Similarities and Differences: LNG-IUS and TCu-380A

This document provides a summary of key similarities and differences between the LNG-IUS, the levonorgestrel-releasing intrauterine system, and the Copper-T 380 IUD (TCu-380A). For detailed information about each method, see the “Essential Knowledge” section of the IUD Toolkit.

**Key Similarities**

- **Effectiveness:** The LNG-IUS and the TCu-380A are both highly effective at preventing pregnancy. The LNG-IUS has a pregnancy rate of < 0.5 percent at 5 years, and the TCu-380A has a cumulative failure rate of 2.2 percent after 12 years of use.

- **Acceptable Client Groups:** Both the LNG-IUS and the TCu-380A are safe and suitable for nearly all women, including younger (under 20 years old) and older women (over 40 years old), women who are postpartum or postabortion, nulliparous and nulligravid women, single and married women, breastfeeding women, HIV-infected women, and women with AIDS who are doing clinically well on antiretrovirals.

- **PID:** The risk of pelvic inflammatory disease (PID) or infertility with use of the LNG-IUS or TCu-380A is very low. A low risk of PID with both is limited to the first 3 to 4 weeks after insertion, beyond which the risk is comparable to nonusers.

- **Mechanism of Action:** Both methods prevent pregnancy prior to fertilization and/or implantation.

- **Return to Fertility:** After removal of either device, there is no delay in a woman’s return to fertility.

- **HIV:** Women with HIV who use the LNG-IUS or the TCu-380A have no increase in genital shedding of the virus.

- **Continuation:** Users of the methods tend to be highly satisfied, and continuation rates are similar for both.

- **Counseling:** Pre-insertion counseling on side effects has been shown to improve continuation rates of both the LNG-IUS and the TCu-380A.

**Key Differences**

- **Active Ingredient:** The LNG-IUS releases the hormone levonorgestrel (the progestin widely used in implants and oral contraceptive pills) directly into the uterine cavity, while the TCu-380A is a nonhormonal method and contains copper.

- **Length of Use:** The LNG-IUS is approved for 5 years and may be effective for up to 7 years. In contrast, the approved lifespan of the TCu-380A is 10 years, and it may be effective for at least 12 years.

- **Effect on Menstruation:** Use of the LNG-IUS typically leads to decreased menstrual bleeding or amenorrhea (absence of bleeding), whereas the TCu-380A is associated with somewhat increased menstrual blood loss.

- **Non-Contraceptive Medical Uses:** The LNG-IUS has noncontraceptive health benefits that nonhormonal IUDs, including the TCu-380A, do not have. Most notably, the LNG-IUS can treat menorrhagia (abnormally long, heavy menstrual flow) effectively.

- **Insertion:** Insertion techniques for the LNG-IUS are different from techniques required for the TCu-380A and other IUDs, and require additional training.

- **Reasons for Discontinuation:** LNG-IUS users are significantly more likely to discontinue use because of amenorrhea, whereas TCu-380A users are more likely to discontinue use because of heavy bleeding and pain.

- **Cost and Programmatic Availability:** The commodity cost of the LNG-IUS is much higher than the TCu-380A. As a result, the LNG-IUS is not available in many resource-constrained settings, whereas the TCu-380A is widely available worldwide.
Please also refer to the comparison chart available in the *Family Planning: A Global Handbook for Providers*.

**Bibliography**


