



# Family Planning Methods and Approaches: What's New and Particularly Relevant to Midwives

Roy Jacobstein MD, MPH, EngenderHealth

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Managing Partner: EngenderHealth; Associated Partners: FHI 360; Futures Institute; Johns Hopkins Bloomberg School of Public Health Center for Communication Programs; Meridian Group International, Inc.; Population Council





### Long-acting reversible & permanent methods: Characteristics and service requirements

#### Characteristics:

- Highly effective
- Convenient
- Popular when available
- Clinical methods, thus require:
  - Skilled, motivated, enabled
     providers: "Provider-dependent":
     "No provider, no program"
  - Suitable service setting
  - Medical instruments and supplies
  - Voluntary, informed choice

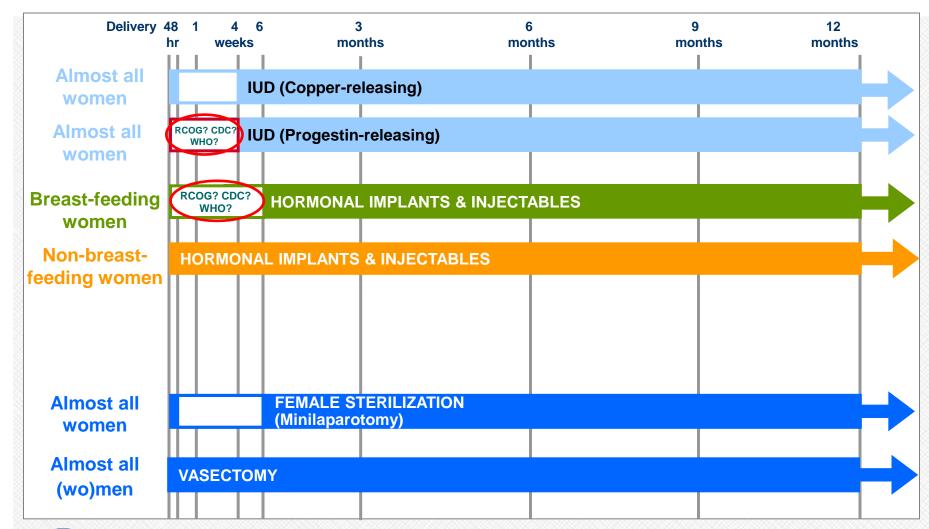








### Most provider-dependent methods can be provided to most women at most times





**Source:** Adapted from World Health Organization. *Medical Eligibility Criteria for Contraceptive Use*, 4<sup>th</sup> Edition (2010).



## Effectiveness of methods in typical use: "Not all FP is the same"

Contraceptive Method	Unintended pregnancies among 1000 women in 1st year of typical use	Comments about effectiveness in typical (i.e., programmatic) use
Implant	<b>0.5</b> (1 pregnancy per 2,000 women)	Most effective of all modern methods
Vasectomy	1.5	Failure rate depends on operator skill; back-up FP needed for 3 months
Female sterilization	5	"Permanent" doesn't mean "infallible" 10-year failure rate:18.5/1000
IUD (Tcu-380A / LNG-IUS)	8/2	
Injectable	60	The injectable, effective as it is, is only 1/120 as effective as an implant
Pill	90	Pill is 1/180 as effective as the implant in typical use (due to human factors)
Condom (male)	180	Not much of an improvement over withdrawal in typical use
Withdrawal	220	Withdrawal is a major improvement over no method use
No method	850	Infertility rate is 15%



**Data Source:** Trussell J. Contraceptive failure in the United States. *Contraception* 2011; 83:397–404. **Comments:** R. Jacobstein





#### Comparison of the three implants

	Implanon <sup>®</sup>	Jadelle <sup>®</sup>	Sino-implant (II)®		
	September Septem		//		
Manufacturer	Merck	Bayer HealthCare	Shanghai Dahua		
Active ingredient	68 mg etonogestrel	150 mg levonorgestrel	150 mg levonorgestrel		
Labeled duration of maximum effective use	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		(up to) 4 years		
Number of rods	1	2	2		
Approximate insertion and removal times	Insertion: 1 min Removal: 2-3 min	Insertion: 2 min Removal: 5 min	Insertion: 2 min Removal: 5 min		
Cost of implant (US\$)	\$8.50	\$8.50	~\$8.00		









# Hormonal implants: Service delivery considerations for FP 2020 and beyond

- Highly effective, easy to insert and remove, and becoming popular, but:
- Bleeding disturbances: <u>universal</u>; specific bleeding pattern: <u>unpredictable</u>
  - Specific sociocultural meaning of bleeding and amenorrhea is very important.
- Has important implications for:
  - Client's choice of a method, and counseling
  - Side effects management ("anticipatory guidance")
  - Follow-up (mHealth opportunity)
- Bleeding side effects: main reason women discontinue
  - Continuation rates: 80-90% in clinical trials; in typical use?
- Removal services must be **regular**, **reliable**, **accessible** 
  - Ease of removal is correlated with superficial insertion.
  - Right to have an implant removed <u>at any time</u> is absolute.
  - A woman need not use it for its full length of labeled use.









#### **IUDs: Service delivery characteristics**

- Almost all women can use an IUD
  - Good for all reproductive intentions (spacing, delaying, limiting)
  - Good option for HIV-positive women, and for young or nulliparous:

"The American College of Obstetricians and Gynecologists recommends that its [provider] members encourage adolescents age 15-19 to consider implants and IUDs as the best reversible methods for preventing unintended pregnancy, rapid repeat pregnancy, and abortion in young women."

--ACOG Committee Opinion #539, Obstet. Gynecol., 2012; 120(4):983-988

- Highly effective and long-acting (up to12-13 years for Copper-T)
- Several health cadres can provide them especially midwives
- Most cost-effective of all FP methods, yet ...
- Plagued by exaggerated and/or erroneous provider concerns:
  - Pelvic inflammatory disease (PID), infertility, HIV/AIDS







### IUD and risk of PID: Very low (and much lower than providers often think)

#### PID incidence rate by time since insertion

#### PID rate per 1000 woman-years



**Time Since Insertion** 



**Source:** Farley et al, 1992, in FHI 2004 Data from Mexico and Thailand



## Latest WHO Medical Eligibility Criteria: IUD use in clients with STIs or HIV/AIDS

	Category			
Condition	Initiation	Continuation		
Increased general risk of STI (high prevalence setting)	2	2		
High <i>individual</i> risk of STI	3	2		
Current chlamydial or gonococcal infection, or purulent cervicitis	4	2		
HIV positive	2	2		
AIDS and clinically well on ARV	2	2		

Source: WHO, Medical Eligibility Criteria, 4th Edition, 2010





#### The Levonorgestrel (LNG)-IUS: Combines "The best [features] of both worlds"

#### **Oral contraceptive**

- Very effective (when used correctly and consistently)
- Reduction of menstrual pain and blood loss
- Reduction of pelvic inflammatory disease

#### Intrauterine device

- Highly effective
- No daily action needed
- Long-acting (up to 5 years)
- Estrogen-free
- Mainly local effects
- Rapidly reversible







### **Service approaches:** Task shifting/task sharing WHO recommendations for who can provide FP

	Lay Health Workers	Auxiliary Nurses	Auxiliary Nurse Midwife	Nurses	Midwives	Associate Clinicians	Advanced Level Associate Clinicians	Non- Specialist Doctors
				Contracep	ve delivery			
1.1–1.13 Promotion of maternal, newborn and reproductive health interventions	<b>②</b>	•	•	•	•	•	•	•
12.2 Initiation and maintenance of injectable contraceptives – standard syringe	<b>W</b>			•	•	•	•	•
12.3 Insertion and removal of intrauterine devices	<b>3</b>	×		<b>②</b>		9	•	•
12.4 Insertion and removal of contraceptive implants	*	w/	<b>/</b>	<b>②</b>		9	•	•
12.5 Tubal ligation	8	<b>3</b>	<b>3</b>	×	*	•	•	•
12.6 Vasectomy	8	×	×	×	\x/	•	•	•
Recommended  Recommended with mo	onitoring and evalu	uation	~	in context of rigor	rous research		pted as within com	



Source: WHO, Task shifting to improve access to contraceptive methods. 2013.





# Technology to facilitate task shifting: Sayana® Press: DMPA in Uniject®



#### **Depo-subQ Provera 104:**

- New formulation for subQ injection
- **30% lower dose** (104 mg vs. 150 mg)
- Same effectiveness and length of protection as DMPA-IM (3 months)
- Potential for home- and self-injection
- Available in 2015; introductory studies (including self-injection) begin in 2014

#### **Uniject:**

- Single dose, single package
- Prefilled, sterile, non-reusable
- Short needles for subQ injection (easier to use by nonclinical personnel)
- Compact; easy to use and store



**Source:** Keith B. Home-based administration of depo-subQ provera 104<sup>™</sup> in the Uniject<sup>™</sup> injection system: a literature review. PATH; 2011.



#### Other new & "hot" FP service approaches

- "Dedicated providers" successful recent example from Zambia:
  - 18 dedicated midwife-providers were placed at 23 busy sites in urban hospitals, to add LARC services to method mix
  - Results: in 14 months, 22,000 clients accessed an implant & 11,000 accessed an IUD; many clients were young and of low parity

**Source:** Neukom J, et al. Dedicated providers of long-acting reversible contraception: new approach in Zambia. *Contraception* 2011,**83**:447-452.

- Mobile services (free or very low-cost; leading to large LA/PM uptake)
- Private sector (e.g., social franchising)
- Integration, with:
  - Perinatal and postpartum services (immediate PP IUD; and implant?)
  - Postabortion care (PAC FP)
  - Immunization (MCH) services

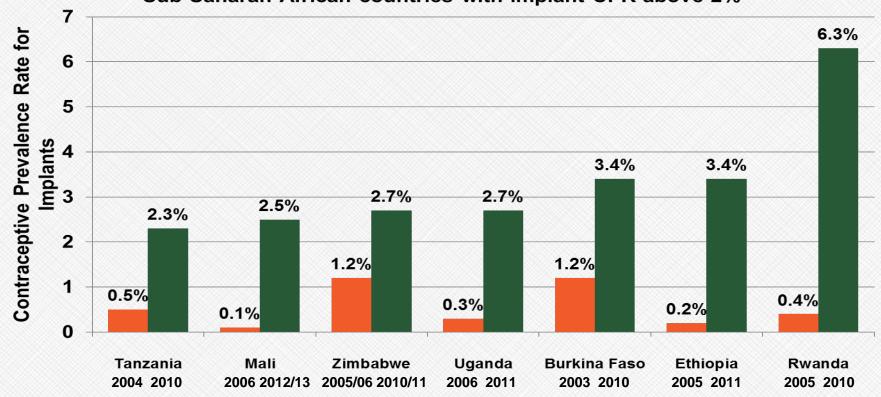






#### Use of implants is rising







All data are from the *Demographic and Health Surveys* (DHS), for women ages 15-49 currently married or in union.

Total modern CPR is 9.9% in Mali (2012-13) and 15% in Burkina Faso (2010).



#### Much is at stake—and ICM members can help a lot!

- 56% of maternal deaths globally are in sub-Saharan Africa
- MMR there is 15 times higher than in industrialized countries
- For every instance of maternal mortality, there are 20 instances of serious morbidity (e.g., fistula)
- These are only averages the levels of morbidity and mortality are far higher among the poor and disadvantaged
- Lifetime risk of maternal death differs markedly:
  - Nigeria: 1 in 29; Netherlands, 1 in 10,500
  - Cambodia: 1 in 150; Czech Republic, 1 in 12,100
  - Guatemala: 1 in 190; Greece: 1 in 20,500
- > 220,000,001 women have an unmet need for FP -- most of these women are in sub-Saharan Africa and South Asia



**Data Sources:** Ahmed S, Li Q, Liu L, Tsui A. Maternal deaths averted by contraceptive use: an analysis of 172 countries. Lancet 2012; World Bank, Lifetime risk of maternal death, 2013; AGI/UNFPA, Adding It Up: Costs and Benefits of Contraceptive Services, 2012...







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