Prescription Contraceptive Use Among Medicaid-Insured Women with Obesity in the United States

Daisuke Goto[1], John W Grunden[1], Lori Cyprien[1], Amy Zhao[1], Lixia Yao[2]

[1]Organon, Jersey City, NJ, USA ; [2]Polygon Health Analytics LLC, Chalfont, PA, USA

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Background

- In the US, 42% of women were estimated to be obese in 2017 to 2018,[1] and 46% of all pregnancies were unintended in 2015 to 2019[2]
- Severe obesity (body mass index over 40) is a known risk factor for unintended pregnancy (UIP)[3]
- To avoid UIP, the Society of Family Planning strongly encourages the use of contraception[4]
  - While obese women might face elevated adverse event risks, these events are rare[5]
- The pattern of contraception use in patients with obesity is not clearly known

Objective

- To study the choice of prescription contraceptives among commercially insured (Medicaid) women with obesity

Methods

- Using the Merative MarketScan Research databases, we identified Medicaid patients 18 to 45 years old who were diagnosed with obesity for the first time between Jan 2017 and Sep 2021
- Patients with a minimum of 1-year baseline data prior to obesity diagnosis and 1-year follow-up after diagnosis were included
- CPT, HCPCS, ICD-10, and NDC codes were used to identify diagnosis and prescriptions
- Patients with 1+ prescriptions, were grouped first by long-acting reversible contraception (LARC; intrauterine devices [IUD] and/or implant), then oral contraception, followed by any other types of contraception
- Subgroup analyses were conducted based on age and selected comorbidities

Results

Table 1. Baseline characteristics (N = 312,411)

Characteristic	n	%*
Age group (years)		
18-24	87,213	28%
25-34	135,024	43%
35-45	90,174	29%
Race		
White	149,995	48%
Black	116,040	37%
Hispanic	15,740	5%
Other	9,101	3%
Missing	21,535	7%
Comorbidities		
Hypertension	48,239	15%
Type-2 diabetes	20,269	7%
Hypercholesterolemia	20,122	6%
Index year		
2017	81,540	26%
2018	71,328	23%
2019	58,218	19%
2020	55,537	18%
2021 (Jan-Sep)	45,788	15%

* %s might not total 100 owing to rounding

40% of newly diagnosed obese women* received prescription for contraception

* Medicaid-insured women 18-45 years of age first diagnosed with obesity between Jan 2017 and Sep 2021

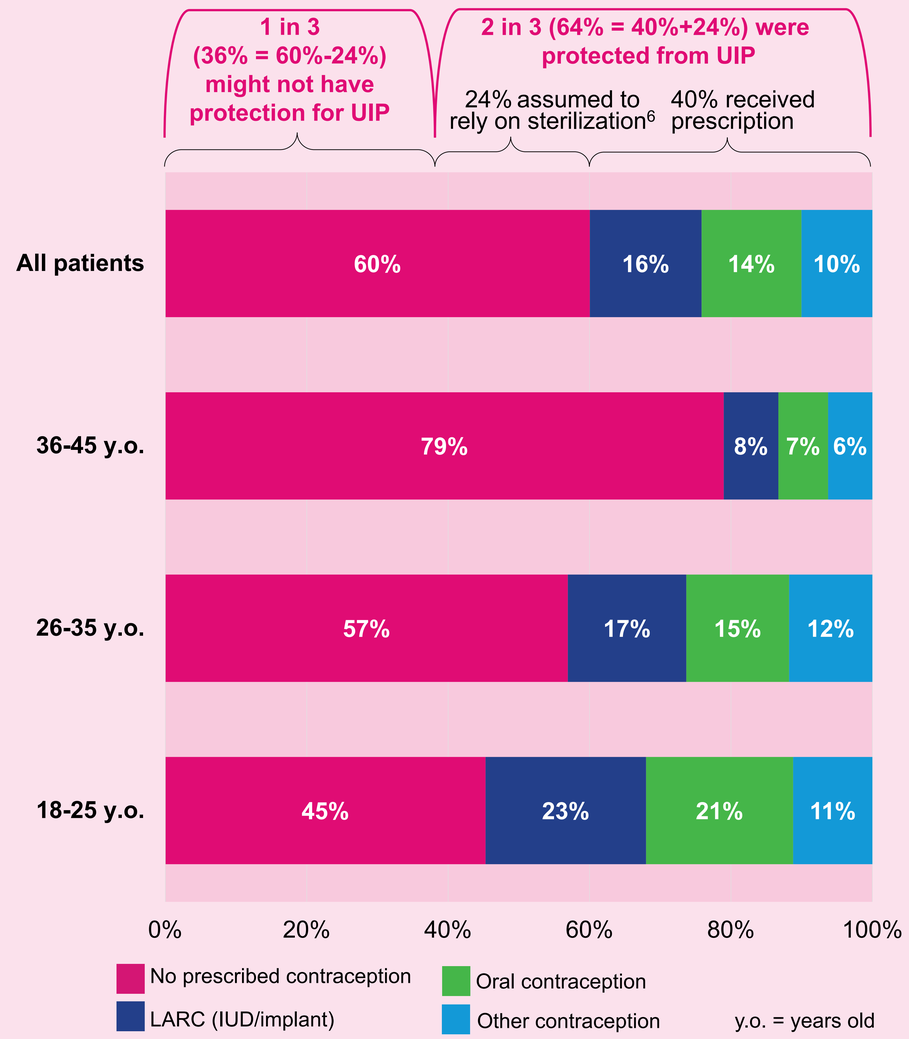
Assuming an additional 24% used sterilization as a contraception method[6]

2 in 3 (64%) were protected from UIP

1 in 3 (36%) might not have UIP protection

14% used estrogen-containing oral contraception that may independently increase the risk of thrombosis[6]

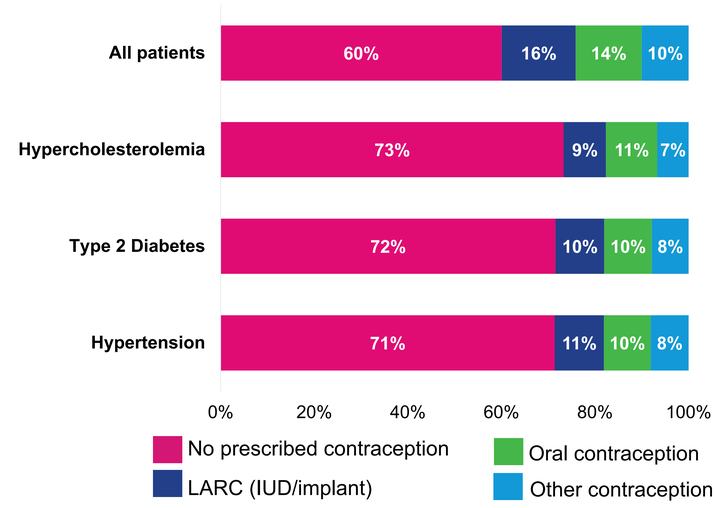
Figure 1. Contraceptive use after obesity diagnosis varied by age



Results (continued)

Figure 2. Contraceptive use by comorbidity

- Patients with comorbid hypercholesterolemia, type 2 diabetes, and/or hypertension were 11% to 13% less likely to receive prescription for contraception than patients without comorbidity



Discussion and Conclusions

- While causal relationships were not assessed in our study, the relative lack of contraception use observed in Medicaid patients newly diagnosed with obesity might help explain the high UIP rate previously reported in women with obesity[3]
- Older patients and those with comorbidities were less likely to receive contraception and may be at greater risk for UIP
- While female sterilization rates in the US could be as high as 39% for women 40 to 49 years old,[6] given the higher birth-related risks associated with advanced age and comorbidities in this population, the current state of contraception is concerning
- Oral contraceptives represented a sizable proportion of prescribed contraception, even though the US Medical Eligibility Criteria for Contraceptive Use rates them as Level 2 (theoretical or proven risks usually outweigh the advantages) for obese patients[5]
- **Limitations of this study** include lack of data on sterilization rates and non-prescriptive contraception; we did not have data on sexual orientation and patient choices that affect need for contraception; no data on prescription compliance

References

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