



Levonorgestrel Intrauterine System (LNG IUS) as a reproductive health service option for low income women in southern Rajasthan, India

Interim findings, June 2019

1. Background

Action Research & Training for Health (ARTH) is a 21 year old Indian non-profit public health organization that contributes to improving the health status of underprivileged communities in India. ARTH directly provides primary care, especially reproductive and child health services, to a population of 180,000 inhabiting 109 villages and 30 urban slums in two districts of Rajasthan. Four health centers cater to low-income populations – three are located in rural-tribal areas and one serves the urban poor. Over two decades, ARTH has undertaken numerous action projects as well as research studies to improve primary health care. We introduced the Copper T 380A as an alternative to female sterilization in 1998, and pioneered 24x7 childbirth services through professionally trained midwives. Other innovations have been described at www.arth.in

Long acting reversible contraceptives (LARCs) include intra-uterine devices and implants, they act for 3 to 12 years after insertion and do not require intervention by the user after application. The only long acting reversible contraceptive available to women in large parts of India is the Copper-T IUD¹. The government family planning program provides combined oral pills, condoms, copper IUD and sterilization, and has recently introduced DMPA injections and a non-hormonal pill, though availability of the latter two is not yet widespread.

A central doctrine of government FP services is that couples with an unmet need for limiting² or those who have “completed their family” by having 2 or more children, should ideally adopt a permanent method in the form of sterilization. However there is widespread aversion among several women to undergoing surgery for family planning. There also remains the possibility of a few wanting to again bear children, in case a child dies or following re-marriage. Hence long acting reversible contraceptives (LARCs) might be introduced as a reversible alternative to sterilization. Among the LARCs, the Copper-T 380A, which is effective for 12 years, has been available since 2004. However, it is not uncommonly associated with cramping pains and excess blood loss in the initial months. We felt that women would especially benefit from the introduction of another LARC in the form of Levonorgestrel Intrauterine System (LNG IUS) for spacing as well as limiting.

The levonorgestrel-containing intrauterine system is an effective and safe form of long-term, reversible birth control. It is especially useful in situations where use of estrogen-containing contraceptives is contraindicated. While changes in menstrual patterns are common, they mostly lead to reduction in frequency and duration of bleeding, that could be managed with proper counseling. In addition to its contraceptive effect, the LNG-IUS offers the potential of reducing anemia, and in dealing with other conditions associated with excess menstrual bleeding such as menorrhagia, symptomatic fibroids and endometriosis. It is recommended as first line treatment for heavy menstrual bleeding, prior to considering a hysterectomy. Although LNG IUS is available in India, its cost is high and it is affordable only by well to do, urban women. Hence with the support of Packard Foundation and Pregna International, ARTH piloted LNG IUS as a low cost, high quality contraceptive for women of low socio-economic means.

How LNG IUS was introduced

ARTH procured LNG IUS at a special concessional rate from Pregna International, and provided the same as Mukti (freedom) contraceptive services in its field area. The service was promoted and offered as a contraceptive as well as primary treatment for heavy menstrual bleeding. Seven nurse-midwives (GNMs and ANMs), of which 4 were earlier trained in Copper IUD insertion, were trained to screen women, insert and remove the IUS. They were supervised by an obstetrician – gynecologist. In the first 2 months, insertions were by the gynecologist, subsequently nurse-midwives took over insertions, although women with heavy menstrual

1 This includes variants of the flagship TCu380A such as the 5 years Multiload

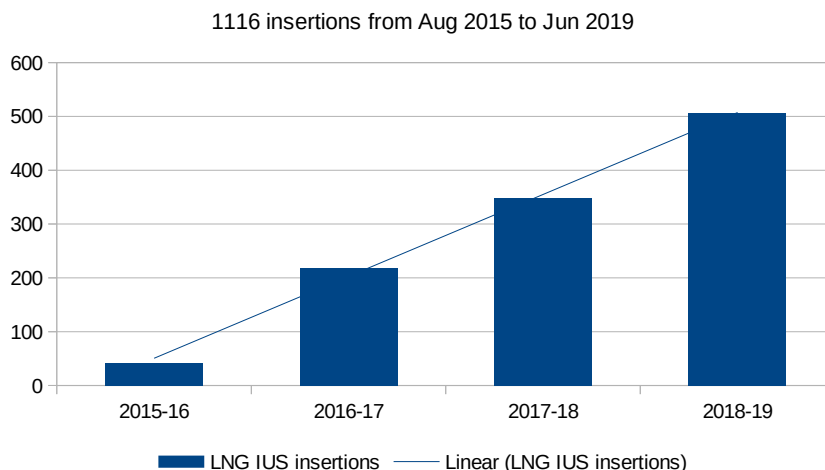
2 In practice, all women who have borne two children are considered as having a need for limiting

bleeding were always assessed by the doctor. The service was widely promoted through community volunteers and a telephone helpline, and by using pamphlets, wall paintings and a village communication campaign. The insertion service was priced at Rs 499 for women, those belonging to the poorer tribal community received a further discount and hence had to pay only Rs 299. Removals were charged at Rs 100.

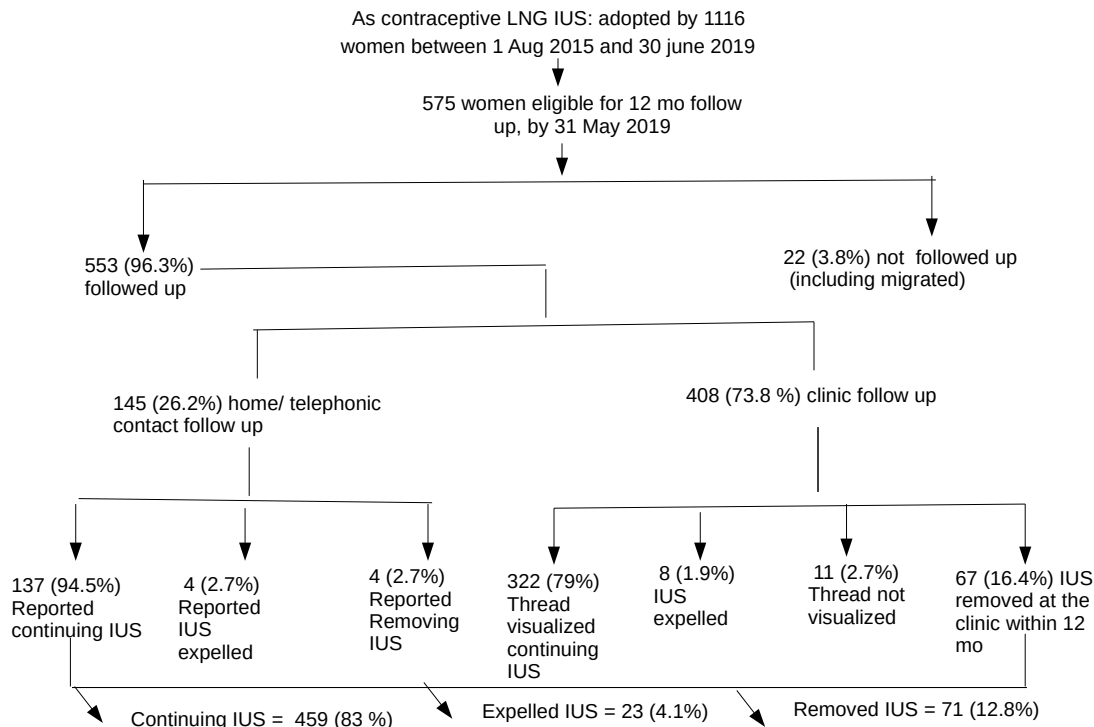
Results

In the period Aug 2015 to June 2019, 1116 women adopted the LNG IUS. Six month follow up indicates high levels of retention and user satisfaction.

LNG IUS insertion for contraception by year



ARTH MUKTI SERVICES



Demographics and user characteristics (1116 adopters, 553 of 575 followed up at 12 mo)

Category	Indicator	Result
Location	Rural	84.5%
Woman's education	Illiterate	56.7%
Caste	Scheduled tribes	55.4%
	Scheduled castes	9.5%
Status on insertion		
Living children	Nil	0.4%
	1	11.4%
	2	39.2%
	3	24.5%
	4 and above	24.6%
Reproductive Intention	Wishes to space	15.9%
	Wishes to limit	82.5%
	Uncertain	1.6%
Ever used a contraceptive prior to insertion? (includes multiple use options)	Condoms	10.2%
	Combined oral pills	13.5%
	Copper-T	9.0%
	DMPA	15.3%
	LNG IUS	0.6%
	Other	1.1%
	None	51.2%
Phase of insertion	Interval (new user)	55.1%
	Interval (switch from another currently used method)	11.6%
	Postpartum	11.6%
	Post-abortion	21.7%
Status on follow up at 12 months (n = 553)		
Menstrual pattern	Oligomenorrhea or amenorrhea	92%
User satisfaction	Satisfied with method	90 %
Discontinuation by 12 months (n = 79, 14.2%)	Removal because of change in reproductive intention	15
	Removal due to family pressure	6
	Removal because of side effects	50
	Partial or complete expulsion	8

Conclusions

- Levonorgestrel IUS has been well accepted as a contraceptive option within a community and clinic based family planning intervention operated by a non-profit. The pricing band of Rs 499 per insertion (with a further discount for tribal community women) has seen a reasonably good response.
- Most women have adopted LNG IUS for limiting contraception – 84% of women state that their reproductive intention is to limit births, while 88% have 2 or more children. Most women adopted the method during the inter-menstrual interval phase. About half had tried out another contraceptive in the past, although only a minority (24%) were using one at the time of adoption. Even though the LNG service was offered for both contraception and heavy menstrual bleeding (HMB), 97% women adopted it for contraception. This suggests that the programme did not succeed in reaching out to women having a primary problem of HMB.
- Continuation rates approached 83% at 12 months, with the major reason for removal being side effects, chiefly oligo and amenorrhea. A significant fraction (26%) of women who opted for removal, did so to conceive again following death of a child or remarriage, or for family reasons.

Sample LNG IUS pamphlets promoting the “Mukti” service, are shown below:

एक और बच्चा नहीं चाहिए?
 ऑपरेशन का विकल्प: लंबे समय तक असर करने वाला सुरक्षित व आसान तरीका



आज ही अपनाईये

मुक्ति

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1800 30000 648 (नि:शुल्क)

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 ARTH
 Action Research and Training for Health

क्या आप अत्यधिक माहवारी की समस्या से परेशान हैं ?

बिना ऑपरेशन के इस समस्या से छुटकारा पा सकती हैं



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