## Adolescent pregnancy: high risk of recurrence despite access to intrauterine devices

Unplanned teenage pregnancy and its recurrence is a challenge for family planning. Long-acting reversible contraception (LARC) is an important resource for adolescents who are vulnerable to pregnancy because of its high efficacy and high continuation rate. In Brazil, the intrauterine device (IUD) is a LARC method that is made available by public health providers and is therefore accessible free of charge to women who are interested in using it.

In order to evaluate the behaviour of adolescents who have become pregnant in relation to IUD information and access to the method at no cost, we carried out an observational study in a university hospital in the northeast of Brazil. Participants were adolescents and young adults who were in obstetric care (delivery, abortion, obstetric incidents) and who received verbal IUD information by trained medical students during their hospital stay. Information given included the mechanism of action, efficacy, side effects and availabilty of free access. Participants who expressed an interest in using the IUD were invited to return to the family planning clinic 4 weeks following their delivery or abortion.

A total of 229 women aged 13 to 20 (mean 18) years participated in the study. Onset of intercourse before age 15 years, a risk factor for teenage pregnancy, was observed in more than half of the sample. We verified that none of them had previously used the IUD or any other LARC. The main contraceptive methods previously used were condoms (79.4%) and oral hormonal contraceptives (62.6%). Previous studies indicate that teenagers have lower continuation rates with non-LARC methods, and are also more likely to experience method failure, being more exposed to pregnancy.<sup>2</sup> We found that 27.3% of the adolescents were already in their second gestation and 12.7% had already had

an abortion. For 72.9% of the participants, pregnancy was unplanned, which is well above average for Latin American countries.<sup>3</sup> Even after receiving all the information about IUDs, and being in obstetric care (when most women do not want a new pregnancy), only 57% were interested in using this method. Interest was associated with greater knowledge of contraceptive methods (P=0.04) and being primigravid (OR=7; 95%CI 1.625 to 3.488), indicating that knowledge about the various contraceptive options increases the chance of a teenager choosing methods of greater effectiveness and that the first pregnancy is an opportunity that should be seized to reinforce support for contraception. Only 20 (15.3%) of the adolescents attended the the family planning clinic appointment for IUD insertion after 4 weeks. The fact that most of the adolescents did not return to the clinic for IUD insertion can be justified by the delay of 4 weeks between childbirth and insertion, demonstrating that the motivation to use the method is much greater during the imediate postpartum. It should also be considered that continuation of LARC and user satisfaction are greater when the method is started immediately after delivery.4

Despite the safety and effectiveness of the IUD in adolescence, its use for most adolescents is not yet a reality. Even with access to information and availability of the IUD at no cost, adolescents are vulnerable to recurrence of pregnancy. Primigravidae present attitudes that are more favourable to the use of the method, indicating that the first pregnancy should be regarded as an important moment for IUD counselling. The great failure of adolescents to attend postpartum return visits for IUD insertion reminds us to consider the opportunity to offer immediate postpartum IUD insertion.

## Gilka Paiva Oliveira Costa,<sup>1</sup> RayannePereiraCabral,<sup>2</sup>ThuanyBentoHerculano,<sup>2</sup> Giulia Paiva Oliveira Costa<sup>2</sup>

<sup>1</sup>Internal Medicine Departament, Medical Sciences Center, Lauro Wanderley University Hospital, João Pessoa, Paraíba, Brazil <sup>2</sup>Medical Sciences Center, Lauro Wanderley University Hospital, João Pessoa, Paraíba, Brazil

Correspondence to Doctor Gilka Paiva Oliveira Costa, Internal Medicine Department, Medical Sciences Center, Lauro Wanderley University Hospital, João Pessoa, PB CEP 58036-130, Brazil; gilkapaiva@yahoo.com.br

**Contributors** GPOC planned and reviewed the study. RPC planned and conducted the study. TBH planned and conducted the study. GPOC reviewed, translated and submitted the study.

**Funding** This research did not receive any specific grant from funding agencies in the public, commercial, or non-profit sectors

Competing interests None declared.

Patient consent Obtained.

**Ethics approval** HULW Research Ethics Committee of the Federal University of Paraiba.

**Provenance and peer review** Not commissioned; internally peer reviewed.

© Article author(s) (or their employer(s) unless otherwise stated in the text of the article) 2018. All rights reserved. No commercial use is permitted unless otherwise expressly granted.



BMJ Sex Reprod Health 2018;**0**:1 doi:10.1136/bmjsrh-2017-101787

## **REFERENCES**

- 1 Trussell J. Contraceptive failure in the United States. *Contraception* 2011;83:397–404.
- 2 Rosenstock JR, Peipert JF, Madden T, *et al.* Continuation of reversible contraception in teenagers and young women. *Obstet Gynecol* 2012;120:1298–305.
- 3 Sedgh G, Singh S, Hussain R, et al. Intended and unintended pregnancies worldwide in 2012 and recent trends. Stud Fam Plann 2014;45:301–14.
- 4 Grimes D, Schulz K, Stanwood N. Immediate postabortal insertion of intrauterine devices. *Cochrane Database Syst Rev* 2004; 4:CD001777.
- 5 Dickerson LM, Diaz VA, Jordon J, et al. Satisfaction, early removal, and side effects associated with long-acting reversible contraception. Fam Med 2013;45:701–7.

