# Unimed A Campinas

## **Reduction of Adolescent Pregnancy and the Increase in Intrauterine Device** Insertion: Data from a Private Health Insurance Company in Brazil Alves Junior JM, Prota FE, Martinelli JCB, Chrispim A, Christoforo FF, da Silva AC, Serpeloni M, Barreto I jmalves@unimedcampinas.com.br Unimed Campinas, Campinas, São Paulo, Brazil

### INTRODUCTION

Teenage pregnancy is an important public health problem around the world that can lead to reduced educational and professional opportunities for women, decreased socioeconomic growth and deepened socioeconomic inequalities [1]. The World Health Organization classifies individuals aged between 10 and 19 years as adolescents [2]. In Brazil, the teenage pregnancy rate reached 48% in 2019, considered high compared to developed countries, such as the United States (18.5%) [3]. Long-acting reversible contraception (LARC), including intrauterine devices (IUDs) and the etonogestrel implant, are some of the most effective methods for preventing pregnancy. In 2009, a private health insurance company in Brazil (Unimed Campinas), was made available the 375 and 380 mg copper IUD, in 2014 the 52 mg levonorgestrel IUD and in 2020 the 19.5 mg levonorgestrel IUD. OBJECTIVE

To assess the impact of Intrauterine Devices (IUDs) on reducing pregnancies in adolescents and their social implications.

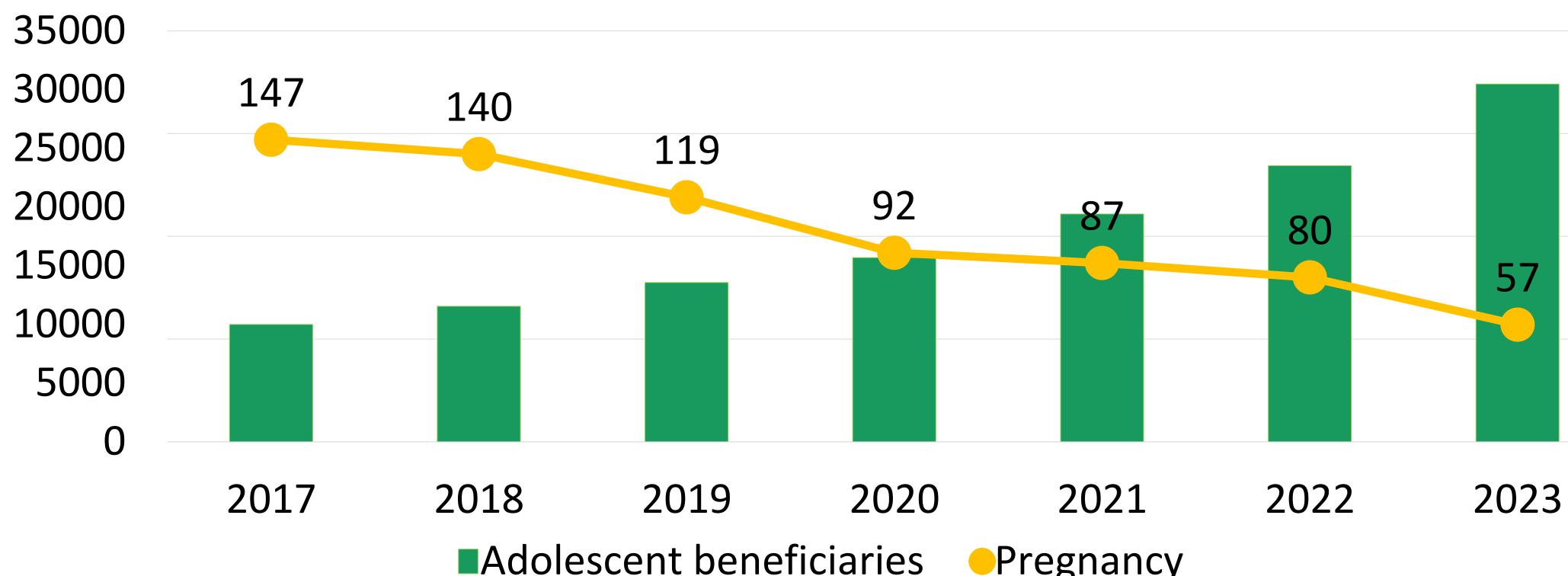
### METHODS

The analysis was conducted using the company's private database, considering the period from Jan/2017 to Oct/2023. Adolescent beneficiaries, aged 13 to 19, who received IUDs (L-IUD 52 mg, Cu-IUD 375/380 mg, L-IUD 19.5), and those without insertions during the same period were included. Device failures were excluded. Results were based on the assembled cohort, considering the number of pregnancies.

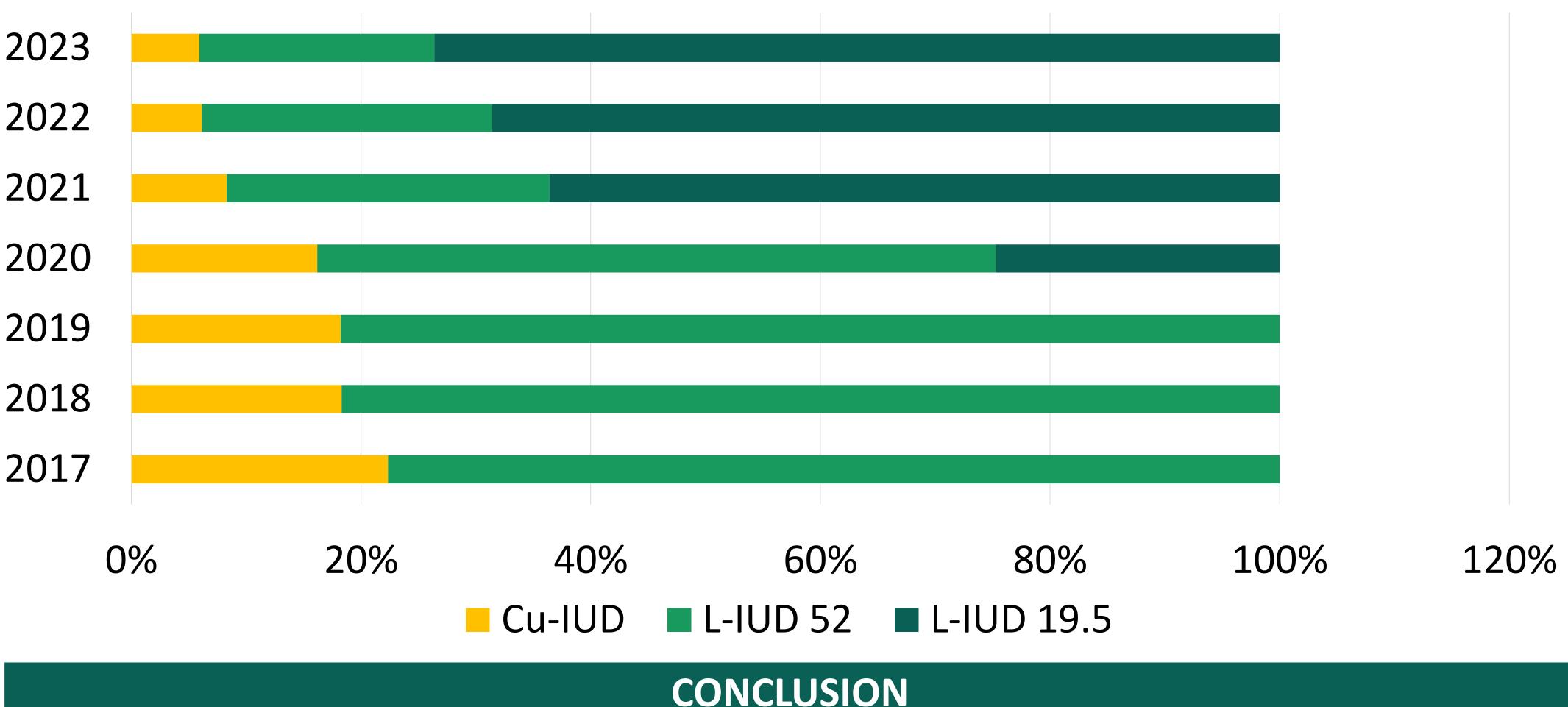
### RESULTS

A 67% increase in the number of adolescent beneficiaries was observed during the period (from 9,994 in 2017 to 30,466 in 2023). The number of IUD users grew from 85 in 2017 to 591 in 2023, mainly with hormonal IUDs (Figure 1). In 2017, approximately 78% of users opted for L-IUD 52; in the following years, this number increased to 81%, decreasing to 59% in 2020 due to migration to L-IUD 19.5. The use of L-IUD 52 remained constant, while L-IUD 19.5 insertions increased, representing 74% of all insertions by the end of the study. Conversely, there was a significant reduction of approximately 62% in the number of pregnancies, decreasing from 147 and 140 in the first two years to 119, 92, 87, 80, and 57 from 2019 to 2023, with a variation from 0.88% to 0.19% (Figure 2).

# FIGURE 1. TREND OF INCREASE IN THE NUMBER OF ADOLESCENT BENEFICIARIES AND **DECREASE IN THE AMOUNT OF PREGNANCY BETWEEN 2017 AND 2023**



### FIGURE 2. DISTRIBUTION OF BENEFICIARIES RECEIVED INTRAUTERINE DEVICES (IUD'S) **BETWEEN 2017 AND 2023**



A clear inversely proportional correlation exists between the increased insertions of IUDs, especially hormonal ones led by L-IUD 19.5, and the decrease in the number of pregnancies. This observation mitigates social risks associated with school dropout, lack of family support, and difficulties in the job market, with adolescent pregnancy being a crucial social indicator associated with significant perinatal risks.

### REFERENCES



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Pregnancy

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<sup>3.</sup> Monteiro DLM, Monteiro IP, Machado MSC, Bruno ZV, Silveira FAD, Rehme MFB., et al. Trends in teenage pregnancy in Brazil in the last 20 years (2000-2019). Revista da Associação Médica Brasileira, 2021, 67, 759-765. Doi: https://doi.org/10.1590/1806-9282.20210265.