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Five-Year Efficacy and Safety of the Liletta® Levonorgestrel Intrauterine System [13F]

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First Bluetooth Connected Ovulation Test with App to Predict and Track Cycles [10F]

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INTRODUCTION: Fertility Apps offer the convenience of cycle tracking and storage of data over multiple cycles. However, accuracy of ovulation prediction by most Apps is very poor. Therefore an App that uploads accurate ovulation test data would be of benefit to women seeking to conceive. This study examined women's usage and experience of the new Clearblue Connected Ovulation Test System.

METHODS: This home based study required volunteers to pair the Bluetooth connected ovulation test to their mobile phone using the associated App, then use the App and ovulation tests for 1 cycle. The tests measure both estrogen and luteinizing hormone to identify the wider fertile window and pinpoint ovulation. Test results are uploaded using the App enabling easy tracking of fertility data. Volunteers completed usability questionnaires when pairing App with holder and after 4 weeks usage. Qualitative feedback from volunteers and Cloud data usage was analysed.

RESULTS: Of 164 Android users, 98% found the test and 93% found the App easy to use. For iOS users (n=23), 100% found the test and 95% found the App easy to use. Cloud data showed women conducted tests on the right days and chose to add additional data e.g. intercourse and menses. Volunteers also successfully uploaded their test results to the App, providing a central, concise record of data. Qualitative data indicated women found this very beneficial.

CONCLUSION: Conclusions: This Clearblue Connected Ovulation Test System combines the convenience of an App with the accuracy and benefit of a home ovulation test.

Financial Disclosure: Dr. Michael Thomas disclosed the following-EvoFem: Consultant/Advisory Board, Sarah Johnson: SPD Development: Employment; SPD Development Company: Employment, Bola Grace disclosed the following - SPD Development Company: Employment; Lorrae Marriott: SPD Development Company: Employment. The other author did not report any potential conflicts of interest.

Reproductive Coercion in the Perinatal Context [11F]

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INTRODUCTION: Reproductive coercion (RC), or behavior that interferes with contraception use and/or pregnancy autonomy, has been poorly assessed in the perinatal context. Our objective was to determine patient factors associated with RC and to explore associations between RC and pregnancy engagement.

METHODS: This was a cross-sectional study utilizing an anonymous, self-administered, Spanish or English survey among women with at least one prior pregnancy. The RC questionnaire queried participants' experience of birth control sabotage and/or pressure to become pregnant by a partner at the time of their most recent pregnancy. Surveys were distributed at a tertiary care center during routine outpatient visits. Descriptive and bivariable analyses were performed.

RESULTS: In this sample of 93 women, 6.5% screened positive for RC. In the overall cohort, the mean age was 36.8 years, 79.6% were racial or ethnic minorities, and 41.9% were college graduates. Women reporting RC were younger (27.6vs.37.4 years, p=0.036) and reported more limited prenatal care (66.7%vs.25.3% with late/ no prenatal care, p=0.049). There were trends demonstrating greater work insecurity, younger age at first pregnancy, poorer selfperception of health, and increased frequency of intimate partner violence (p<0.075). Race/ethnicity and education did not differ by

experience of RC. Women were significantly more likely to have had an undesired pregnancy or pregnancy ambivalence if they had experienced RC (p=0.004).

CONCLUSION: In this unselected population, RC was present in a distinct minority of women without discrimination along racial, ethnic, education and economic lines. These data suggest that RC experience is associated with pregnancy ambivalence/unintendedness and poorer engagement in perinatal care.

Financial Disclosure: The authors did not report any potential conflicts of interest.

Postpartum Intrauterine Device Utilization Rate at an Academic Institution [12F]

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INTRODUCTION: In the first year postpartum, 70% of pregnancies are unintended. Long acting reversible contraceptives, such as intrauterine devices (IUDs), are among the most effective forms of contraception and have been successful in reducing unintended pregnancy rates. Many institutions do not place IUDs until several weeks postpartum despite the American College of Obstetricians and Gynecologists' recent Committee Opinion No. 670.

METHODS: A retrospective cohort study was performed among women who delivered from 7/2014 through 6/2015 at our institution. Those who expressed desire to use an IUD as contraception prior to discharge from the hospital following delivery were included. Billing lists with ICD-10 codes for IUD insertion were used to cross reference inpatient lists from the postpartum hospital stays. Primary outcome measure was percentage of patients who had an IUD inserted by three months postpartum. Additional reasons for not receiving an IUD were examined.

RESULTS: 196 patients were identified who desired an IUD for postpartum contraception, and 86 (43.9%) received one. The most common reason for not receiving an IUD was loss to follow up (60%). Other reasons included choosing to use another form of contraception: hormonal (28.1%), barrier (9.1%), or abstinence (1.8%).

CONCLUSION: More than half of our patients do not receive their desired method of postpartum contraception. As loss to follow up is the most common reason, institution of immediate postplacental IUD placement may allow for increased utilization and fewer unintended pregnancies. Further study is necessary to elucidate the barriers to immediate postpartum contraception.

Financial Disclosure: The authors did not report any potential conflicts of interest.

Five-Year Efficacy and Safety of the Liletta® Levonorgestrel Intrauterine System [13F]

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University of Colorado, Aurora, CO David K. Turok, MD, Jeffrey T. Jensen, MD, Beatrice A. Chen, MD, Thomas D. Kimble, MD, and Mitchell D. Creinin, MD

INTRODUCTION: Liletta is a levonorgestrel 52 mg contraceptive intrauterine system (IUS) currently approved for contraception for up to four years based on an ongoing multicenter trial currently planned to continue for up to eight years of use. We evaluated the five-year efficacy and safety data for Liletta.

METHODS: Women aged 16-45 years were enrolled; those women aged 36-45 years received the IUS for safety evaluation only. We followed 1,568 women aged 16-35 years and 146 women aged 36-45 years after successful IUS placement. We assessed five-year pregnancy rates and safety outcomes.

RESULTS: The 16-35 year old subjects included 1,011 (57.7%) nulliparous and 438 (25.1%) obese women. Among these women, nine pregnancies occurred including four in nulliparous women and one in an obese woman. One pregnancy occurred following perfora-



tion and one following expulsion. Six (67%) pregnancies were ectopic. The Pearl Index in the first year was .15 (95% CI .02-.55). Cumulative life-table pregnancy rates through years three and five were .59 (95% CI .28-1.25) and .92 (95% CI .46-1.82), respectively. Perforation following IUS placement occurred in two (0.1%) women; both were diagnosed within the first year. Expulsion occurred in 63 (3.7%) participants, most (50 [80.6%]) during the first year of use. Pelvic infection was diagnosed in 11 (.6%) women. Only 39 (2.3%) women discontinued due to bleeding complaints, primarily (n=29 [74.3%]) in the first year.

CONCLUSION: Liletta is highly effective and has an excellent safety profile over five years of use; most expulsions and discontinuation for bleeding occur during the first year of use.

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The Impact of Rural or Urban Location on Clinical Availability of the Copper IUD: A Mystery Caller Study [14F]

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INTRODUCTION: The copper IUD is the only highly effective nonhormonal method of contraception. It is also the most effective form of emergency contraception (EC), when placed within 5 days of unprotected intercourse, and is the only method of EC that provides ongoing contraception. For these reasons, local availability of the copper IUD to women is essential.

METHODS: A mystery caller model was employed with a single caller making inquiries to urban and rural clinics in Washington state over a two-month period regarding availability of copper IUDs using a standardized script. Clinic types included OB/GYN, primary care, family planning and multispecialty. Clinics were identified using the HRSA 340B database, with allocation as urban vs rural based on the Office of Management and Budget county designations. The primary outcome was the reported availability of the copper IUD. Secondary outcomes included ability to schedule an appointment for copper IUD placement within 5 days.

RESULTS: A total of 97 urban and 97 rural clinics were included in the analysis. A greater proportion of urban clinics reported availability of copper IUDs than rural clinics (78 vs 50%; p <0.001). Only 19 urban clinics and 10 rural clinics were able to schedule an appointment for copper IUD placement within the 5 day window needed for EC use (19 vs 10%, p = 0.07).

CONCLUSION: Rural clinics are less likely to have copper IUDs available, even when clinic type is taken into account. Efforts are needed to increase availability of this method, particularly in rural areas.

Financial Disclosure: The authors did not report any potential conflicts of interest.

Evaluating the Availability of Ulipristal Acetate in Eastern Long Island [15F]

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INTRODUCTION: Ulipristal acetate (UPA) was approved by the FDA in 2010 as a form of emergency contraception (EC), which can be taken within 120 hours of unprotected sex. Evidence has shown that UPA is more effective than oral levonorgestrel emergency contraceptive pills (LNG-ECP) and more cost effective. UPA is more effective in patients with a BMI >30. No studies have looked at the availability of UPA in New York State. We specifically looked at Long Island due to its population density.

METHODS: We conducted an observational population-based study utilizing a telephone-based secret shopper methodology. Researchers called 200 unique retail pharmacies in Long Island from May 2016-July 2017, representing themselves as patients and physicians.

RESULTS: Only 9.5% of pharmacies had UPA immediately available, although 81% reported ability to order UPA. In contrast, 80% reported having LNG-ECP readily available. Only 47% of pharmacists who had UPA available could correctly identify its differences from LNG-ECP. 82% of pharmacists in the physician call group were unfamiliar with UPA. In addition, 0% of pharmacists mentioned BMI as an important difference in efficacy between UPA and LNG-ECP.

CONCLUSION: Although UPA is the more effective EC than LNG-ECP, its availability is limited. Knowledge of UPA is lacking in pharmacists and clinicians alike. Increasing education of clinicians, pharmacists and patients regarding differences between EC pills may assist in increasing demand for UPA and could increase overall availability of UPA.

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