

A community randomized trial of enhanced family planning effort in a Ugandan HIV Surveillance Program

**Tom Lutalo¹, Zikulah Namukwaya¹,
Godfrey Kigozi¹, Edward Kimera¹,
Fred Nalugoda¹ David Serwadda¹,
Maria Wawer², Ron Gray²**

¹Rakai Health Sciences Program

²Johns Hopkins Bloomberg School of Public Health

Linking Reproductive Health, Family Planning and HIV/AIDS in Africa

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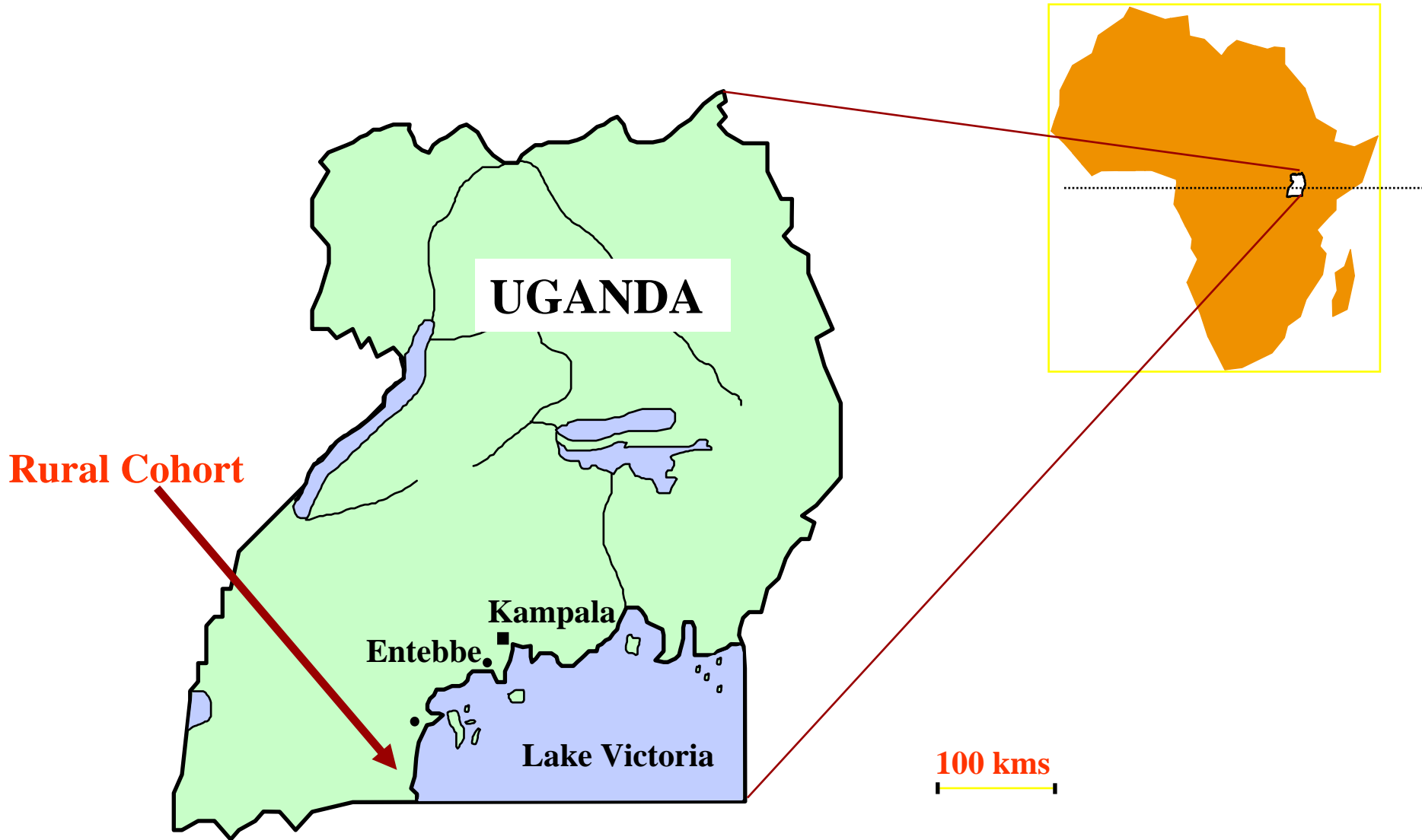
Background

The Rakai Health Sciences Program (RP)

- **Since 1994 a cohort of ~12,000 adults aged 15-49 yrs has been under annual surveillance**
- **RP provides health education about**
 - **STDs & HIV**
 - **Family planning**
 - **Abstinence and condom promotion for prevention of STDs and HIV**
 - **Condoms which are also provided free of charge or at subsidized prices**

Background II: Earlier Cohort trends and FGD results

- Analysis of cohort data showed increased modern FP and condom use between 1995-98 (Lutalo, *SFP*)
 - Half of female respondents said wanted no more children
 - **Only 13% of these women were using contraceptives**
 - ¼ of respondents wanted to delay pregnancy by >2 yrs
 - **15% were practicing family planning**
- Misconceptions occurred about potential health risks especially with respect to *adverse effects on fertility* and *health of future children*
- FGD participants were more vocal about perceived health risks of FP than about potential benefits
- Impediments included *women's access* to FP services, *costs* of contraception and *men's negative attitudes* towards FP
- There was a need for more service outlets, better training of service providers and sensitization especially of men
- Provision of specialized adolescent services was emphasized.
- Identified a need to introduce and evaluate interventions to correct misconceptions, and to improve access to quality services.



Objectives of Intervention

- **Establish and maintain community based outreach programs to improve family planning awareness and utilization**
- **Evaluate impact of intervention using cohort data**

Funding

1999-2003, received support from Gates Institute at Johns Hopkins Bloomberg University

Methods

Formed a reproductive health (RH) research team

- **6 clusters were randomized to FP intervention**
- **Used existing service delivery points and personnel**
- **Recruited community based volunteers in the 6 clusters
(most identified by community members)**
- **Used Rakai Program Community based HIV counselors**
- **Involved District Health personnel**
- **Opened a RH center for adolescents**

Activities

- **Outreach Programs in the six clusters**
 - Training and follow up of Community Based Reproductive Agents (**COBRAs**)
 - Training and follow up of Service Delivery Providers (**SDPs**)
 - Programs for both in-school and out of school adolescents
 - Drama sessions (using themes developed by community members) plus video shows
 - Involved Traditional Birth Attendants for IEC (**TBA**s)
 - Community mobilization and sensitization using both RH team and Cohort teams
 - Established an Adolescent Reproductive Health Center (ARHC)
 - Developed IEC materials
- **Service Delivery**
 - Supplied and equipped COBRAs to supply condoms and oral contraceptives
 - Supplied SDPs to provide condoms, oral contraceptives, injections
- **Monitoring and Evaluation**
 - Initiated and supervised record keeping by COBRAs and SDPs
 - Trend analysis using cohort data (FP and Non-FP regions)
- **Dissemination of findings**
 - Village meetings
 - Shared experiences (SDPs, COBRAs, Certified Satisfied Users)
 - Reported to District Health Team
 - Shared experience with Medical and MPH students

Evaluation of impact

- **Based on process data and annual cohort survey data**
 - **Process data**
 - » providers trained, clients served, services provided
 - **Survey data**
 - » 15-49 yrs sexually active men, non preg women
 - » Trends in contraceptive use by arm
 - » Focus on methods provided by volunteers
 - » Chi-square tests of statistical significance
 - » Multivariate Logistic Regression to est. adjusted OR and 95% CI of contraceptive use at FUP assoc. with intervention

Process data: Intervention Activities 1999-2003

- **Personnel**
 - 593 volunteers (131 COBRAs, 123 SDPs, 81 Satisfied Users, 138 Opinion Leaders, 120 TBAs)
- **Information, Education and communication**
 - All communities in all the six FP regions had drama shows, videos and sensitization meetings
- **ARHC (targeting those aged 10 – 23 yrs) established at field station**
 - Access to clinical services
 - VCT
 - Contraceptives
 - IEC (sexuality and FP)
- **Use of community based HIV counselors for promotion of FP**
- **Client contacts by volunteers**
 - 8,067 client contacts by SDP
 - 15,473 client contacts by COBRAs

Analyses of Cohort Data

- **Compared FP use at baseline (1999-2000; RND 6) and after over 30 months follow up (2003-04; RND 9) in FP and non-FP clusters**
- **Stratified analyses by peri-urban and rural location**

Cohort baseline and follow up Study populations

FP Intervention

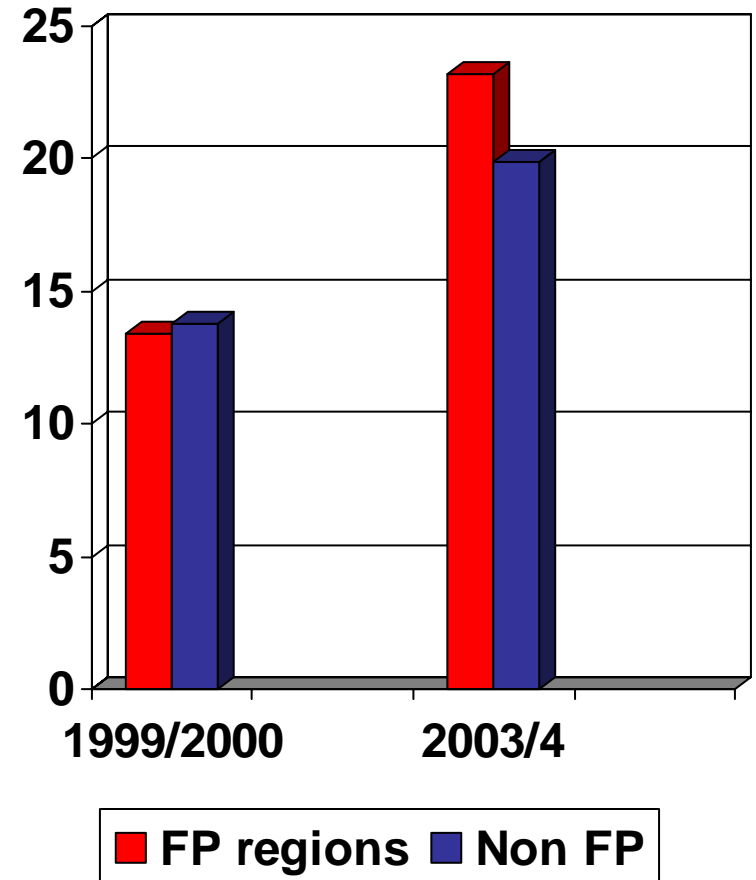
	Baseline	Follow up
n	6720	5944
Rural	5394 (80%)	4740 (80%)
Peri-urban	1326 (20%)	1204 (20%)

Non FP Intervention

	Baseline	Follow up
n	3574	3285
Rural	2980 (83%)	2724 (83%)
Peri-urban	594 (17%)	561 (17%)

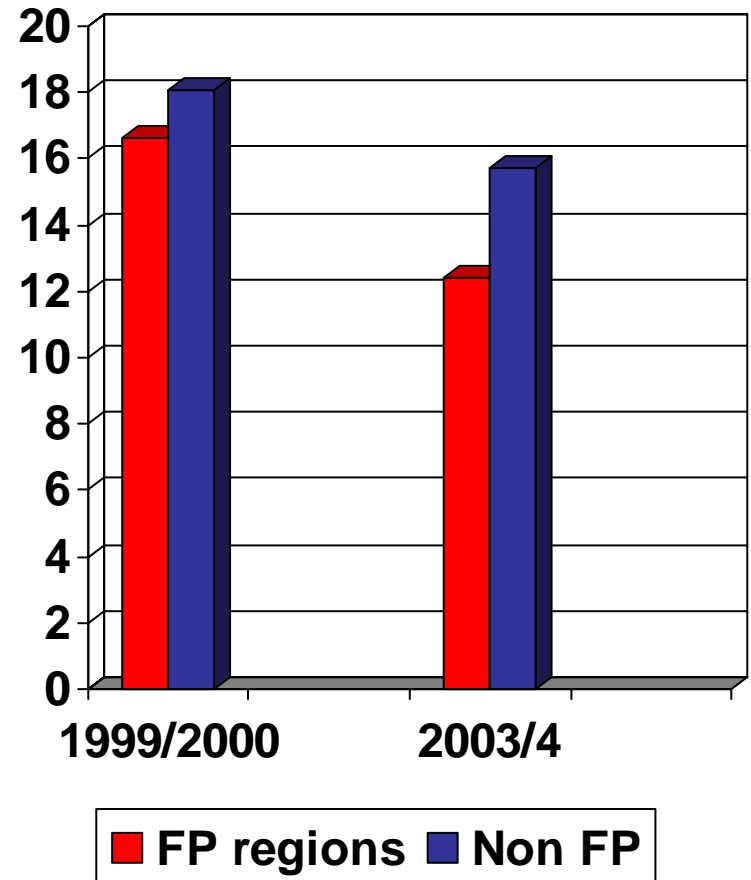
Use of Female Controlled Contraceptives between baseline and follow up by study arm

- Use of female controlled contraceptives was similar at baseline
(13.4% Vs 13.8%, $p=0.69$)
- At follow up, female controlled contraceptive use was significantly higher in the FP regions compared to non FP regions
(23.2% Vs 19.9%, $p=0.009$)

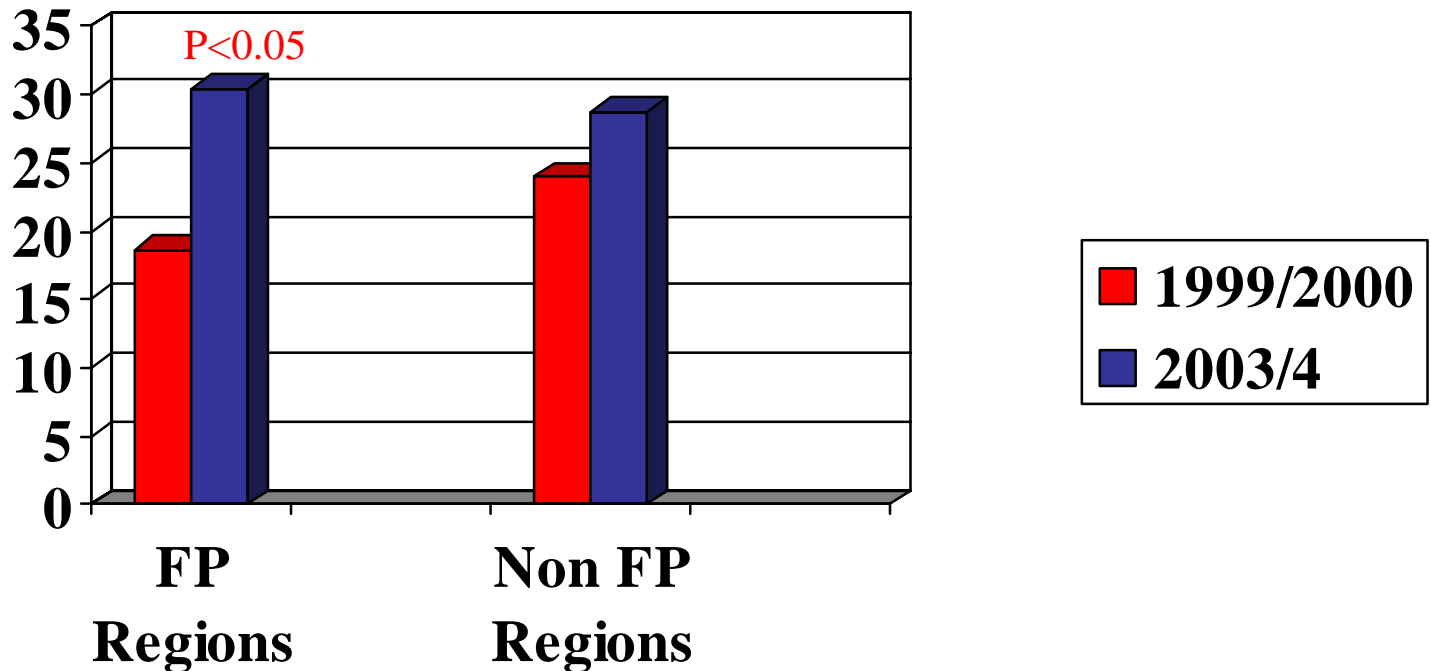


Pregnancy rates between baseline and follow up by study arm

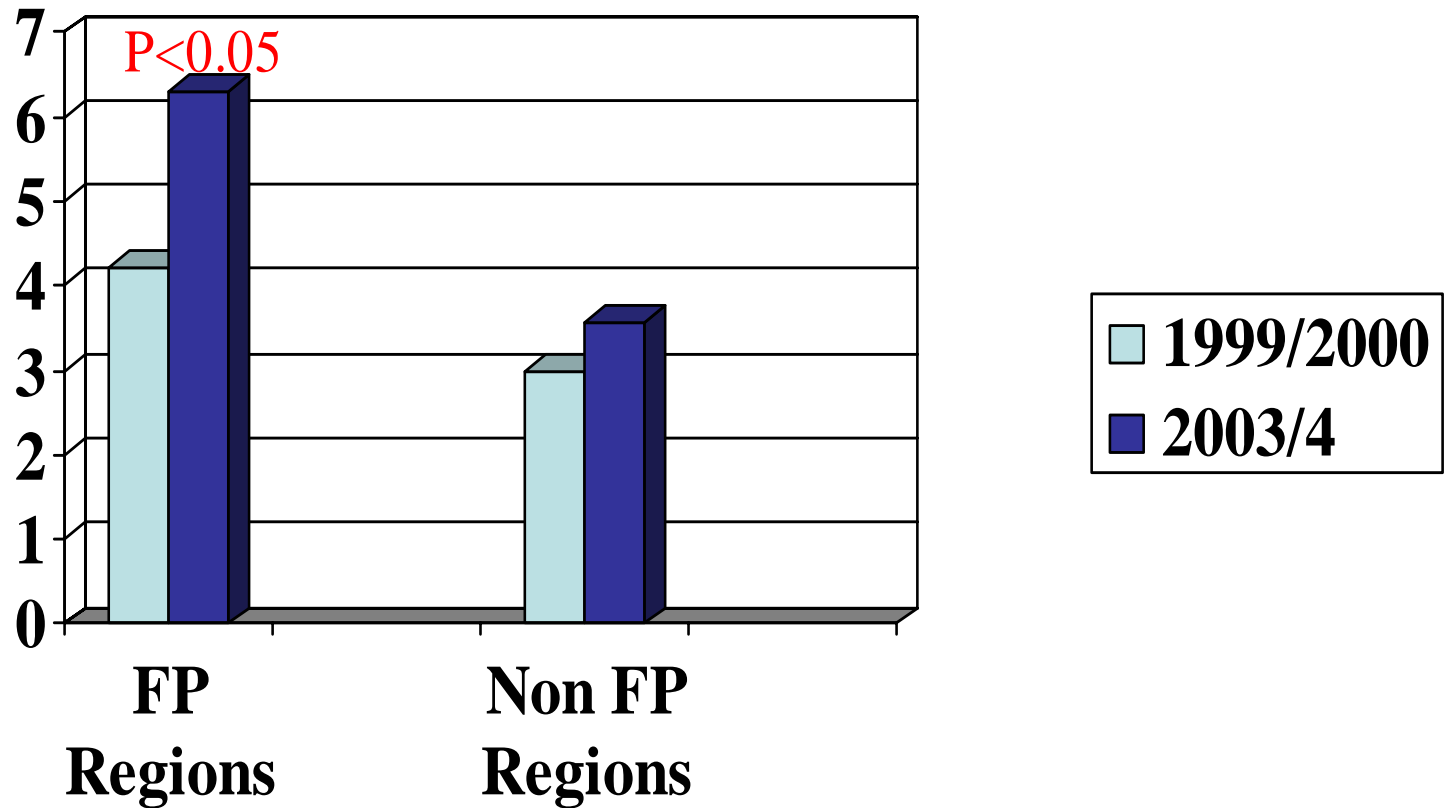
- Pregnancy rates at baseline were comparable (16.6% Vs 18.1%, $p=0.13$)
- At follow up pregnancy rates were significantly lower in the FP regions compared to the non FP regions (12.4% Vs 15.7%, $p=0.002$)



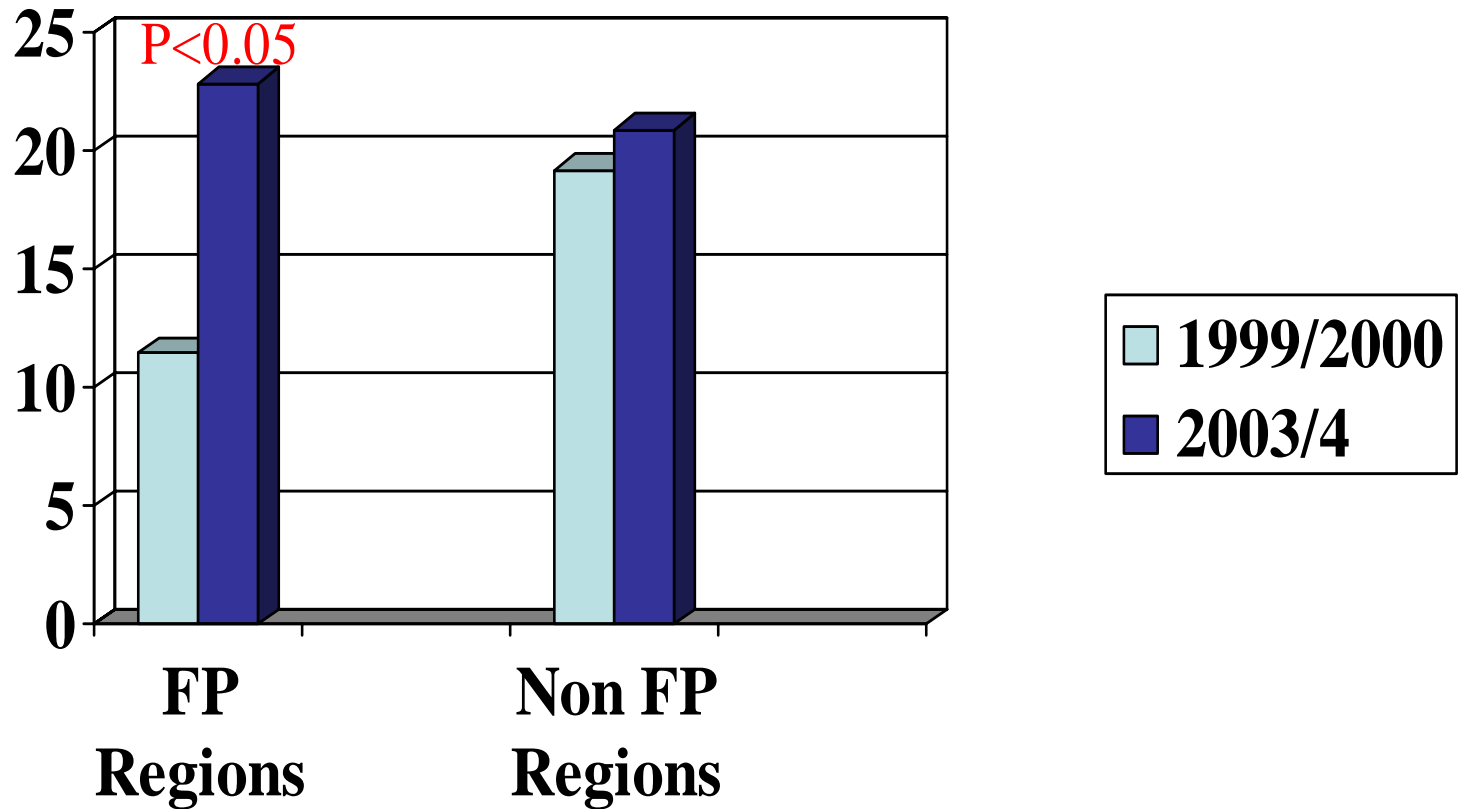
Use of Female Controlled Contraceptives in Peri-Urban Communities



Use of Oral Contraceptives in Rural Communities



Use of Injectables in Peri Urban Communities



Condom use and adjusted analysis

- **Condom use by males in the two study arms did not change significantly between baseline and follow up**
(Intervention: 23.2% to 22.5%)
(Control: 22.7% to 21.2%)
- **Duration of intervention, education and number of children were strong determinants of hormonal contraceptive use**

Summary

- **The intervention resulted in**
 - **modest but statistically significant increased use of hormonal contraceptives (pill & injections)**
 - **Lower pregnancy rates in intervention arm**

Public Health challenges for such an intervention

- **Intensive supervision of the volunteers**
- **Increase in counseling time by resident HIV counselors for quality FP counseling**
- **Higher demand for modern contraceptives**
- **Need to establish regional adolescent reproductive centers**
- **Sustainability and roll out to other areas requires government involvement**

RHSP appreciates the efforts of

**The Gates Institute at Johns Hopkins
Bloomberg University**

The RH team

The volunteers

The District Health staff

Thank You