Global Trends and Considerations in Contraceptive Implant Scale-Up

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Jhpiego
Contraceptive Implants are Accelerating Growth in Contraceptive Prevalence Worldwide
Kenya mCPR and Method Mix among Married Women, 2003–2015
Source: DHS and PMA2020
Uganda mCPR and Method Mix among Married Women, 2001–2016
Source: DHS and PMA2020
Burkina Faso mCPR and Method Mix among Married Women, 2003–2016

Source: DHS and PMA2020
Where do implants comprise larger proportions of overall contraceptive use?

Source: UN Contraceptive Use, Demographic and Health Surveys
Contraceptive Implant Prices 2009-2013
Source: RHInterchange and RHSC Press Releases

Bayer and Merck/MSD have committed to $8.50 price through 2023

Slide adapted from M. Steiner, FHI360
How do implant users compare to contraceptive users overall?
Source: PMA2020 Special Surveys in Burkina Faso, Ethiopia, and Kenya

They are on average more married, higher parity, and less educated

<table>
<thead>
<tr>
<th></th>
<th>Contraceptive Users Married</th>
<th>Implant Users Married</th>
<th>Contraceptive Users Parity 2+</th>
<th>Implant Users Parity 2+</th>
<th>Contraceptive Users w/No Education</th>
<th>Implant Users w/No Education</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Burkina Faso</strong></td>
<td>85%</td>
<td>90%</td>
<td>74%</td>
<td>80%</td>
<td>56%</td>
<td>64%</td>
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<tr>
<td><strong>Ethiopia</strong></td>
<td>9%</td>
<td>10%</td>
<td>75%</td>
<td>74%</td>
<td>42%</td>
<td>48%</td>
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<tr>
<td><strong>Kenya</strong></td>
<td>78%</td>
<td>89%</td>
<td>65%</td>
<td>72%</td>
<td>45%</td>
<td>53%</td>
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</table>

They receive their method from public health facilities

<table>
<thead>
<tr>
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<th>Contraceptive Users Receiving Method from Public Facility</th>
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Special Considerations for Introducing and Scaling-up Contraceptive Implants
Lessons Learned from Implant Programming:  
From Jhpiego’s experience in the Accelerating Scale-up of Implants Project

• Develop implant introduction and scale-up plans with stakeholders

• National implant programming should factor-in product evolutions

• Consider the needs of implant users not only at initiation, but for follow-up care and removal as well

• Consider the provision of implants outside family planning wards (e.g. community provision, or in maternity settings for postpartum clients)

• Avail necessary equipment and consumables to insert and remove contraceptive implants

• Work with communities and clients to dispel myths and misconceptions
Product Evolution

**Implanon NXT**
Merck/MSD has developed an improved device for inserting Implanon, and countries around the world are transitioning from the previous version to the newer Implanon NXT.

*K4Health Resource: Implanon NXT: On-the-Job Training Course for Current Implant Providers*

**Levoplant**
In June 2017, Sino-implant (II) received WHO pre-qualification and updated the global brand name to Levoplant. Now pre-qualified, Levoplant can be procured by most donors and procurers.

Conditions for Quality Implant Removal Services

- Supplies & Equipment in Place
- Competent & Confident Provider
- System in Place for Managing Difficult Removals
- Reassurance, Counseling, & Reinsertion/ Switching Are Offered
- Implant Removal Data Collected & Monitored
- Service Is Affordable or Free
- Service Available When She Wants, Within Reasonable Distance
- Woman Knows Where & When to Go for Removal

K4Health Resource: Implant Removal Resources
**Availing Implants Immediately After Delivery**

<table>
<thead>
<tr>
<th></th>
<th>48 hours</th>
<th>1 week</th>
<th>3 weeks</th>
<th>4 weeks</th>
<th>6 weeks</th>
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<tbody>
<tr>
<td><strong>Breastfeeding</strong></td>
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<td>IMPLANTS</td>
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<td>FEMALE STERILIZATION</td>
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<td>WITHDRAWAL</td>
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<tr>
<td><strong>Not Breastfeeding</strong></td>
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<td>INJECTABLES</td>
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COCs should not be initiated by breastfeeding women until at least 6 months postpartum. In addition, fertility awareness methods, such as Standard Days Method (CycleBeads), require women to chart 4 regular menstrual cycles before beginning this method, so timing varies from one woman to the next.
Equipment and Consumable Needs for Implants: Insertion and Removal

- Antiseptic solution with bowl
- Sterile gloves
- Sterile drape
- Sharp dissecting forceps
- Local anesthetic (1% concentration with or without epinephrine)
- 2.2 mm ringed forceps (modified NSV clamp)
- Scalpel
- Syringe
- Curved mosquito forceps
- Straight mosquito forceps
- Sterile gauze
- Steri-Strips or sterile skin closure
- Pressure bandage

Illustrations by Erica L. Chin
On the Horizon
Possible Duration Changes?

Extended use up to 5 years of the etonogestrel-releasing subdermal contraceptive implant: comparison to levonorgestrel-releasing subdermal implant

Moazzam Ali1,*, Ayse Akin2, Luis Bahamondes3, Vivian Brache4, Ndem Habib1, Sihem Landousi1, and David Hubacher5, for the WHO study group on subdermal contraceptive implants for women

BACKGROUND: The subdermal contraceptive implant and the 52-mg levonorgestrel intrauterine device are currently Food and Drug Administration approved for 3 and 5 years of use, respectively. Limited available data suggested both of these methods are effective beyond that time. Demonstration of prolonged effectiveness will improve the cost-effectiveness of the device, and potentially patient continuation and satisfaction.

OBJECTIVE: We sought to evaluate the effectiveness of the contraceptive implant and the 52-mg hormonal intrauterine device in women using the method for 2 years beyond the current Food and Drug Administration–approved duration.

STUDY DESIGN: We initiated this ongoing prospective cohort study in January 2012. We are enrolling women using the contraceptive implant or 52-mg levonorgestrel intrauterine device for a minimum of 3 and 5 years, respectively (implant intrauterine device in ≥2007 or implant in ≥2009). Demographic and reproductive health histories, as well as objective body mass index, were collected. Implant users were offered periodic withdrawal for analysis of serum etonogestrel levels. The primary outcome, unintended pregnancy rate, was calculated per 100 women-years. We excluded baseline demographic characteristics using χ² test and Fisher exact test, and compared serum etonogestrel levels stratified by body mass index using the Kruskal-Wallis test.

RESULTS: Implant users (n = 291) have contributed 444.0 woman-years of follow-up. There have been no documented pregnancies in implant users during the 2 years of participation follow-up. Calculated failure rates in the fourth and fifth years for the implant are calculated as 0 (0-sided 95% confidence interval, 0–1.48) per 100 woman-years and 0 (1-sided 95% confidence interval, 0–1.48) per 100 woman-years of 5 years. Women using the 52-mg levonorgestrel intrauterine device had a mean serum levonorgestrel level of 225.7 ng/mL (range 95.9–450.3 ng/mL) at the end of the third year, and 153.2 ng/mL (range 70.3–463.7 ng/mL) at the end of the fifth year. Median etonogestrel levels were not statistically different at the end of 4 years of use with overweight women.

CONCLUSION: This study indicates that the contraceptive implant and 52-mg hormonal intrauterine device continue to be highly effective and well tolerated beyond the 2 years of Food and Drug Administration–approved duration. Further studies are needed to establish the clinical effectiveness and satisfaction of using these methods for an additional 3 years of use.
Thank you