FP: What’s New, What’s Hot, and What Does It Mean for LAC

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### Part I. Context for FP in LAC: High CPR, but outliers

<table>
<thead>
<tr>
<th>Subregion</th>
<th>All method CPR (%, married women)</th>
<th>Modern method CPR (%, married women)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>74</td>
<td>69</td>
</tr>
<tr>
<td>LAC</td>
<td>72</td>
<td>63</td>
</tr>
<tr>
<td>South America</td>
<td>75</td>
<td>66</td>
</tr>
<tr>
<td>Central America</td>
<td>67</td>
<td>59</td>
</tr>
<tr>
<td>Caribbean</td>
<td>62</td>
<td>58</td>
</tr>
<tr>
<td>Mexico / Guatemala</td>
<td>68 / 54</td>
<td>60 / 44</td>
</tr>
<tr>
<td>D.R. / Haiti</td>
<td>73 / 32</td>
<td>70 / 25</td>
</tr>
<tr>
<td>Colombia / Peru</td>
<td>78 / 71</td>
<td>68 / 48</td>
</tr>
<tr>
<td>Brazil / Bolivia</td>
<td>77 / 61</td>
<td>70 / 35</td>
</tr>
</tbody>
</table>

PRB, Family Planning Worldwide 2008 Data Sheet; DHS, 2008-09 Preliminary information, Guatemala
Young, growing population in LAC: 30% < 15: future need for more FP services is certain

- 1950: 166 Million
- 2000: 513 Million
- 2050: 808 Million
FP reduces maternal mortality and morbidity
- MMR 15 times higher in LAC than in developed regions
- One death per 770 births in LAC (vs. 1 per 11,000 births in developed regions)
- MMR: 230 in Bolivia; 221 in rural Guatemala

FP reduces abortion
- LAC: 2nd highest abortion rate in world (after Eastern Europe)
- Totals unchanging: 4.1 million abortions in 2003, 4.2 million in 1995
- WHO & FIGO now define FP as part of PAC

FP contributes to achievement of MDGs:
- Poverty / equity / gender / national development
- CPR and unmet need for FP now MDG 5 indicators
Part II: What’s new in FP thinking & programming?

Seven Habits of Highly Successful Programs

- Following principles of fostering & sustaining behavior change
- Ensuring access to quality services, in all its dimensions
- Holistic programming (supply, demand, enabling environment)
- Focusing on meeting clients’ reproductive intent
- Focusing also on the provider: “no provider, no program”
- Greater focus on method effectiveness: “Not all FP is the same”
- Ensuring contraceptive security [more than “commodity security,” or “product”]
Fostering change in medical settings: Some key considerations

- **Perceived benefit**: most important variable influencing rate & extent of adoption of new provider or client behavior
  
  “What’s in it for me?”

- Greater the **perceived relative advantage**, the more rapid the rate of adoption/change

- Other important variables:
  - **Compatibility** with medical system’s norms, standards, practices
  - **Simplicity** of new behavior

- Technological change has “hardware” and “software”

- Fostering change requires repetition of effort & takes time
It’s in the eye of the “changee”
Slow pace of change in medical settings

U.S. examples:
- Unnecessary hysterectomies: 80,000 annually
- 500,000 unnecessary C-sections, every year!
- Correct treatment of heart attacks by experts: 11-year lag
- Non-scalpel vasectomy (NSV):
  > 1972: invented in China
  > 1980s: proven better / adopted as main approach in FP programs
  > 2003: WHO still calling it a “new method”
  > 2004: 51% (only) of vasectomies in U.S. via NSV
  > 2010: ARHP CTU: despite evidence, no preference given to NSV
Why is change slow in medical settings?

- Conservative and hierarchical
- Lack of perceived need for change
  “What’s worked for me is working”
- Lack of provider motivation to change
- Lack of knowledge or understanding
  - of latest scientific findings
  - of benefits and risks of FP methods
- Fear of iatrogenic disease: *Primum non nocere!*
  - Great fear of “harm of doing” vs. “harm of not-doing”
  - FP perceived as a potential danger
  - Risks a woman faces from (unwanted) pregnancy not considered
“… well-intentioned but inappropriate policies or practices, based … medical rationale, that result in scientifically unjustifiable impediment to, or denial of, contraception.”

Doctors are the “gatekeepers”

Common medical barriers in LAC:
- Limitations on provider cadres
- Provider bias against (or for) a method
- Inappropriate eligibility restrictions
- Unsubstantiated “contraindications”
- Process hurdles (e.g., lab tests)

Many barriers to FP access in LAC

Barriers to FP services
- Location
- Medical
- Physical
- Knowledge
- Cost
- Myths
- Inappropriate eligibility criteria
- Gender
- Socio-cultural norms
- Regulatory
- Socio-cultural
- Time
- Legal
- Poor CPI
- Provider bias

Categories of Barriers
- Cognitive
- Socio-cultural
- Geographic
- Financial / cost
- Health care system
  - Structure
  - Provider-level factors
Not all FP is the same: Relative effectiveness of various FP methods in preventing pregnancy

<table>
<thead>
<tr>
<th>Method</th>
<th>Number of unintended pregnancies among 1,000 women in 1st year of (typical) use</th>
</tr>
</thead>
<tbody>
<tr>
<td>No method</td>
<td>850</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>270</td>
</tr>
<tr>
<td>Female condom</td>
<td>210</td>
</tr>
<tr>
<td>Male condom</td>
<td>150</td>
</tr>
<tr>
<td>Pill</td>
<td>80</td>
</tr>
<tr>
<td>Injectable</td>
<td>30</td>
</tr>
<tr>
<td>IUD (CU-T 380A / LNG-IUS)</td>
<td>8 / 2</td>
</tr>
<tr>
<td>Female sterilization</td>
<td>5</td>
</tr>
<tr>
<td>Vasectomy</td>
<td>1.5</td>
</tr>
<tr>
<td>Implant</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Continuation rates of various FP methods

<table>
<thead>
<tr>
<th>Method</th>
<th>% Continuing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tubal ligation</td>
<td>~100%</td>
</tr>
<tr>
<td>Vasectomy</td>
<td>~100%</td>
</tr>
<tr>
<td>Implants</td>
<td>94%</td>
</tr>
<tr>
<td>IUD</td>
<td>84%</td>
</tr>
<tr>
<td>OCs</td>
<td>52%</td>
</tr>
<tr>
<td>Injectable</td>
<td>51%</td>
</tr>
<tr>
<td>Periodic abstinence</td>
<td>51%</td>
</tr>
<tr>
<td>Condoms</td>
<td>44%</td>
</tr>
</tbody>
</table>

Source: The ACQUIRE Project 2007. Reality √, from DHS data, worldwide
Suboptimal quality & use: high discontinuation rates in LAC

Discontinuation within 1 year

Source: CDC, Guatemala RHS Survey, 2002
Suboptimal fit with reproductive intentions

**Bolivia**

- Periodic abstinence: 24%
- Withdrawal: 5%
- Female sterilization: 11%
- IUD: 11%
- Injection: 10%
- Other modern: 4%
- Vasectomy: 0%
- Pill: 4%
- Non-use (unmet need): 28%

**Haiti**

- Non-use (unmet need): 55%
- Injection: 17%
- IUD: 3%
- Implant: 3%
- Injection: 11%
- Pill: 5%
- Condom: 4%
- Vasectomy: 0%
- Female sterilization: 0%
- Other modern: 2%
- Periodic abstinence: 6%
- Withdrawal: 6%

**Demand for FP to limit**

**(60% of all women)**

**Source:** MEASURE/DHS, Bolivia DHS Survey, 2003.

**Demand for FP to limit**

**(41% of all women)**

**Source:** MEASURE/DHS, Haiti DHS Survey, 2006.
Part III. What’s new in contraception of relevance to LAC?

1. Injectables
2. Hormonal Implants
3. IUDs (CuT 380A, LNG-IUS)
4. Female Sterilization
5. Vasectomy
6. Emergency Contraception
WHO FP handbook: En español, para usted
1. Injectables: Key characteristics

- **High use, rising popularity in LAC [MWRA]:**
  - Nicaragua 23% (2006), was 6% (1998); Colombia 13% (2007), up from 4% (2000)
  - El Salvador 11% (2002), up from 0.4% (1985); Honduras 14% (2005-06)
  - Bolivia 11% (2008), up from 1% (1998)

- **Safe and suitable for almost all women**
  - MEC Category 1, age 18-45; (younger or older: Category 2)
  - Any parity; post-abortion, or PP (if breastfeeding, 6 wks PP); HIV-infected, or with AIDS

- **Mechanism of action:** prevents ovulation, thickens cervical mucus

- **Use-effectiveness:** 3 pregnancies per 100 women-yrs of use

- **Counseling important** re bleeding changes
“Grace period” extended by WHO (OK up to 4 weeks late)

Bone density (temporary, reversible, no Δ in MEC [WHO, 2005])

No association with HIV acquisition or progression

Community-based provision of injectables:

WHO, 2009: “Safe and effective”
New formulation of Depo-Provera: Depo-subQ Provera 104, for delivery with Uniject

Potential “home run”

Depo-subQ Provera 104:
- New formulation for subQ injection
- 30% lower dose (104 mg vs. 150 mg)
- Fewer side effects
- Same effectiveness, same length of protection (>3 months)
- Approved by USFDA (2005) and UK
- Potential for home- and self-injection
- Available to USAID in 2011?

Uniject:
- Single dose, single package
- Prefilled, sterile, non-reusable
- Short needles for subQ injection (easier use by non-clinical personnel)
- Compact; easy to use and store
2. Hormonal implants

- Small, progestin-releasing, subdermal rods
- WHO MEC Category 1 for nearly all women
- Highly effective (pregnancy rate ~ 1 / 2000 in 1st yr)
- Labeled effective for 3-5 years, depending on implant type
- Continuation rates high
  (if good counseling and proper side effects management)
- Gaining popularity as price ↓↓
<table>
<thead>
<tr>
<th></th>
<th>Sino-implant (II)</th>
<th>Jadelle</th>
<th>Implanon</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manufacturer</strong></td>
<td>Shanghai Dahua Pharmaceutical</td>
<td>Bayer HealthCare</td>
<td>Schering Plough / Organon</td>
</tr>
<tr>
<td><strong>Formulation</strong></td>
<td>150 mg levonorgestrel In 2 rods</td>
<td>150 mg levonorgestrel In 2 rods</td>
<td>68 mg etonogestrel In 1 rod</td>
</tr>
<tr>
<td><strong>Mean Insertion &amp; Removal time</strong></td>
<td>Insertion: 2 min Removal: 4.9 min</td>
<td>Insertion: 2 min Removal: 4.9 min</td>
<td>Insertion: 1.1 min Removal: 2.6 min</td>
</tr>
<tr>
<td><strong>Labeled duration of product use</strong></td>
<td>4 years</td>
<td>5 years</td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Trocars</strong></td>
<td>Disposable</td>
<td>Autoclavable / Disposable</td>
<td>Pre-loaded disposable</td>
</tr>
<tr>
<td><strong>Cost of implant (US$)</strong></td>
<td><strong>$8.00</strong></td>
<td>$24</td>
<td>$20</td>
</tr>
<tr>
<td><strong>Cost per Year (if used for duration)</strong></td>
<td>$2.00</td>
<td>$4.80</td>
<td>$6.70</td>
</tr>
</tbody>
</table>
Registration status of Sino-implant, world & LAC

**REGISTERED (n=6)**
- China
- Indonesia
- Kenya
- Madagascar
- Sierra Leone
- Zambia

**In Progress (n=20)**
- Argentina
- Bangladesh
- Bolivia
- Brazil
- Burkina Faso
- Chile
- Colombia
- Dominican Republic
- Ecuador
- Fiji
- India
- Mexico
- Mozambique
- Nigeria
- Peru
- Russia
- South Africa
- Sudan
- Venezuela
- Zimbabwe

**Under Review (n=10)**
- Burundi
- Ethiopia
- Ghana
- Malawi
- Mali
- Nepal
- Pakistan
- Rwanda
- Tanzania
- Uganda
*Direct costs include the commodity, materials and supplies, labor time inputs and annual staff salaries. The height of each bar represents the range of cost per CYP across the 13 USAID priority countries, while the diamond shows the average value.
3. IUDs: Key characteristics

♦ Reframing: almost all women can use an IUD
  – Good for “spacers” and “delayers,” as well as “limiters”
  – Good option for HIV+ women

♦ Highly effective (>12-13 yrs): “Reversible sterilization”

♦ More service cadres can provide (because non-surgical)

♦ Most cost-effective method (after ~ 2 yrs), yet …

♦ Provider concerns (“myths”):
  ♦ Pelvic inflammatory disease (PID), infertility, HIV/AIDS

♦ Thus “The IUD has the worst reputation of all methods -- except among those using it!”
IUD and risk of PID: Very Low (far lower than providers realize)

PID Incidence Rate by Time Since Insertion

PID Rate (per 1000 woman-years)

Source: Farley et al, 1992, in FHI 2004
Data from Mexico and Thailand
IUD and other risks

- Infertility associated with IUD?: No:
  - Study done in Mexico (Hubacher et al, NEJM, 2001)
  - Infertility due to Chlamydia, not the IUD
  - IUD-associated infertility: “immeasurable and not of PH significance”

- IUD use associated with HIV/AIDS?: No:
  - IUD use does not increase risk of HIV acquisition
  - Use of IUD by HIV-infected women is safe
    (same—low—rates of overall and infectious complications)
  - IUD use in HIV+ woman does not ↑risk to HIV-neg. male partner

Challenge: these facts not widely known; and hard to change “truths”
<table>
<thead>
<tr>
<th>Condition</th>
<th>Category</th>
<th>Initiation</th>
<th>Continuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased general risk of STI (high prevalent setting)</td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>High <em>individual</em> risk of STI</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Current chlamydial or GC infection, or purulent cervicitis</td>
<td></td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>HIV positive</td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>AIDS</td>
<td></td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>AIDS and clinically well on ARV</td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

### LNG-IUS: “the best of both worlds”

<table>
<thead>
<tr>
<th>Oral contraceptives</th>
<th>Intrauterine devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very effective</td>
<td>No daily action needed</td>
</tr>
<tr>
<td>Reduction of menstrual loss</td>
<td>Long-acting</td>
</tr>
<tr>
<td>Reduction of pelvic inflammatory disease</td>
<td>Estrogen-free</td>
</tr>
<tr>
<td></td>
<td>Rapidly reversible</td>
</tr>
</tbody>
</table>

#### Levonorgestrel
Intrauterine “system”
Like to keep life simple? Imagine birth control you don’t have to think about.¹

Want hassle-free, 99.9% effective birth control for up to 5 years (or less, if you choose)?² Mirena® is an estrogen-free intrauterine contraceptive (IUC) for women who are looking for a contraceptive option to help simplify their lives. It’s for women who have decided their families are just the right size, it’s for expectant mothers to consider after they have had their baby, and it’s for women who aren’t satisfied with their current form of contraceptive. And, it can be removed at any time for a quick return to fertility.² Like to keep life simple? Then Mirena may be right for you. Of course, there’s some important safety information you should know. »

Simple Tips for Romancing the Bedroom »
4. Female Sterilization

- Highly effective, comparable to vasectomy, implants, IUDs
- No medical condition absolutely restricts eligibility
- Should not be “lost” in excitement over implants
- Many women rely on it in many countries
- Risk of failure (pregnancy), while low:
  - continues for years after the procedure
    (18.5/1000 at 10 years; almost 2/100)
  - does not diminish with time
  - higher in younger women
5. No Scalpel Vasectomy (NSV)

- NSV better than incisional method
- Small puncture; *vas deferens* pulled through skin and transsected
- Almost all men eligible

**Not effective immediately** — new WHO guidance: backup method for 12 weeks

- Very effective (0.2-0.4% failure; but reports of 3-5% failure; *counseling* implications)
- Very safe: 5-10% minor complications (pain, infection, bleeding)
6. Emergency Contraception (EC)

- Method of *preventing* pregnancy *after* unprotected sex
- Safe and suitable for *all* women
- Hormones of regular OCs are used (in higher dosage)
  - Preferred: one dose: POPs (1.5 mg LNG): ↓ risk 89% (1 in 100 pregnant)
  - COCs: 2 doses 12 hrs apart (EE 100 mcg, LNG 0.5 mg): ↓ risk 75% (2 in 100)
- Inhibits ovulation; does NOT interfere with implantation, nor interrupt established pregnancy
- "EC is contraception, not abortion" (is not RU-486)
- Approved by USFDA but not provided by USAID
ECPs: Most Effective When Taken Early
“The Sooner, the Better”

Percentage of pregnancies prevented

- **Progestin-only**
  - up to 24 hours*
  - 25-48 hours*
  - 49-72 hours*
- **Combined**

* Timing refers to when regimen initiated after unprotected sex

Contraceptive & Non-Contraceptive Benefits

- ↓ risk of ectopic pregnancies by > 90% (all methods)
- ↓ menstrual cramps, pain and blood loss (all hormonals)
- ↓ risk of ovarian cancer (COCs)
- ↓ risk of endometrial cancer (COCs, IUDs)
- ↓ symptomatic PID (COCs, implants, injectables)
- ↓ symptoms of endometriosis (all hormonals)
- Alternative to hysterectomy for menorrhagia (LNG-IUS)
- FP: Safer than pregnancy and delivery (all methods)
- Reframing: “The pill is safer than aspirin”