

DOI: 10.1002/ijgo.12597

EDITORIAL

WILEY



Institutionalization of postpartum intrauterine devices

Anita Makins^{1,2,*} | Sabaratnam Arulkumaran^{1,3}¹International Federation of Gynecology and Obstetrics, London, UK²Oxford University Hospitals NHS Foundation Trust, Oxford, UK³St George's, University of London, London, UK**KEYWORDS:** Birth spacing; FIGO initiative; Illegal abortions; Long-acting reversible contraceptives; Maternal mortality; Postpartum intrauterine device; PPIUD; Task sharing

It is estimated that 220 million women need modern contraception but are unable to access it for a variety of reasons.¹ Poverty, gender inequality, lack access to health services, poor quality services, as well as stock outs of commodities are some of the reasons for the high unmet need. Many women in low- and middle-income countries (LMICs) are young when they have their families. Permanent methods that may be available, such as tubal ligation, are not ideal owing to their irreversibility and women's options may be limited to user-dependent methods with high failure rates, such as condoms, the oral contraceptive pill, and depot injections.² Reliable family planning may be hard to achieve, meaning that the likelihood of caring adequately for their live children and contributing to the upkeep of the family economically is difficult, thus perpetuating the cycle of poverty.

WHO recommends 24 months before attempting the next pregnancy to reduce the risk of adverse maternal, perinatal, and infant outcomes.³ From a pediatric perspective, short birth intervals are associated with an increased risk of neonatal mortality, infant mortality, deaths in children under 5 years, and child malnutrition.^{3,4} From an obstetric point of view, short birth intervals have been associated with increased risk of preterm birth, birth of small for gestational age babies, and spontaneous abortion.⁵ Moreover, optimal use of family planning could avert 32% of maternal deaths through prevention of unsafe births as well as legal and illegal abortions.⁶ Tackling maternal mortality the traditional way by improving access to and quality of obstetric care is a complex intervention, whereas addressing low contraceptive prevalence rates presents a relatively simpler and more cost-effective option, often with more rapid results.

Although long-acting reversible contraceptives (LARCs) have been on the market for many years (with a few newer products in the recent past), their increased reliability has not been capitalized on. Subdermal

hormonal implants and hormonal intrauterine systems are relatively unaffordable for low- and some middle-income country governments in the absence of subsidies and price adjustments. The copper coil intrauterine device (IUD) on the other hand has been widely available as an interval contraceptive method for years and has the advantage of being cost-effective and nonhormonal.⁷ Although copper IUDs are available, their uptake is not high. In LMICs, women are often unable to attend family planning clinics as they are busy and inaccessible; or, if they do attend, they may find them nonfunctional or that providers are unwilling or unskilled in IUD insertion. Providing depot injections, contraceptive pills, and condoms is a much quicker solution for health-care providers overworked in busy clinics.

The increasing number of institutional births at a global level provides an opportunity to introduce postpartum copper IUDs that are reliable and can be kept for up to 10 years, should the woman choose. Insertion in the postpartum period, especially if performed following delivery of the placenta at vaginal or cesarean birth, is a relatively easy procedure that can be done immediately after birth, therefore avoiding any extra intervention. This one-stop approach allows the woman to return home knowing she has a reliable contraceptive in situ that will not influence her ability to breastfeed or require her to return for frequent follow-up.

Implementing contraception in maternity services moves away from the traditional model of women's care where family planning is discussed after 6 weeks in designated clinics; hence, implementation has to be strategically thought out.

The International Federation of Gynecology and Obstetrics (FIGO) recognized the potential public health impact that the postpartum IUD (PPIUD) could have, particularly in LMICs, and to this end embarked on an initiative that began in 2013.⁸ The project approached countries

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2018 The Authors. *International Journal of Gynecology & Obstetrics* published by John Wiley & Sons Ltd on behalf of International Federation of Gynecology and Obstetrics

that were interested in PPIUD not only because they could afford the services, but also because of the advantages that this method confers on maternal and perinatal health in addition to offering reliable contraception to women. However, there was skepticism about PPIUD among some health personal as the literature quotes variable expulsion and complication rates and previous attempts had failed to popularize the method.⁹

After an initial successful pilot phase in six hospitals in Sri Lanka, FIGO had confidence in the model and believed in the potential public health impact; the initiative was therefore expanded to a total of 48 hospitals across six countries: Sri Lanka, India, Nepal, Bangladesh, Kenya, and Tanzania. This Supplement presents the planning and implementation of both phases of the FIGO PPIUD initiative, outlining the steps taken and the overall results on counselling, insertion, and follow-up at 6 weeks. Lessons from the initiative as a whole and from individual countries on various aspects are described.

In total, 36 766 women had PPIUD inserted across the six countries and follow-up of just over 50% demonstrated that expulsion rates were lower than previously reported at 2.6%.¹⁰ Rates of severe infection (pelvic inflammatory disease) were as low as 0.01% and there was not one single case of perforation. The methodology taught and used was high insertion at the uterine fundus using the Kelly forceps. On-the-job training was developed in Nepal and was found to be highly successful, with the benefit of not taking health personnel away from the work place for organized training.¹¹ Task sharing of insertion of IUDs by midwives and nurses in India,¹² Nepal,¹⁰ Kenya,¹⁰ and Tanzania¹³ proved to be extremely successful, with escalation of acceptance rates and very little variance in complication rates. Training of lay people as counsellors in Bangladesh had some advantages albeit not the anticipated impact on PPIUD acceptance,¹⁴ which reflected the multifaceted factors that are at play in some cultures where the woman is not the decision maker when it comes to her own sexual and reproductive health. Analysis of counselling factors across four countries exemplified the unique role that each context plays in women's acceptance of contraception and PPIUD in particular.¹⁵ As a result of this initiative, the Sri Lankan Government has made postpartum contraception a mainstay of its policy, including both PPIUD and hormonal implants into the menu of options that women can choose from.¹⁶ The article from Edinburgh¹⁷ demonstrates that PPIUD is not only for LMICs by describing the experience of successful implementation within the National Health Service of the United Kingdom.

The positive experience of the FIGO PPIUD project is distilled in this Supplement. We urge governments to take on board the lessons learnt and described here, and to appreciate the enormous benefits that offering PPIUD could bring to women around the world. The Supplement is a tool book on how to introduce PPIUD into different health systems and expand contraceptive choices. The work at FIGO and with the six participating national societies will continue in the years ahead; the respective governments have welcomed continuation of the initiative with a view to sustainability and further embedding the practice of offering postpartum contraception as part of routine postpartum care.

AUTHOR CONTRIBUTIONS

AM and SA contributed equally to writing the editorial and directed the initiative in the six countries.

ACKNOWLEDGMENTS

On behalf of FIGO, we thank the national societies who participated in the PPIUD initiative, the governments of the six countries, the FIGO Contraception Working Group who acted as the scientific and technical advisory group, and most importantly the generous grant provided by our anonymous donors.

CONFLICTS OF INTEREST

The authors have no conflicts to declare.

REFERENCES

- Guttacher Institute. Adding it up: Investing in contraception and maternal newborn health, 2017. 2017. <https://www.guttacher.org/fact-sheet/adding-it-up-contraception-mnh-2017>. Accessed June 19, 2018.
- Mansour D, Inki P, Gemzell-Danielsson K. Efficacy of contraceptive methods: A review of the literature. *Eur J Contracept Reprod Health Care*. 2010;15:4–16.
- World Health Organization. *Report of a WHO Technical Consultation on Birth Spacing*. Geneva: WHO; 2007.
- Rutstein SO. Effects of preceding birth intervals on neonatal, infant and under-five years mortality and nutritional status in developing countries: Evidence from the demographic and health surveys. *Int J Gynecol Obstet*. 2005;89(Suppl.1):S7–S24.
- Shulman JJ, Merritt CG. Postpartum contraception: Subsequent pregnancy, delivery, and abortion rates. *Fertil Steril*. 1976;27:97–103.
- Arulkumaran S, Hediger V, Manzoor A, May J. Saving Mothers' Lives: Transforming Strategy into Action. Report of the Maternal Health Working Group 2012. <https://www.imperial.ac.uk/media/imperial-college/institute-of-global-health-innovation/public/Mothers-lives.pdf>. Accessed June 19, 2018.
- Trussel J. Update on and correction to the cost-effectiveness of contraceptives in the United States. *Contraception*. 2012;85:611.
- de Caestecker L, Banks L, Bell E, Sethi M, Arulkumaran S. Planning and implementation of a FIGO postpartum intrauterine device initiative in six countries. *Int J Gynecol Obstet*. 2018;143(Suppl.1):4–12.
- Goldthwaite L, Sheeder J, Hyer J, Tocce K, Teal S. Postplacental intrauterine device expulsion by 12 weeks: A prospective cohort study. *Am J Obstet Gynecol*. 2017;217:674.e1–674.e8.
- Makins A, Taghinejadi N, Sethi M, Machiyama K, Munganyizi P, Odongo E, et al. FIGO postpartum intrauterine device initiative: Complication rates across six countries. *Int J Gynecol Obstet*. 2018;143(Suppl.1):20–27.
- Thapa K, Dhital R, Karki YB, Rajbhandari S, Amatya S, Pande S, et al. Institutionalizing postpartum family planning and postpartum intrauterine device services in Nepal: Role of training and mentorship. *Int J Gynecol Obstet*. 2018;143(Suppl.1):43–48.
- Bhadra B, Burman SK, Purandare CN, Divakar H, Sequeira T, Bhardwaj A. The impact of using nurses to perform postpartum intrauterine device insertions in Kalyani Hospital, India. *Int J Gynecol Obstet*. 2018;143(Suppl.1):33–37.
- Muganyizi PS, Kimario G, Ponsian P, Howard K, Sethi M, Makins A. Clinical outcomes of postpartum intrauterine devices inserted

- by midwives in Tanzania. *Int J Gynecol Obstet.* 2018;143(Suppl.1):38–42.
14. Fatima P, Antora AH, Dewan F, Nash S, Sethi M. Impact of contraceptive counselling training among counsellors participating in the FIGO postpartum intrauterine device initiative in Bangladesh. *Int J Gynecol Obstet.* 2018;143(Suppl.1):49–55.
 15. Makins A, Taghinejadi N, Sethi M, et al. Factors influencing the likelihood of acceptance of postpartum intrauterine devices across four countries: India, Nepal, Sri Lanka, and Tanzania. *Int J Gynecol Obstet.* 2018;143(Suppl.1):13–19.
 16. Weerasekera DS, Senanayake L, Ratnasiri PU, et al. Four years of the FIGO postpartum intrauterine device initiative in Sri Lanka: Pilot initiative to national policy. *Int J Gynecol Obstet.* 2018;143(Suppl.1):28–32.
 17. Cooper M, Cameron S. Successful implementation of immediate postpartum intrauterine contraception services in Edinburgh and framework for wider dissemination. *Int J Gynecol Obstet.* 2018;143(Suppl.1):56–61.