsory referral – 60% reach ensured by followup	Time constraints No followup done
Access to free TB drugs limited outside public settings	Family planning access more wider in public dispensaries or private doctors/ NGOs
Initiation of treatment does not depend on any underlying health conditions	Female centric methods are dependent on the day of menstrual cycles
	Decision making Constraints on eligibility to use methods

Four prong strategy of PPTCT

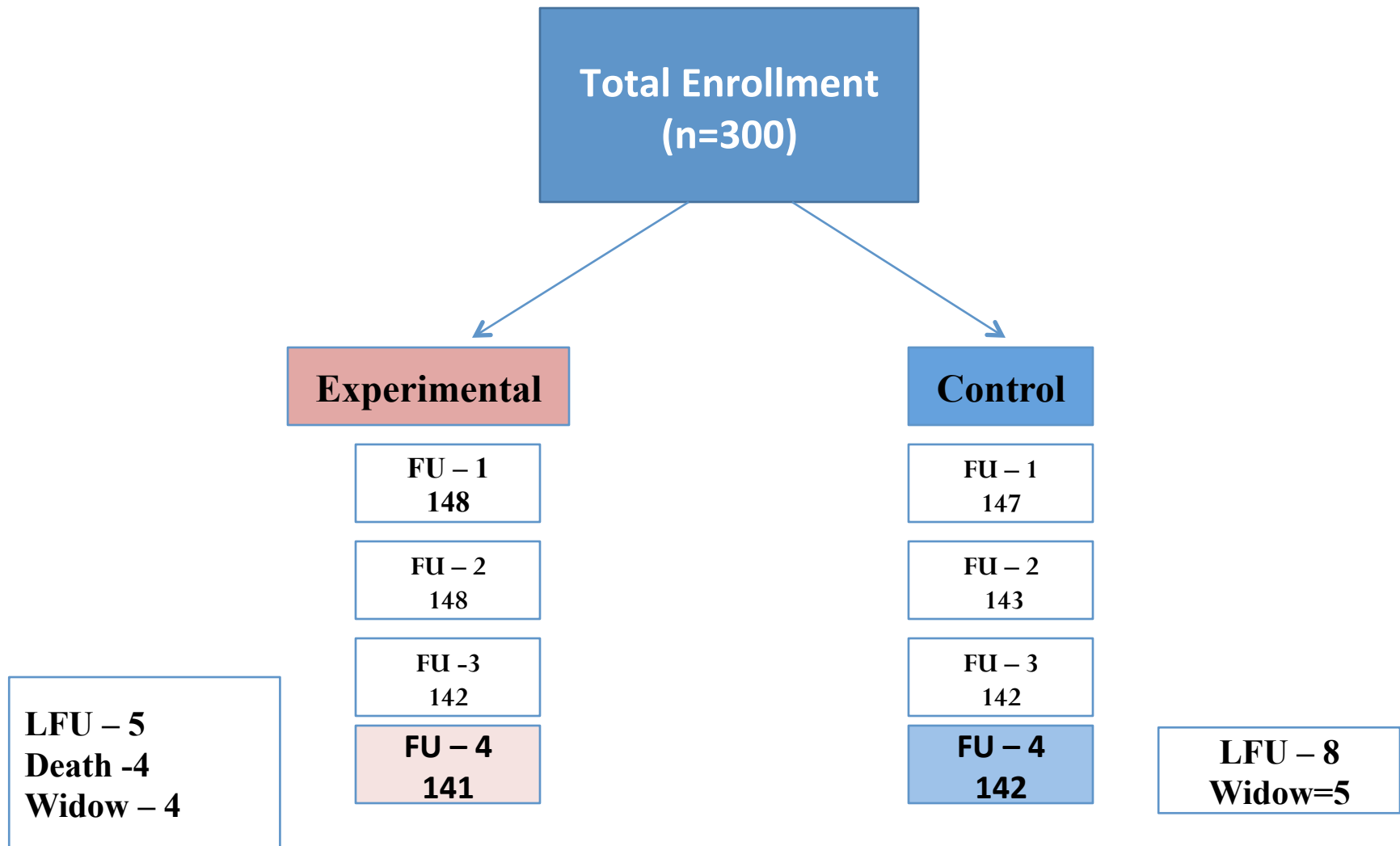
The United Nations PPTCT strategy outlines four approaches necessary for reducing mother-to-child transmission:

1. preventing HIV infection among individuals planning to have children – **Condom promotion, safe sex**
2. preventing unintended pregnancies among HIV-infected women
3. providing HIV counseling and testing to expectant mothers and providing antiretroviral prophylaxis HIV-infected mothers and their newborns – **Option B plus**
4. supporting HIV-infected mothers and their families – **public private partnership , PLHIV networks**

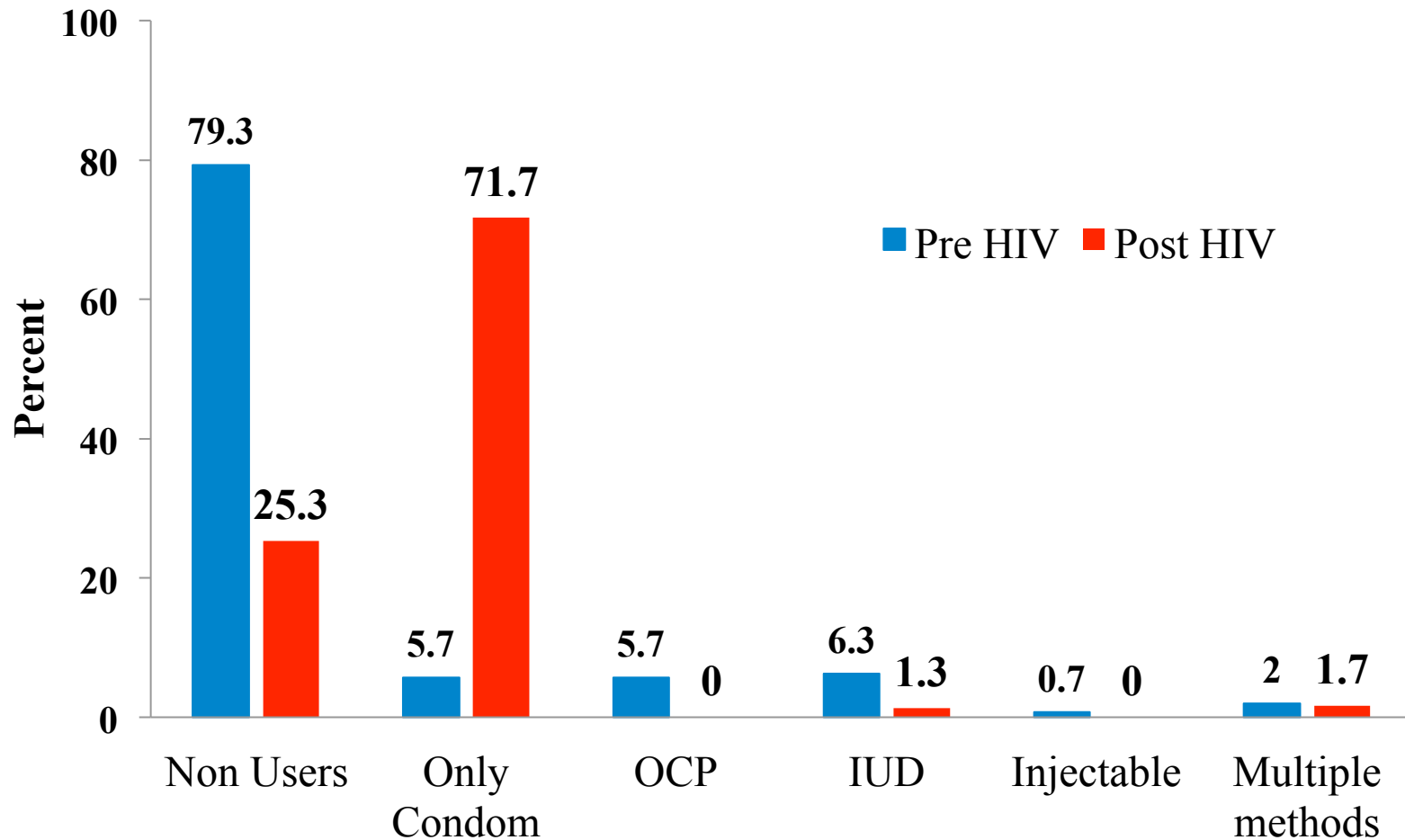
Benefits of investing in Prong 2

- Existing ARV-PPTCT likely averted 8.1% of infections and 8.5% of deaths. Family Planning use likely averted 19.7% of infections and 13.1% of deaths ([Hladik W, Stover *et al.*, 2009](#))
- For any given amount of money, increasing contraceptive use averted 22% more HIV-positive births than did the traditional PPTCT strategy. Reducing unmet need for contraception was more cost-effective for preventing HIV-positive births than was the current programmatic emphasis on HIV counseling and testing coupled with nevirapine provision. [FHI \(2007\)](#)

Participant enrollment and follow-up

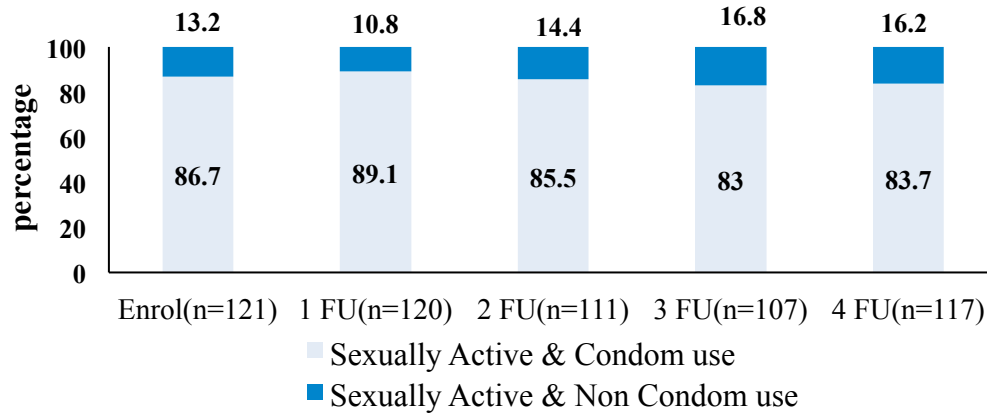


Contraceptive methods used before and after HIV

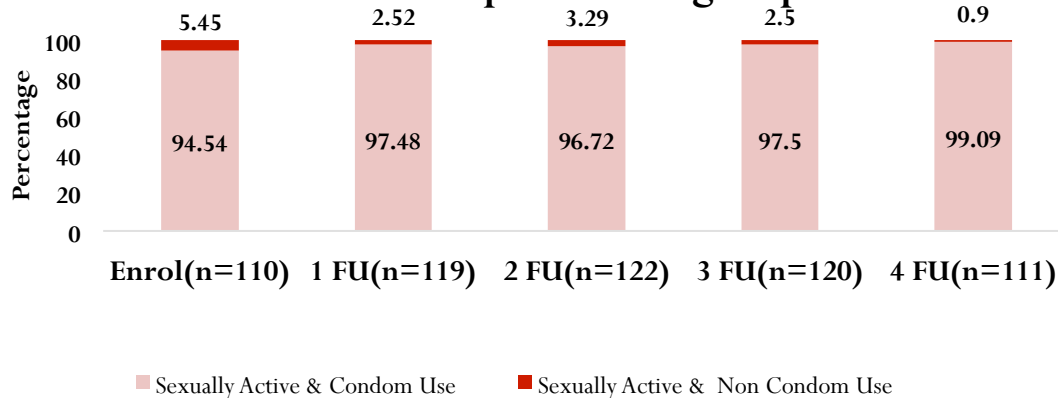


Condom Use

Condom use among sexually active participants over time : Control group



Condom use among sexually active participants over time : Experimental group



Regular Condom Use (%)

Time Reference	Control	Experiment	P value
Enrol.	76.8% n=121	86.3% n=110	0.887
1 FU	88% n=120	89.% n=119	0.003
2 FU	80% n=111	93.4% n=122	0.01
3 FU	81.2% n=107	94.2% n=120	0.001
4 FU	82% n=117	96.3% n=111	0.014