Introducing the Contraceptive Sino Implant II (Zarin) in Sierra Leone

Background

Maternal mortality in Sierra Leone is amongst the highest in the world. A decade-long civil war and severe underdevelopment have denied access to decent reproductive health services and information to an entire generation of women. The most recent figures estimate a maternal mortality rate of 857 deaths per 100,000 live births (DHS 2008). This grave fact is explained in part by the lack of modern contraceptive use amongst women of reproductive age; only 8.2 per cent of women used contraception in 2008 (DHS 2008).

Alongside poor overall use of contraception, Sierra Leonean women have limited choices when deciding which contraceptive works best for them. They are mostly restricted to short term methods such as the condom, pill and injectable with only 0.3 per cent of women using long-term or permanent contraceptive methods in 2008 (DHS 2008). In a country where stock-outs are common and consistent access to short-term contraceptives is poor, long-term reversible methods offer an important option for women who want to delay space or end their child-bearing years.

In 2008, Marie Stopes Sierra Leone (MSSL) and BlueStar Sierra Leone, working in conjunction with the Ministry of Health Services, began a national expansion programme to provide contraceptive access to women in every chiefdom in the country. MSSL is a member of the Marie Stopes International (MSI) partnership and the largest non-governmental provider of reproductive health services in Sierra Leone and has provided family planning and reproductive health services to women and men for over twenty years. BlueStar is a MSI global social franchise network that supports private clinics and pharmacies in Sierra Leone to provide quality family planning and reproductive health services. Central to the expansion plan was being able to offer all women an increased range of contraceptives to choose from when they desire to prevent or delay a pregnancy. Encouraged by demand for implants in other African countries, MSSL set about registering a contraceptive implant in conjunction with a range of partners including, the Ministry of Health Services, the Pharmaceutical Regulation Board, Pharm Access Africa Limited, Family Health International and the United Nations Fund for Population.
The Zarin implant was selected thanks to the relative cost compared with other implants (see below) and its high quality. It can be inserted by a trained health worker such as a nurse or midwife and gives protection from unwanted pregnancy for at least four years. The product was successfully registered within three months of submitting the initial application dossier and a Pharmacovigilence plan to monitor product quality was put in place. The product was initially rolled out by training private providers within the MSSL’s BlueStar social franchise network, followed by MSSL’s own providers and then health workers from the public sector.

Source Tumlinson K, Steiner MJ, Rademacher et al., FHI submitted manuscript 4/2010; 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.

Convinced that the method would be popular, MSSL purchased an initial consignment of 8,000 implants through its own funds. This was soon followed by an order of 5,000 implants for MSSL by UNFPA. To date, a total of 8174 implants have been distributed in Sierra Leone. Using the Marie Stopes International Impact Calculator, this has averted an estimated 215 maternal deaths.
The product

The Zar implant is a sub dermal contraceptive implant inserted just under the skin of a woman’s upper, inner arm. Insertion involves a minor surgical procedure, by a mid-level provider such as a nurse or midwife who can conduct the simple insertion procedure working alone.

When visiting a health provider to receive an implant, counseling should be provided on the benefits and potential side effects of using the implant alongside full information about alternative forms of contraception. Clients are made aware that the implant offers no protection against HIV or other sexually transmitted infections.

Advocacy steps

Establishing a broad advocacy coalition with government, development partners, civil society and private sector was key to the rapid registration and roll-out of Zarin. At every step of the registration process, a range of partners were involved, sharing technical expertise and putting weight behind the application.

The development of an effective Pharmacovigilence plan to ensure effective monitoring of quality was central to the registration of Zarin. This embraced participation from a wide-range of stakeholders, including the Pharmacy Regulation Board itself.

Steps on the registration process

Based on the Pharmacy Regulation Board’s requirements, MSSL, PAAL and FHI worked with the manufacturer to develop a high quality dossier for registration of the implant in Sierra Leone. This included evidence of the effectiveness of the product and the development of a Pharmacovigilence plan, training plan and product samples.

The Pharmacovigilence plan included:

- a manufacturing audit by the Pharmacy Regulation Board
• an outline of a complication reporting system,
• a schedule of complication monitoring meetings
• a training and quality assurance plan

Keeping in constant contact with the Pharmacy Regulation Board to ensure that the Implant did not fall off the agenda was fundamental. MSSL’s liaison officers kept in touch regularly to monitor the progress of the application and provide updates on the demand for the product and ensure that the Pharmacy Regulatory Board was a full partner in the design and implementation of the project.

Introduction steps

Zarin was first introduced through private clinics subscribed to the BlueStar healthcare social franchise network. During the launch phase, the franchisees offered the implant for free to raise initial demand. Thereafter all qualifying BlueStar franchisees implemented a standard price of Le 10,000 ($2.50). Introduction to the BlueStar network was quickly followed by the addition of Zarin to MSSL centers and the public sector.

MSSL organized training with private sector health workers and trainers of trainers from MSSL who soon after rolled out the training to MSSL staff. The training improved health worker counseling and clinical skills through a four day training covering four key modules, equipment for insertion and removal was also procured and supplied to the Franchisees.

Implant counseling and insertion training outline

<table>
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<tr>
<th>Topic</th>
<th>Learning activities</th>
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<tbody>
<tr>
<td>1. Empathic counseling skills</td>
<td>Group work; role plays; theory and practical tests</td>
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<tr>
<td>2. Helping clients to make an informed decision</td>
<td>Group work; role plays</td>
</tr>
<tr>
<td>3. Developing clinical skills</td>
<td>Demonstration; Practice insertion on dummy arm;</td>
</tr>
<tr>
<td>4. Managing complications and side-effects</td>
<td>Demonstration; theory and practical tests</td>
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Demand creation

Demand for implants was generated through an integrated campaign that incorporated two main objectives: increasing recognition of the product and raising awareness of the implant’s benefits. The demand generation campaign targeted poor urban women, health workers and the media before being rolled out to rural areas. The content of promotional activities emphasized the discrete nature of the implant, its reliability and the length of time it protects against pregnancy.

BlueStar and MSSL distributed a range of IEC materials (posters and IEC) in target communities and through health providers. Launch events gave product information to senior members of health care organizations from across the health system. The launch events also provided the opportunity to invite the media, generating further publicity which alongside a radio campaign of jingles and radio discussion shows.

In rural areas, MSSL’s outreach teams disseminated information about the new product through their standard demand generation activities which include health talks, megaphone
announcements and radio jingles. Community stakeholders were encouraged to promote awareness of the new method through regular stakeholder meetings.

Conclusion

Successes: MSSL and BlueStar provided 8174 implants for women in 2008 and 2009.

Swift registration, acceptance, import and introduction of a new contraceptive technology into a resource poor environment to increase access and choice are possible with careful planning, steps and advocacy.

Key lessons learned:

1. Government and other partners needed to be convinced. MSSL put their own resources and reputation on the line to prove Zarin was a product that would meet client's needs.

2. There is an inevitable 3-6 month build-up phase as the product gets recognition and traction in the market.

3. Marketing worked. The Zarin posters introduced the product by name and function and clients were able to ask at BlueStar and MSSL for the product as well as providers include the method in the contraceptive basket.

4. Close liaison with Pharmacy Board is absolutely vital. It was important to have briefed and have the support of the Pharmacy Board.

5. Although in some countries introducing implants doesn't lead to a demand for other LAPM methods necessarily and there can be a “rush” for implants. In Blue Star and MSSSL outlets demand for IUD has also increased up at the same time.

The way forward:

MSSL is planning to conduct an impact assessment to find out which women choose Zarin. This proposed research has five primary objectives:

1. To compare the sociodemographic characteristics of women choosing the implant with other contraceptive methods
2. To assess the potential role of the Zarin implant as an alternative to other long-acting methods
3. To examine postpartum uptake of Zarin and other long-acting methods and how timing of uptake may differ
4. Where feasible, to assess any differences in early removal events (timing, reason, etc)
5. Establish an anonymous cohort of users for possible records-based follow-up activities
MSSL seek to expand access further through sharing their expertise with the Ministry of Health and Sanitation by training public sector staff to further widen access.

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