



Society of Family Planning Annual Meeting Scientific Abstracts Oral and Poster Presentations

ORAL ABSTRACTS

O01

“FIGURING OUT WHAT I DIDN’T LIKE ABOUT ALL OF THE PREVIOUS [METHODS LED] TO KNOWING WHAT I WANTED BETTER”: A QUALITATIVE STUDY OF THE CONTRACEPTIVE JOURNEY AMONG REPRODUCTIVE-AGED WOMEN IN UTAH

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Objectives: In the United States, women on average start or stop a contraceptive method approximately 10 times during their reproductive years. Yet, research on contraceptive use has not accounted for how women’s lived experiences with prior methods influence future contraceptive decisions. This qualitative study explored women’s contraceptive journeys and examined how individuals’ past experiences influence decisions around contraceptive strategies.

Methods: We conducted 30 in-depth interviews with women enrolled in the HER Salt Lake study, using modified grounded theory. Participants were asked to chronologize their contraceptive use. Interviewers queried decisional aspects around initiation and cessation of each method and examined how method experiences factored into subsequent decisions. We had interviews transcribed and developed a codebook. We conducted double-coded open coding followed by axial coding, with every third interview assessed for continued inter-rater reliability between coders. We conducted iterative thematic analyses, assessing substantive significance of findings to develop a contraceptive journey framework.

Results: Five themes emerged across contraceptive chronologies: 1) the assumption of contraceptive responsibility by women initiated by relationship changes; 2) the role of initial excitement about a new method and subsequent disappointment in a method’s downsides; 3) the concept of “method fatigue”; 4) the changing decisional balance between “acceptable” and “unacceptable” side effects and method attributes; and 5) changes in contraceptive preferences over time. Emerging themes represent nodes where contraceptive strategies may adjust and influence future contraceptive utilization.

Conclusions: Women’s contraceptive experiences over their reproductive lives are an important component of current and future

method-related decisions. Contraceptive use should be considered an ongoing decision-making process.

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O02

THE POTENTIAL FOR INTRAMUSCULAR DEPOT MEDROXYPROGESTERONE ACETATE AS A SELF-BRIDGING EMERGENCY CONTRACEPTIVE

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Objectives: This pilot study examines the potential of depot medroxyprogesterone acetate (DMPA) as an emergency contraceptive by examining its ability to disrupt ovulation when administered at graded stages of dominant follicle development.

Methods: Participants included healthy, ovulatory women aged 18–33 years who were pre-assigned to one of three dominant follicle size groups: 12–14mm, 15–17mm, and ≥18mm. Participants underwent serial transvaginal ultrasound (TVUS) until their dominant follicle reached its assigned size, at which point DMPA was administered. For the following 5 days, daily TVUS was performed to detect follicle rupture (>50% decrease in size), with serum markers of ovulation (estradiol, progesterone, luteinizing hormone) obtained to detect cases of ovulatory dysfunction. The participant returned twice weekly for 2 weeks to provide serum progesterone levels to detect delayed ovulation or ovulatory dysfunction.

Results: Seventeen women completed the study. Follicle rupture and ovulation occurred in six (35%) participants (35%), as defined by ultrasound-detected decrease in follicle size with subsequent rise in serum progesterone >3ng/mL. As follicle size increased, the likelihood of ovulation also increased (12–14mm: 0%, 0/5; 15–17mm: 33%, 3/9; >18mm: 100%, 3/3). Cases of ovulation occurred among participants whose pre-DMPA LH levels ranged from 13.5–149.0 IU/L (average: 68.5 IU/L).

Conclusions: DMPA suppressed ovulation in 65% of tracked cycles and may disrupt ovulation when administered in the periovulatory period, prior to the LH surge.

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O03**INTRACERVICAL BLOCK FOR LEVONORGESTREL-RELEASING INTRAUTERINE SYSTEM PLACEMENT AMONG NULLIGRAVIDAS: A RANDOMIZED CONTROLLED TRIAL**

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Objectives: This study assessed whether 3.6mL 2% lidocaine intracervical block reduces pain at tenaculum and levonorgestrel-releasing intrauterine system (LNG-IUS) placement among nulligravidas, and to assess if intracervical block effects ease of insertion.

Methods: In this double-blinded, parallel, randomized controlled trial, nulligravidas were block-randomized to one of three arms before LNG-IUS placement: 3.6mL 2% lidocaine intracervical block, sham (intracervical dry-needling) or no intervention. The primary outcome was pain at LNG-IUS placement. Secondary outcomes were pain at tenaculum placement and ease of insertion (assessed by the health-care provider). Pain was assessed qualitatively (none, mild, moderate, severe) and quantitatively (mean and 95% confidence interval [95% CI]), through a visual analogue scale. We used chi-square tests and mixed-effects linear regression models.

Results: We randomized 302 nulligravida women (99 with intracervical block, 101 sham and 102 no intervention); 300 had a successful LNG-IUS insertion. The intracervical block group had a lower frequency of women reporting severe pain than did the other groups, both at tenaculum placement (2% with intracervical block vs. 30.2% with sham vs. 15.2% with no intervention, $p < .0001$) and at LNG-IUS placement (26.5% with intracervical block vs. 59.4% with sham vs. 50.5% with no intervention, $p < .0001$). Mean pain (95% CI) at LNG-IUS placement was lower with intracervical block than with sham: 4.3 (3.8–4.9) vs. 6.6 (6.2–7.0), $p < .0001$ or with controls: 4.3 (3.8–4.9) vs. 5.8 (5.3–6.4), $p < .0001$. Ease of insertion did not differ among the groups.

Conclusions: Intracervical block before LNG-IUS placement was associated with lower pain at tenaculum and device placement among nulligravidas.

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O04**THE ASSOCIATION OF RESTRICTED ABORTION ACCESS AND INCREASING RATES OF MATERNAL MORTALITY WITHIN THE UNITED STATES**

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Objectives: We aimed to explore the relationship between maternal mortality and access to abortion in the United States using publicly available data for 1995–2017.

Methods: We utilized the Global Health Data Exchange (GHDx) and CDC Wonder (CDCW) databases to abstract maternal mortality data from 1995 to 2017. We compared maternal mortality ratios (deaths per 100,000 live births) in states considered restrictive or

protective of abortion rights based on Guttmacher Institute policy analysis.

Results: The maternal mortality ratio (MMR) from GHDx weighted by the number of births in each state from the CDC did not differ significantly between restrictive states and protective states in 1995 (restrictive: 12.8, 95% CI 11.8–13.7; protective: 10.3, 95% CI 8.5–12.0). The MMRs for these groups of states diverged significantly after 2009. Restrictive states had a higher MMR than protective states in 2017 (restrictive: 28.5, 95% CI 25.7–31.2; protective: 16.1, 95% CI 12.0–20.1, $p < .001$). The MMR decreased or remained stable for all races in protective states and increased for all races in restrictive states (Hispanic: 8.5 vs. 16.2; White: 8.9 vs. 20.4; Black: 28.2 vs. 47.2; Asian: 11.5 vs. 14.6; and Native American: 13.4 vs. 37.9).

Conclusions: The results of this study demonstrate an association between decreased abortion access and increased maternal mortality, particularly for Black and Native American women. Further investigation is needed to understand how decreased abortion access may be contributing to increased maternal mortality.

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O05**INTRANASAL FENTANYL FOR PAIN CONTROL DURING FIRST-TRIMESTER UTERINE ASPIRATION: A RANDOMIZED CONTROLLED TRIAL**

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Objectives: We evaluated the effectiveness of intranasal fentanyl (INF) in reducing pain during a first-trimester uterine aspiration.

Methods: In this double-blinded, randomized controlled trial, participants requesting surgical abortion at 14 weeks' gestation or less received either 100 mcg of INF or placebo administered 15 minutes prior to uterine aspiration. All participants received oral ibuprofen and a standardized paracervical block. The primary objective was to compare pain reported on a 100mm Visual Analog Scale (VAS) immediately after uterine aspiration. Secondary objectives included comparing reported post-procedural pain and satisfaction with procedural pain control in the two groups. To find a difference in pain of 15mm with an $\alpha = .05$ and power of 80%, we aimed to recruit 106 people.

Results: Of 356 people assessed for eligibility from March 2017 through May 2018, 107 participants were recruited. Pain during aspiration was 58.4mm (+/- 28.0) in the INF group and 59.6mm (+/- 24.6) in the control group, $p = .82$. Dilation pain was 54.3mm (+/- 25.8) in the INF group and 52.5mm (+/- 23.7) in the placebo group, $p = .73$. Post-procedure pain was 19.1mm (+/- 19.5) in the INF group and 18.1mm (+/- 19.4) in the placebo group, $p = .80$. Neither patient satisfaction (INF 65.8 mm +/- 31.7 vs. placebo 62.9mm +/- 28.8, $p = .63$) nor provider satisfaction (INF 76.3 mm +/- 26.0 vs. placebo 72.9mm +/- 23.9, $p = .49$) differed between groups.

Conclusions: As an adjunct to NSAID and paracervical block, INF does not decrease pain with aspiration, with dilation, or post-procedure, nor does it improve patient or provider satisfaction. Abortion patients are highly amenable to receiving medications intranasally.

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006

INFLUENCE OF GENETIC VARIANTS ON BLEEDING PATTERNS AMONG ETONOGESTREL CONTRACEPTIVE IMPLANT USERS

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Objectives: This study aimed to identify genetic variants that are associated with abnormal bleeding patterns related to etonogestrel (ENG) contraceptive implant use.

Methods: We recruited healthy, reproductive-aged women using ENG implants for 12–36 months. Participants completed questionnaires regarding current bleeding patterns and experiences of abnormal bleeding during contraceptive implant use. We measured serum ENG concentrations and genotyped each participant for 120 single nucleotide variants in 14 genes involved in progesterin metabolism, regulation, and function. We performed backwards stepwise multivariable logistic regression to identify genetic variants associated with abnormal bleeding and current amenorrhea.

Results: We enrolled 350 ethnically diverse participants. A majority (59.4%) reported abnormal bleeding during implant use; 14.9% (52/350) were amenorrheic at enrollment. We found three genetic variants associated with bleeding patterns. Carriers of *CYP2C19*19* were more likely to report abnormal bleeding (aOR 2.12, $p=.01$). Participants homozygous for the *AKRIC3* rs1937840 variant and carriers of the *CYP2C9* rs4918758 variant were both more likely to report amenorrhea (aOR 2.49, $p=.005$; and aOR 2.70, $p=.03$, respectively). Frequencies of these genetic variants were 57.1%, 51.8%, and 28.1%, respectively. Serum ENG concentrations were also significantly associated with abnormal bleeding (aOR 1.005, $p=.02$).

Conclusions: We identified three genetic variants associated with abnormal bleeding and amenorrhea in ENG implant users. The variant *CYP2C19*19* may cause reduced enzymatic activity of *CYP2C19* (peripherally involved in progesterone metabolism). Because higher serum ENG concentrations are also associated with abnormal bleeding, this variant may play a role in reduced breakdown of active ENG metabolites. Future pharmacogenomic studies may lead to improvements in individualized contraceptive selection, counseling, and patient satisfaction.

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007

EFFECTIVENESS OF ACCOMPANIMENT OF SELF-MANAGED MEDICATION ABORTION BETWEEN 13 AND 24 WEEKS GESTATION: A RETROSPECTIVE REVIEW OF CASE RECORDS FROM ARGENTINA, CHILE, AND ECUADOR

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Objectives: Where clinic-based abortion care is not accessible, feminist networks have emerged to support people seeking abortions. Trained volunteers, or “accompaniers,” provide telephone or in-person support to people self-managing abortions via evidence-based protocols. The

objective of this study is to evaluate the effectiveness of self-managed abortion with accompaniment support in the second trimester.

Methods: This is a retrospective analysis of anonymized case records completed by accompaniers providing accompaniment for second-trimester medication abortions in Argentina, Chile, and Ecuador. Descriptive statistics on women’s pregnancy histories, gestational age, and abortion outcomes were calculated.

Results: Between 2016 and 2018, 315 women received accompaniment support for 317 medication abortions at 13–24 weeks’ and 6 days’ gestation. Before contacting the accompaniment group, 19% had previously tried to interrupt the pregnancy. At least 94% of abortions used a mifepristone-misoprostol regimen, with most (75%) administering misoprostol sublingually. Approximately 12% ($n=37$) of accompaniments resulted in a manual vacuum aspiration or dilation and curettage from formal health services. Seventy-five percent successfully terminated with the accompanied medication attempt alone, and 95% were considered complete after additional surgical or medication intervention. Complication data were available for Chile and Ecuador ($n=96$); 6% had retained placentas and 3% reported excessive bleeding raising concerns of hemorrhage, while 8% experienced high fever, excessive vomiting and pain, or hypotension. No procedures requiring transfusion or hysterectomy were documented.

Conclusions: These results suggest self-managed medication abortion in the second trimester, conducted with accompaniment support, is an effective model of abortion care and provides a safe alternative to clandestine surgical procedures.

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008

CONTRACEPTIVE NEEDS AND PREFERENCES AMONG WOMEN WITH OPIOID USE DISORDER

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Objectives: To elicit the contraceptive decision-making needs and preferences of women with opioid use disorder (OUD).

Methods: We conducted semi-structured qualitative interviews with 20 women who were currently pregnant or within 1 year of a pregnancy and had OUD. We used the principles of the Ottawa Decision Support Framework to explore contraceptive decisional needs and preferences and analyzed each transcript using grounded theory.

Results: Women with OUD described contraceptive decisions influenced by multiple novel factors, including perceived infertility, a desire to avoid medications including hormones in recovery, their partner’s recovery status, and their own potential relapse. Participants’ concerns about methods were commonly contextualized by a history of OUD. These included anxiety about long-acting reversible contraception associated infections given previous hospitalizations for OUD-related infections, bleeding patterns in the setting of housing instability, and interactions with psychiatric medications given coexisting mental health diagnoses. Participants also identified barriers to contraceptive access and utilization. These barriers included distrust of the health care system, stigma from providers, the restricted environments of both incarceration and recovery programs precluding return to care, and fluctuating priorities between opioid use and health care needs. Trusted sources of information included health-care providers with whom they have an established relationship, friends who are not actively using opioids, and peers in recovery programs.

Conclusions: Women with OUD have unique decisional needs and preferences with regard to contraceptive decision making. Better understanding how best to support contraceptive decision making in this population is essential to providing just, equitable, and patient-centered care.

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O09

REPRODUCTIVE HEALTH NEEDS OF TRANSGENDER AND GENDER-NONCONFORMING INDIVIDUALS ASSIGNED MALE AT BIRTH

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Objectives: Transgender and gender-nonconforming individuals assigned male at birth are often reluctant to seek health care. Our objective is to assess contraceptive use, sexually transmitted infection (STI) prevention, and provider contraceptive education in this population.

Methods: We present descriptive data on contraceptive use and reproductive history from an online survey of transgender and gender-nonconforming individuals assigned male at birth aged 18–64.

Results: A total of 207 individuals participated. The mean age was 34 (SD 14.3). The majority were white (180; 87%), and 130 (63%) had private insurance. Some 92 (44%) had at least a college degree, and 108 (52%) earned less than \$24,000/year. In all, 151 (74%) were on hormone therapy, and 108 (54%) were sexually active. About three-quarters (139; 74%) were attracted to people who could carry a pregnancy; however, 38 (20%) were currently at risk for pregnancy. Slightly more than half (103; 52%) believed or were unsure that hormone therapy prevents pregnancy, and 13 (7%) had been told by a provider that hormone therapy prevents pregnancy. Fewer than half of participants (37; 46%) used contraceptives, with the vast majority opting for condoms. Of the 44 (54%) who did not, 15 (34%) had partners who used contraceptives. About half (91; 48%) stated a provider had not discussed contraception after initiating hormones. One-third (64; 34%) used barriers to prevent STIs.

Conclusions: Almost half of transgender and gender-nonconforming individuals assigned male at birth were not counseled about contraception by their health-care providers after starting hormones. Condoms were most frequently used to prevent pregnancy and STIs. This highlights the need for provider education to ensure patients and their partners are aware of the need for effective contraception.

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O10

SUICIDAL ATTEMPTS AROUND A FIRST-TIME FIRST-TRIMESTER ABORTION

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Objectives: We use data that do not rely on self-report and consider prior mental health to examine the association between abortion and suicide attempts.

Methods: Using Danish Population Registries, we linked data for 523,280 women who were 18 to 36 years old between January 1, 2000, and December 31, 2016. In survival analyses, we examined whether having had an abortion increased women's risk of first-time suicide attempts—defined as a suicide attempt or self-injurious behavior according to the Danish algorithm—and whether this risk changed over time from the abortion, adjusting for important covariates such as age, calendar year, childbirth history, mental health history, parental mental health history, a physical health indicator, and parental education level.

Results: Women who had had an abortion had a higher risk of having a suicidal attempt than did women who had not had an abortion. However, this risk relative to women not having had an abortion was the same in the year before and the year after an abortion (IRR=2.46, 95% CI 2.22–2.72 vs. IRR=2.54, 95% CI 2.29–2.81, $p=.509$) and decreased as time from the abortion increased (IRR=1.90, 95% CI 1.75–2.06 for 1–5 years afterward vs. IRR=1.73, 95% CI 1.53–1.96 for >5 years afterward).

Conclusions: Women who have had an abortion are more likely to have suicide attempts both before and after their abortion than are women who have had no abortions. However, the higher likelihood among women having had an abortion is not attributable to their abortion.

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O11

ONE KEY QUESTION AND THE DESIRE TO AVOID PREGNANCY SCALE: A COMPARISON OF TWO APPROACHES TO ASKING ABOUT PREGNANCY WISHES

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Objectives: The CDC recommends routinely assessing patients' reproductive life plans, but no research has compared different approaches. We compared women's responses to One Key Question® (OKQ) and the Desire to Avoid Pregnancy (DAP) scale and measured their relationships to self-reported contraceptive use.

Methods: We surveyed nonpregnant women patients ($n=177$) aged 18–49, who had not undergone sterilization or menopause, at primary care and ob/gyn practices. We asked OKQ (“Would you like to become pregnant in the next year?”) and the 14-item validated DAP. We performed one-way ANOVA to compare mean DAP scores across OKQ response categories, and logistic regression to investigate their association with current contraceptive use.

Results: Based on OKQ, most patients reported no desire to become pregnant (78%), while 7% desired pregnancy and 15% were unsure or okay either way. The overall mean DAP score was 2.52 (SD=1.03, range: 0–4, where 4=highest desire to avoid pregnancy, Cronbach's $\alpha=.96$). Mean DAP scores differed significantly by OKQ response (“Yes”=0.84, “unsure/okay either way”=1.47, “No”=2.89, p -value: $<.001$), but scores demonstrated marked variation within each OKQ response group. Contraceptive use was lower among those who answered “Yes” (46%; OR=0.15, CI: 0.05–0.51) or “unsure/okay either way” (65%; OR=0.34, CI: 0.14–0.87) compared with “No” (85%). Likewise, odds of contraceptive use increased by 66% for each one-point increase in DAP score (OR=1.66, CI: 1.16–2.38).

Conclusions: This study reiterates the reliability and validity of the DAP scale and supports OKQ's convergent validity compared to the

DAP. Clinicians who use OKQ for screening should proceed with further discussion to fully understand a patient's wishes and clinical needs.

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O12

SEXUAL OUTCOMES ASSOCIATED WITH CONTRACEPTIVE USE AT ONE, THREE, AND SIX MONTHS IN THE HER SALT LAKE CONTRACEPTIVE INITIATIVE

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Objectives: Using a cohort of new-start contraceptive users, we assessed contraceptive-related changes in a range of physiologic and psychological sexual outcomes. Outcome measures include both validated sexual functioning measures and perceptions of methods' sexual effects.

Methods: At 1, 3, and 6 months after enrollment, participants from the HER Salt Lake Contraceptive Initiative, a prospective cohort study providing no-cost contraceptives, completed the Female Sexual Function Index (FSFI-6), the New Sexual Satisfaction Scale (NSSS), a computer-adapted visual analog scale of current sex-life ranking, and a five-point scale of perceived sexual changes due to method in the last month (with responses ranging from "improved my sex life a lot" to "made my sex life a lot worse").

Results: A total of 3613 individuals in the final sample initiated one of six short- or long-acting methods, with no significant sexual differences by method type selected at baseline. We documented no significant changes in FSFI-6 scores, NSSS scores, or mean sex-life ranking within the first 6 months. However, participants reported significantly different *perceptions* of contraceptive-related sexual changes. At 1 month, 48% of participants reported their new method had made their sex life worse in the last month; 19% reported it had improved their sex life (χ^2 $p < .001$). LNG IUD users most commonly reported positive sexual impacts; copper IUD users most commonly reported negative sexual impacts. These patterns were similar at 3 and 6 months.

Conclusions: New-start contraceptive users perceived both positive and negative sexual changes due to their method over 6 months, but we did not find significant changes in sexual functioning.

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O13

THE RELATIONSHIP BETWEEN INSURANCE COVERAGE AND USE OF PRESCRIPTION CONTRACEPTIVES BY RACE AND ETHNICITY, LESSONS FROM THE AFFORDABLE CARE ACT

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Objectives: This study described contraceptive use by race and ethnicity before and after the Affordable Care Act (ACA) and assessed

the relationship between insurance coverage and prescription contraceptive use in both periods.

Methods: We used data for women aged 15–44 at risk of unintended pregnancy from the 2006–2010 and 2015–2017 rounds of the National Survey of Family Growth. We examined changes in patterns of contraceptive use over time by race and ethnicity. We also examined changes in insurance coverage over the same period and considered how the relationship between insurance coverage and prescription contraceptive use has changed over time within each racial and ethnic group using both descriptive and multivariate regression methods.

Results: Prior to the ACA, black and Hispanic women were less likely than white women to use prescription contraceptives by 13.2 and 9.9 percentage points, respectively. Following the ACA coverage expansions, all groups experienced a reduction in uninsurance, but only black women experienced a significant increase (10.2 points) in prescription contraceptive use. As a result, the post-ACA black-white disparity in use narrowed to 3.9 points, while the Hispanic-white disparity remained unchanged. We also found that the estimated relationship between insurance coverage and use of prescription contraceptives changed over time for each group.

Conclusions: Our results suggest that changes in coverage under the ACA had modest, if any, effects on use of prescription contraceptives. Unobservable factors associated with women's family planning preferences and motivations are also important and make it challenging to isolate the true relationship between coverage and contraceptive use.

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O14

ATTITUDES ABOUT SELF-MANAGED ABORTION LEGALITY IN THE UNITED STATES: RESULTS FROM A NATIONALLY REPRESENTATIVE SURVEY

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Objectives: Women in the United States who attempt to self-manage their abortions are becoming increasingly vulnerable to legal, rather than medical, risk. Six state laws explicitly criminalize self-managed abortion (SMA), and many others are being used to prosecute people who attempt SMA or help others to attempt SMA. This study aims to investigate attitudes about the criminalization of SMA among women of reproductive age living in the United States.

Methods: In August 2017, we surveyed a probability-based representative sample of women aged 18–49 years living in the United States. We conducted weighted bivariate and multivariate logistic analyses to identify characteristics associated with supporting decriminalization of SMA.

Results: Fifty percent of eligible women ($n = 7022$) completed the survey. Fifty-seven percent reported support for decriminalization of SMA, including 70% of those with personal SMA experience (PR=1.25, 95% CI: 1.05–1.49) and 66% of those who knew someone who had attempted SMA but did not have personal experience with SMA (PR=1.17, 95% C: 1.08–1.27), relative to women with no experience. Previous medication abortion experience, religion, religiosity, education, and Hispanic race/ethnicity were also associated with support for SMA decriminalization. Age, marital status, region, access to abortion, income, and parity were not associated with SMA attitudes.

Conclusions: Our findings indicate that current legal efforts to criminalize women who self-manage abortion are inconsistent with women's attitudes about the practice. Lack of familiarity with SMA may help explain why some support its criminalization. Understanding these contributing factors could inform strategies for changing attitudes about SMA.

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015

MEDICATION ABORTION WITH PHARMACIST DISPENSING OF MIFEPRISTONE: A COHORT STUDY

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Objectives: This study aimed to assess the feasibility and acceptability of medication abortion (MAB) with mifepristone dispensed by pharmacists.

Methods: We recruited patients seeking MAB at six California sites. After standard clinical assessment and MAB consent, participants enrolled in the study and obtained mifepristone and misoprostol at nearby pharmacies from trained pharmacists. Participants completed surveys 2 and 14 days after enrollment. We extracted demographic and clinical data from medical records.

Results: From July 2018 to February 2019, we enrolled 83 participants. All took mifepristone as prescribed. Follow-up data were available for 82 (99%); the MAB was effective for 76 (93%; 95% confidence interval 85–97%), while 6 (7%) had aspirations. No unexpected or serious adverse events were reported. At Day 2, 77 (93%) completed the questionnaire and reported being satisfied with the pharmacy experience (n=72, 94%) and pharmacy staff (n=76, 99%). Seventy-five respondents (97%) reported that they received adequate information either from the pharmacist (n=40, 52%) or had already received necessary information from the clinician (n=35, 45%). Of 75 respondents (90%) surveyed at Day 14, only 2 (3%) indicated a preference to obtain medications in the clinic for future MABs, whereas 48 (64%) said they would prefer to obtain medications at pharmacies, 23 (31%) said either would be fine, and 2 (3%) were unsure. The most commonly reported reasons participants might not recommend pharmacy dispensing included long wait times and potential privacy concerns; advantages included “more control, power and freedom,” accessibility, convenience, and “patient agency.”

Conclusions: MAB with pharmacist-dispensed mifepristone and misoprostol appears feasible, with high patient satisfaction.

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016

ASSOCIATION BETWEEN INTERPERSONAL VIOLENCE AND DUAL PROTECTION USE AMONG ADOLESCENT FEMALES IN ATLANTA: IMPLICATIONS FOR EXPANDING DUAL PROTECTION MESSAGES TO INCLUDE PrEP/PEP

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Objectives: Female adolescents in the southern United States disproportionately experience adverse reproductive health outcomes, including HIV/STIs. Supporting adolescents' successful use of dual protection (DP) strategies (condoms+contraceptives or condoms only) to prevent unintended pregnancies and HIV/STIs is greatly needed, but interpersonal violence may impede DP use.

Methods: Baseline audio computer-assisted self-interview survey data (N=735) from a randomized controlled trial of a clinical intervention to increase DP use among sexually active African-American 14–19 year olds accessing services at a Title X clinic in Atlanta, Georgia, were used to examine associations between abuse (lifetime experience of emotional, physical or sexual abuse by any perpetrator), DP use, and condom intentions/self-efficacy.

Results: A total of 357 adolescents (48.2%) reported experiencing at least one form of abuse; they significantly differed from those without abuse on DP use in the previous 3 months (abuse: No dual protection, 33.8%; condoms only, 21.6%; condoms+contraceptives, 44.6% vs. no abuse: No dual protection, 25.2%; condoms only, 24.1%; condoms+contraceptives, 50.7%; p<.05). Adolescents with abuse histories also reported significantly lower condom use in the past 3 months (p<.05), lower condom use self-efficacy (p=.01), and lower intentions to use condoms in the next 3 months (p<.001).

Conclusions: Experiences of abuse are highly prevalent among adolescent females seeking Title X services in Atlanta. Given that those with abuse histories report lower DP use (likely driven by lower condom use) as well as lower condom use intentions and self-efficacy, useful interventions in addition to a continued focus on strengthening condom use may include expansion of education and access to user-controlled HIV prevention options like pre- and post-exposure prophylaxis (PrEP/PEP) may be expanded for this population, particularly in HIV hotspots.

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017

THE EFFECT OF ISOTRETINOIN ON ETONOGESTREL CONCENTRATIONS IN CONTRACEPTIVE IMPLANT USERS

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Objectives: Isotretinoin, commonly used for the treatment of severe acne, is a hepatic cytochrome P-450 (CYP) enzyme inducer and potent teratogen. The teratogenic risks of isotretinoin exposure require effective contraception. We studied the pharmacokinetic interaction between isotretinoin and etonogestrel (ENG) in contraceptive implant users.

Methods: We enrolled healthy, reproductive-aged women using an ENG implant for at least 4 weeks and initiating isotretinoin prescribed by a dermatologist for acne. We collected a baseline serum ENG level prior to initiation of isotretinoin and repeated ENG levels after 4 and 9 weeks of isotretinoin co-administration. To measure ENG, we used a validated liquid chromatography–tandem mass-spectrometry assay. We compared ENG concentrations before and after isotretinoin exposure using a nonparametric, related-samples test.

Results: We enrolled nine women; eight had serum drawn at 4 weeks and four at 9 weeks. Participants' median age was 21 years (range 17–26), median BMI was 27.4 kg/m² (range 21.1–34.9), and median duration of implant use was 16.5 months (range 1–27). Median ENG levels were 192.9pg/mL (IQR 125.2–201.6) before isotretinoin, 161.0pg/mL (IQR 136.3–193.7) at 4 weeks, and 146.0pg/mL (IQR 96.9–288.7) at 9 weeks.

The maximum decrease in serum ENG levels was 31.2% at 4 weeks and 24.2% at 9 weeks, but these were not statistically significant different from baseline ENG levels ($p=.78$, Friedman's test).

Conclusions: Based on standard definitions, isotretinoin is a weak CYP inducer (<50% decrease). This small study provides some reassurance that the etonogestrel implant remains an effective form of contraception in patients taking this teratogenic medication.

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018

MEASUREMENT OF ABORTION SAFETY USING COMMUNITY-BASED SURVEYS: FINDINGS FROM THREE COUNTRIES

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Objectives: We aimed to measure abortion safety in Nigeria, Cote d'Ivoire, and Rajasthan, India, using self-reported abortion data from representative samples of reproductive-aged women.

Methods: Interviewers asked women separately about their experience with "pregnancy removal" and "period regulation at a time when you were worried you were pregnant," and collected details on method(s) and source(s) of abortion. We operationalized safety along two dimensions: 1) whether the method(s) used were nonrecommended and put the woman at potentially high risk of abortion-related morbidity and mortality (i.e., methods other than surgery and medication abortion drugs), and 2) whether the source(s) used involved a nonclinical or no provider(s). We combined source and method information to categorize a woman's abortion into one of four safety categories.

Results: In Nigeria ($n=1810$), 29.1% of abortions involved a recommended method and clinical provider, 5.4% involved a recommended method and nonclinical or no provider, 9.2% involved a potentially nonrecommended method and clinical provider, and 56.3% involved a nonrecommended method and nonclinical or no provider. The corresponding estimates were 32.7%, 3.0%, 1.9%, and 62.4% in Cote d'Ivoire ($n=647$) and 39.7%, 25.5%, 3.4%, and 31.4% in Rajasthan ($n=457$).

Conclusions: Results demonstrate that abortion safety, as measured by abortion-related process data, is generally low but varies significantly by legal context. These individual-level data enable exploration of social inequities in abortion safety, which previous approaches have precluded. The policy and programmatic strategies employed to improve abortion safety and quality of care may differ for women in different abortion safety categories.

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019

REAL-WORLD RATES OF CONTRACEPTIVE FAILURE AFTER PUBLICLY FUNDED STERILIZATION OR IUD PLACEMENT IN CALIFORNIA

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Objectives: This study aimed to estimate real-world rates of contraceptive failure in the 12 months following hysteroscopic or laparoscopic sterilization, compared with IUD placement.

Methods: This was a retrospective cohort study of California Medicaid claims for women aged 18–50 who had had a contraceptive procedure between January 2008 and August 2014. We excluded procedures within 4 weeks of birth, women with conditions precluding general anesthesia, claims indicating cancer, and procedures done concomitant with endometrial ablation.

We identified pregnancy-related claims after index contraceptive procedures and used multivariable regression to examine associations between contraceptive procedure and contraceptive failure rates, adjusting for year of procedure, Medi-Cal program, region of state, patient age, race/ethnicity, baseline health status, obesity, history of Cesarean section, and hormonal contraceptive use prior to index procedure. IUD users were censored upon IUD removal.

Results: We identified women who had undergone laparoscopic sterilization ($n=37,540$), hysteroscopic sterilization ($n=11,564$), and IUD placement (hormonal $n=39,132$; copper $n=24,909$).

At 12 months postprocedure, per 100 person-years of enrollment, unadjusted incidence of pregnancy claims was highest for hysteroscopic sterilization, 4.80 (95% CI 4.34–5.31), followed by laparoscopic sterilization, 2.78 (95% CI 2.58–3.00), hormonal IUD 2.57 (95% CI 2.45–2.70) and copper IUD, 2.36 (95% CI 2.23–2.50).

In adjusted analyses, compared with laparoscopic sterilization, pregnancy claims were less common following placement of hormonal IUD (aRR 0.86, 95% CI 0.79–0.93), similar for copper IUD (aRR 1.01, 95% CI 0.93–1.10) and more common following hysteroscopic sterilization (aRR 1.50, 95% CI 1.34–1.68).

Conclusions: Real-world first-year failures of IUD were similar to or better than surgical sterilization. Among surgical procedures, more failures occurred after hysteroscopic than laparoscopic sterilization.

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020

REASSESSING THE EFFECTS OF MANDATORY WAITING PERIODS FOR ABORTION

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Objectives: We studied the causal effects of mandatory waiting period laws for abortion on abortion timing and abortion rates.

Methods: We focused on Tennessee's 48-hour mandatory waiting period law for abortion. We collected information on abortions of residents by gestational age from state health departments. Using a difference-in-differences approach, we estimated the causal effect of the mandatory waiting period for abortion on the percent of second-trimester abortion and abortion rates for Tennessee relative to a group of states for the period 2010 to 2016.

Results: The comparison between the information of abortions by gestational age of Tennessee relative to a group of states indicates the mandatory waiting periods had a positive effect on abortion timing. The percentage of second-trimester abortions significantly increased in Tennessee by 50% after the passage of the law. However, the overall abortion rate did not significantly change.

Conclusions: The mandatory waiting period did not prevent women from getting an abortion; rather, it caused them to get the abortion

on a later stage of their pregnancy when it is costlier for women in terms of time, health and personal finances.

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POSTER ABSTRACTS

P1

ABORTION ACCESS IN OHIO'S CHANGING LEGISLATIVE CONTEXT

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Objectives: Since 2010, Ohio's legislature has passed 19 abortion-related laws, including limiting where abortions can be performed and gestational-age restrictions. More than half the state's abortion clinics have closed since 2010. We examine changes in abortion utilization, including geographic distribution and gestational age, in Ohio from 2010 to 2016.

Methods: We used several data sources to compile proportions, rates, and ratios. Ohio's Office of Vital Statistics produces an annual report, *Induced Abortions in Ohio*, a summary of reports submitted by clinicians for every induced abortion. In addition, we used CDC's Abortion Surveillance Reports, the American Community Survey, and the Ohio Public Health Data Warehouse.

Results: Ohio has abortion rate declines that mirror those in the broader United States, but fewer abortions per 1000 reproductive-aged women compared with the United States overall. While most counties, especially rural counties, had decreasing abortion ratios, counties with large cities saw increases. After abortion clinics close, the abortion ratio drops in the county where the clinic was located and in the surrounding counties. The abortion ratio subsequently rebounds, but not to pre-closure levels. In 2010, Ohio had a smaller proportion of early first-trimester abortions, as compared with the United States overall, and that difference increased over time.

Conclusions: While Ohio's slow decline in abortion ratio is expected, geographic analysis reveals steep decreases in some counties combined with increases in others, suggesting geographic inequity in abortion access. Compared with the nation as a whole, Ohio has a lower rate of abortion. However, women who obtain first-trimester abortions have them later in the first trimester, suggesting delays to care.

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P2

OUT-OF-CLINIC AND SELF-MANAGED MENSTRUAL REGULATION IN BANGLADESH: PROVIDER PERSPECTIVES

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Objectives: We aimed to contextualize out-of-clinic and self-managed menstrual regulation (MR) from the perspective of trained MR providers in Bangladesh.

Methods: Qualitative in-depth semi-structured interviews (IDIs) were conducted with 25 trained MR providers from urban tertiary-care facilities in six cities in Bangladesh. IDIs explored attitudes and practices of unsanctioned MR/abortion providers and self-managed MR/abortion, providers' experiences treating patients who sought abortion services out-of-clinic, barriers/facilitators to safe MR/abortion, and MR/abortion definitions.

Results: There was a lack of consensus among trained providers about the definition of MR/abortion and gestational age cutoffs. Post-abortion care (PAC) services are increasing due to patients purchasing mifepristone/misoprostol from pharmacists, who do not provide adequate instruction. Patients sometimes present or are taken to untrained providers by brokers, who intercept patients entering the hospitals/clinics and receive a commission from unsanctioned clinics for bringing patients. Although inserting foreign objects into the cervix (used by traditional healers or for self-management) is still being used, this practice was less commonly reported. Barriers to accessing in-clinic MR include distance, family influence, brokers, and lack of knowledge. In addition, providers sometimes use their own moral judgement to deny MR services, affecting patient autonomy.

Conclusions: Providers in urban tertiary-care facilities in Bangladesh are mostly seeing the complicated MR/PAC cases, and the safety of out-of-clinic/self-managed abortion is still unknown. Lack of standardization among providers of MR definition/gestational-age cutoffs may affect patient care and MR access. MR safety can be improved by eliminating brokers. A harm-reduction approach to improve MR/abortion care provided by pharmacies may be beneficial.

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P3

RESPONDENT-DRIVEN SAMPLING: EVALUATING A NEW METHOD FOR THE MEASUREMENT OF INFORMAL-SECTOR ABORTION IN SOWETO, SOUTH AFRICA

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Objectives: Our aim was to explore the feasibility of applying the Respondent-Driven Sampling (RDS) methodology to estimate the incidence and lifetime prevalence of informal-sector abortion in Soweto, South Africa.

Methods: RDS has been successfully used to estimate the prevalence of sensitive and illegal behaviors, and may offer a previously untested alternative to measuring informal-sector abortions. In April and May 2018, nine "seeds" were identified and recruited. Seeds were instructed to recruit up to three eligible participants (women of reproductive age living in Soweto). Our primary outcome of interest was lifetime prevalence of informal-sector abortion, defined as any abortion that takes place outside of a formal health-care setting. Recruitment continued until study proportions for selected characteristics and the proportion of women reporting informal-sector abortion reached equilibrium. The estimated lifetime prevalence of informal-sector abortion was calculated using the RDS-2 estimator in R, calculated as the number of respondents who reported ever having had an informal-sector abortion, weighted by the inverse of their network size.

Results: A total of 862 women participated in the study. In preliminary weighted estimates, lifetime prevalence of informal sector abortion is 5.6% (95% CI: 0.7–10.4%), formal-sector abortion is 5.6% (95% CI: 0–12.0%), and all abortion is 12.5% (95% CI: 4.8–20.2%).

Conclusions: RDS was a successful methodology for recruiting participants who had had formal or informal sector abortion. Further testing of and innovations on the RDS methodology are needed to determine whether it is an efficient and effective method through which to estimate lifetime prevalence of informal-sector abortion.

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P4

ESTIMATING ABORTION INCIDENCE IN GHANA FOR 2017 USING THE ABORTION INCIDENCE COMPLICATIONS METHODOLOGY

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Objectives: Although abortion is legally permitted in Ghana under specific sociomedical conditions, the procedure remains highly stigmatized with limited access, potentially impacting accuracy of self-reported abortion estimates. As part of a larger project comparing five methodologies to estimate abortion incidence in Ghana, we implemented an indirect estimation approach: the Abortion Incidence Complications Methodology (AICM).

Methods: We drew a nationally representative, two-stage, stratified sample of 608 health facilities, and implemented a Health Facility Survey to estimate treated complications stemming from illegal induced abortion, and the number of legal abortions. A Key Informants Survey of 146 individuals generated a multiplier representing the inverse of the proportion of illegal induced abortions treated for complications in facilities. Applying the multiplier to estimates of treated complications from induced illegal abortions, and adding estimated legal abortions, yielded an annual estimate of all abortions.

Results: Approximately 200,000 abortions occurred in Ghana in 2017, corresponding to a national abortion rate of 26.8 (95% CI: 21.7–31.9) per 1000 women aged 15–49. Abortion rates were lowest in the Northern zone (18.6) and highest in the Middle zone (30.4). Of all abortions, 71% were illegal (72% Northern, 78% Middle, 60% Coastal). Nationally, 48% of pregnancies were unintended (21% Northern, 61% middle, 45% Coastal). Of all pregnancies, 15% ended in abortion.

Conclusions: Prior studies using Bayesian modeling generated an abortion rate of approximately 28 for women aged 15–49 for West Africa during 2010–2014. Our 2017 results for Ghana derived using an AICM-based approach were similar (26.8). Future analyses will compare these estimates to those from other methodological approaches.

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P5

PARTICIPANT SIDE EFFECT AND SATISFACTION OUTCOMES: SECONDARY ANALYSIS OF A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED TRIAL OF INTRAFETAL DIGOXIN AS AN ADJUVANT FOR DILATION AND EVACUATION AT 20 TO 24 WEEKS' GESTATION

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Objectives: This study aimed to assess participant side effects and satisfaction outcomes with the use of intrafetal digoxin injection prior to dilation and evacuation (D&E).

Methods: We conducted a multi-center, randomized, double-blind, placebo-controlled trial of intrafetal digoxin versus placebo before D&E at 20 to 24 weeks. We enrolled subjects between February 2017 and May 2018 from four abortion clinics in San Francisco, CA, Long Beach, CA, Los Angeles, CA, and Portland, OR. Participants received a blinded intrafetal injection of either one mg digoxin or an equivalent volume saline the day before D&E. We stratified randomization by gestational group (20–22 weeks, 22–24 weeks). Secondary outcomes included participant side effects and participant satisfaction and experience with the injection. We used an intention-to-treat analysis.

Results: Of the 321 eligible patients, we enrolled 190 and randomized 178. Baseline pain acceptability and nausea were similar between the digoxin and placebo groups. There were no differences in pain, nausea, vomiting, chills, fever or dizziness between groups before and after D&E (all p values >.05). The majority of participants (63%) preferred to receive an injection prior to their D&E, and 57% would recommend an injection to another woman, with no differences between groups.

Conclusions: Inducing fetal demise with digoxin does not affect participant side effects compared to placebo. The majority of participants preferred receiving an injection prior to their D&E and would recommend it to another woman. Satisfaction results should be interpreted with caution, given that all participants consented to an injection at baseline.

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P6

PATIENT PREFERENCES IN ANALGESIA FOR FIRST-TRIMESTER SURGICAL ABORTION

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Objectives: This study aimed to identify patient priorities and preferences for pain management during first-trimester surgical abortion under nitrous oxide or oral sedation.

Methods: Women seeking first-trimester surgical abortion, self-selecting inhaled nitrous oxide (NO) or oral sedation (PO) with oxycodone and ativan, enrolled in this prospective cohort study. Participants provided demographic data, rated procedure pain on a 10 cm visual analog scale (VAS) and participated in semi-structured interviews. We analyzed qualitative data using a content analysis approach. Descriptive characteristics are reported as means.

Results: Thirty-one (16 NO and 15 PO) women enrolled. All participants received a paracervical block. Overall mean age was 28.32 (± 5.78) years and mean gestational age was 7.29 (± 2.12) weeks. Mean maximum procedural pain was 5.69 (± 3.15) and 7.1 (± 2.1) for NO and PO groups, respectively ($p=.15$). Pre-procedure, participants wanted a positive experience. Participants endorsed an ideal analgesic as having a quick onset of action, minimal side effects, no addiction potential and effectiveness at reducing pain. After the procedure, NO participants valued resumption of normal activities, while PO participants desired ongoing anxiolysis. Distinct components of NO and PO sedation were preferred by patients. Higher procedure pain and more medication side effects than anticipated were often mitigated by anticipatory counseling. Participants emphasized that positive interactions with providers/staff significantly improved their abortion experience.

Conclusions: Preemptive comprehensive counseling about procedure and analgesia effectiveness along with providing options for analgesia will facilitate an affirmative abortion experience that is desirable and patient centered.

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P7

ABORTION EMOTIONS AND DECISION REGRET OVER 5 YEARS: AN EXAMINATION OF DECISION DIFFICULTY AND COMMUNITY STIGMA

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Objectives: Claims that abortion is inherently stressful and causes emergent negative emotions undergird state laws regulating abortion. This study examined women's emotions over 5 years post-abortion and looked at whether aspects of women's circumstances operated as risk factors for persistent negative emotions or decision regret.

Methods: We followed 667 women having abortions at 30 United States facilities in 2008–2010 for 5 years. Semi-annually, participants reported their emotions and whether they felt the abortion was the right decision. We used longitudinal multivariable mixed-effects models to examine changes in these outcomes over time by decision difficulty and perceived community abortion stigma.

Results: Experiencing greater abortion decision difficulty was associated with more negative emotions immediately after abortion; over 5 years, these emotions declined significantly—particularly through the second year post-abortion—and largely converged with those of women who expressed no decision difficulty. For sadness, the most common negative emotion 1 week post-abortion, predicted means at 5 years were 0.8 (very difficult) vs. 0.5 (not difficult) (0–4 scale). The predicted percentage of women reporting that the abortion decision was right for them was unchanged over time for those who had no decision difficulty (>99%); among those for whom the decision was very difficult, this percentage increased from 95% to 98% ($p=.02$). Stigma results followed similar patterns. Nevertheless, decision difficulty and stigma remained the greatest risk factors for negative emotions and decision regret 3–5 years post-abortion.

Conclusions: Findings provide additional evidence that emotions about an abortion are personal, associated with social context, and challenge the emotional-harm rationale for policies regulating abortion.

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P8

RELIGIOSITY, BIBLICAL LITERALISM, AND TEXAS VOTERS' SUPPORT FOR TARGETED REGULATION OF ABORTION PROVIDERS

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Objectives: In prior research, voters who received abortion safety information were less likely to support medically unnecessary abortion regulations enacted by Texas House Bill 2 (HB2). We examined religiously

motivated support for HB2, including the impact of safety information on HB2 support among voters who interpret the Bible literally.

Methods: We analyzed data from a representative internet survey of 1187 registered Texas voters. Half of respondents were randomly selected to receive information about the low complication rate of abortion before answering questions about HB2. Using logistic regression, we predicted support for the provision requiring abortion providers to have admitting privileges at a nearby hospital. We tested whether the effect of religiosity varied by education, and whether the consequences of receiving abortion safety information were different among voters who interpret the Bible literally. We controlled for opposition to legal abortion, political affiliation, and demographic characteristics.

Results: High religiosity predicted support for HB2, but only among voters with college degrees (OR, 4.99; 95% CI, 2.53–9.81). Biblical literalism did not directly predict HB2 support, but it neutralized the effect of receiving safety information. Among non-literalists, receiving safety information reduced support (OR, 0.46; 95% CI, 0.32–0.66). Among biblical literalists, receiving safety information had no significant effect on support (OR, 0.97; 95% CI, 0.50–1.86).

Conclusions: Although highly religious voters were more supportive of HB2, their support was sensitive to abortion safety information. Biblical literalists were not necessarily more supportive of HB2, but were not influenced by safety information.

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P9

LARC SATISFACTION AND CONTINUATION AMONG LOW-INCOME POSTPARTUM WOMEN IN TEXAS

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Objectives: Previous studies measured LARC continuation without investigating satisfaction. We sought to identify predictors of LARC satisfaction and measure the impact of satisfaction on continuation.

Methods: We analyzed longitudinal survey data from 1699 postpartum Texas women. At each interview, we coded LARC users as satisfied, resigned, or miserable on the basis of open-ended questions about contraceptive preferences. Resigned users were using LARC because their preferred method was inaccessible; miserable women were unhappy with LARC itself. We predicted resignation and misery using multinomial logistic regression. We estimated continuation using Kaplan-Meier curves, and identified predictors of discontinuation using Cox proportional hazard models.

Results: LARC users ($n=418$) completed 1505 interviews (83.5% satisfied, 5.3% resigned, 11.3% miserable). The relative risk of resignation versus satisfaction was 7.9 times as high among women who wanted postpartum sterilization ($p=.000$). Insured women were at lower risk of resignation ($p=.007$) or misery ($p=.021$) than uninsured women. Foreign-born Hispanic women were least likely to be miserable: the relative risk of misery versus satisfaction was 2.6 times as high for Hispanic women born in the United States ($p=.002$) and 2.2 times as high for Black women ($p=.016$).

LARC continuation rates were 85% at 12 months and 72% at 24 months. Discontinuation was more likely among miserable users (hazard ratio, 3.91; $p=.000$). Hispanic women born in the United States were less likely to discontinue LARC than were foreign-born Hispanic women (HR, 0.46; $p=.009$).

Conclusions: Most LARC users were satisfied, but a significant minority were resigned or miserable. Misery predicted subsequent

discontinuation. Hispanic women born in the United States were less likely than foreign-born Hispanic women to discontinue LARC, despite their higher risk of misery.

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P10

"IT'S ISOLATING TO HAVE AN ABORTION, AND TO BE QUEER AND HAVE AN ABORTION IS EVEN MORE SO": EXPLORING QUEER PATIENTS' EXPERIENCES SEEKING ABORTION CARE

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Objectives: Though often overlooked in family planning research and clinical practice, both queer cisgender women and queer gender-nonbinary individuals assigned female at birth (AFAB) seek abortion services. This study sought to document these individuals' experiences seeking abortion care.

Methods: Qualitative data derive from a larger project using a modified grounded theory approach to understand the role of sexual identity in pregnancy decisions and desires. Investigators conducted in-depth interviews with 20 queer AFAB individuals who had been pregnant or were considering pregnancy. For the current study, investigators conducted selective analyses focusing on experiences seeking abortion. Two researchers independently coded and analyzed transcripts using an inductive approach.

Results: Four major themes emerged. First, participants experienced both universal barriers to abortion (e.g., lack of access) and barriers specific to queer identity (e.g., fear of discrimination, inability to find identity-affirming care). Second, participants felt doubly stigmatized for having an abortion and for being queer, while also feeling isolated from the queer community. Third, mental health played a significant role in the experience. Participants voiced concerns that an unwanted pregnancy would exacerbate existing mental health conditions. Simultaneously, stigma and isolation contributed to poor mental health post-abortion. Fourth, participants offered concrete solutions for improving abortion care for queer patients, including queer- and trauma-informed provider training and practices.

Conclusions: Findings outline the factors unique to queer identity that shape abortion experiences. Improvements to clinical care should consider these experiences. Compassionate and inclusive care requires enhanced recognition of diverse sexual identities in both family planning research and clinical practices.

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P11

COMPARISON OF MIFEPRISTONE-MISOPROSTOL VERSUS MISOPROSTOL-ALONE REGIMEN FOR INDUCTION ABORTION AT AND BEYOND 24 WEEKS' GESTATION

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Objectives: This study compared clinical outcomes of mifepristone-misoprostol versus misoprostol-alone regimens of induction abortion performed at and beyond 24 weeks' gestation.

Methods: We conducted a retrospective analysis of induction abortion cases performed at and beyond 24 weeks' gestation between May 2016 and January 2018 at a U.S. clinic. We compared clinical outcomes of those who received mifepristone-misoprostol (n=294) versus misoprostol-alone (n=189). On day 1, all patients received a fetocidal injection and laminaria, and those in the mifepristone-misoprostol group received mifepristone. In addition, 24–72 hours later, depending on cervical assessment, patients in both cohorts received misoprostol buccally every 2 hours until onset of labor. Bivariate analyses were employed to compare patient characteristics, procedure characteristics, and clinical outcomes between cohorts. Survival analyses were used to compare time-to-fetal-expulsion from first misoprostol administration.

Results: Time-to-fetal-expulsion from first misoprostol did not differ significantly between groups (median time: 4.7 hours vs. 4.8 hours; p=.272; log-rank: p=.770). Patients in the mifepristone-misoprostol group received less misoprostol (median: 800 mcg [400–1200 mcg] vs. 800 mcg [800–1200 mcg]; p=.014) and fewer laminaria (median: 5 [4–7] vs. 6 [5–10]; p<.001) throughout the procedure. Fewer than 2% of patients were transferred to a hospital for complications or failed procedure, which did not vary by regimen.

Conclusions: Based on our findings, addition of mifepristone does not appear to affect time to expulsion for later induction abortions; misoprostol alone may be comparably effective. Induction abortion at and beyond 24 weeks' gestation is safe, with low rates of complications, making it appropriate to use in outpatient settings.

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P12

TRENDS IN ABORTION PROCEDURE TYPE FOLLOWING GEORGIA'S 22-WEEK ABORTION BAN

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Objectives: We investigated trends in abortion procedure type performed in Georgia before the ban, during partial enforcement and during full enforcement of HB 924, a 22-week abortion ban.

Methods: Using the Georgia Department of Public Health's state-mandated Induced Termination of Pregnancy (ITOP) forms, we used bivariate and multivariable statistics to analyze changes in abortion procedure types for 10 different procedures during 3 time periods: before the ban (2007–2012), during partial enforcement (2013–2015) and during full enforcement (2016–2017) of the ban.

Results: From 2007 to 2017, a total of 360,975 abortions were performed in Georgia. Using the categories defined by the ITOP data set, the three most common procedures during the total study period were suction curettage (67.4%), dilation and evacuation (D&E, 15.3%), and medical abortion with mifepristone (15.1%). Following passage of the 22-week abortion ban, the number of mifepristone abortions increased from 6.7% pre-ban to 34.3% following full enforcement. D&E procedures increased from 12.9% pre-ban to 20% following full enforcement. Suction curettage, however, decreased from 77.2% to 45.1% following full enforcement.

Conclusions: Following passage of Georgia's 22-week abortion ban, we found an increase in mifepristone abortion and D&E procedures, but a decrease in suction curettage. While our ongoing analysis is examining trends in abortion procedure type by gestational age,

preliminary findings highlight implications of access to different types of abortion services following implementation of restrictive policies such as bans based on gestational age.

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P13

SELF-MANAGED ABORTION IN THE LITERATURE: A SYSTEMATIC REVIEW

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Objectives: Self-managed abortion (SMA), the performance of one's own abortion outside of a medical setting, is a model of abortion care used, and possibly preferred, across a range of settings. To assess what is known about SMA and to target future research toward gaps in the evidence base, we conducted a systematic review of the peer-reviewed scientific literature on SMA around the world.

Methods: A systematic search for peer-reviewed research was conducted in March 2018 using PubMed, Embase, Web of Science, Popline, PsycINFO, Google Scholar, Scielo, and Redalyc. We included studies that had (1) a research question focused on SMA; and (2) were published in English or Spanish, inclusive of all publication years. Four reviewers performed article screening, data extraction, and determination of final inclusion for analysis.

Results: The combined search returned 6526 articles; this number declined to 130 after removing duplicates, screening title and abstract, and removing ineligible articles. Included articles reported on SMA methods (59), safety (38), procurement (28), characteristics of those who self-manage (28), efficacy (27), reasons for SMA (25), the emotional experience (21), and the physical experience (8).

Conclusions: We provide a comprehensive state of the literature on SMA globally. Numerous methods of SMA, including abortion pills, are reported in the literature. The literature is rife with measurement inconsistencies, including what is "effective" or "safe" SMA, and demographic characteristics reported. Some reasons for seeking care and emotional experiences may be unique to SMA. We make initial recommendations to streamline SMA outcomes measurement.

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P14

UNDERSTANDING DECISION CERTAINTY AMONG WOMEN SEARCHING ONLINE FOR ABORTION CARE

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Objectives: We examined levels of decision certainty in a national sample of women considering abortion and explored predictors of change in certainty at 4 weeks follow-up.

Methods: Participants were recruited using Google ads, a method that targeted ads to those using keywords such as "abortion clinic near me." Potential participants were directed to an online screening and baseline survey and sent a follow-up 4 weeks later. Decision certainty was measured at baseline and follow-up using the Decisional Conflict Scale. We identified factors associated with an increase in decision conflict over time.

Results: We have baseline and follow-up data from 864 participants. Conflict scores range from 1 to 100, with higher scores indicating more conflict. The mean baseline and follow-up conflict scores were 26.1 and 24.8, respectively, giving a mean change of -1.2. At follow-up, participants who were still pregnant and seeking abortion experienced a mean increase in conflict score of 2.8 (95% CI 0.3-5.3) while those who obtained an abortion or decided to continue the pregnancy experienced a mean decrease in conflict score. Being an American Indian/Alaska Native, being employed or in school, and having had a previous abortion were associated with an increase in decision conflict.

Conclusions: This study was able to measure relatively high decision certainty earlier in the decision-making process in a population that included groups not well captured with other methodologies—those who could not or chose not to present for abortion care. In addition, this study measured decision certainty at 2 time points in order to describe trends in how it may change over time.

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P15

SELF-MANAGED ABORTION IN URBAN NORTH INDIA: AUTONOMY, COMMUNITY NORMS, AND STIGMA

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Objectives: More than three-quarters of abortions in the north Indian state of Uttar Pradesh (UP) are estimated to be medication abortions (MAs) outside health facilities. However, little is known about women who self-manage their abortions this way and their reasons for using self-managed abortion (SMA). Women's autonomy, community norms, and stigmas may lead women with an unwanted pregnancy toward or away from SMA.

Methods: We analyzed longitudinal survey data from 312 women (aged 15-49) in six north Indian cities who reported an abortion between 2009 and 2014. We used logistic regression to examine associations between baseline autonomy and community norms and whether the abortion was self-managed (respondent, relative/friend, or pharmacist performed the abortion). Autonomy was assessed through several sub-scales; community norms were assessed by aggregating autonomy scales and perceptions of family planning stigma.

Results: In all, 16.6% of women reported SMAs. Of these, all were first trimester, 76.2% were MAs, and 72.4% reported no complications. In the multivariable model, women in communities with more financial autonomy were more likely to report SMA. Women with only sons, those with more education, and those who reported that they did not want any children were less likely to report SMA.

Conclusions: SMA may be more discreet than facility-based abortion, which likely appeals to women in crowded urban neighborhoods where information and stigma spread quickly. Greater financial autonomy in a community may also indicate that, regardless of individual situation, women are generally empowered enough and have access to enough

money to choose the abortion method they prefer—and SMA may be their preferred method.

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P16

BUFFERED LIDOCAINE FOR PARACERVICAL BLOCKS IN FIRST-TRIMESTER OUTPATIENT SURGICAL ABORTIONS: A RANDOMIZED CONTROL TRIAL

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Objectives: This study was conducted to determine if buffered lidocaine decreases injection pain as compared to plain lidocaine for paracervical blocks during first-trimester outpatient surgical abortions.

Methods: In this double-blind, randomized controlled trial, patients who desired surgical termination of a first-trimester pregnancy or management of an early pregnancy failure were randomized to receive a paracervical block with either 20 ml of 1% lidocaine or 18 ml of 1% lidocaine plus 2 ml of 8.4% sodium bicarbonate. The primary outcome was pain from injection of the paracervical block measured on a 100-mm visual analog scale. Secondary outcomes included pain at cervical dilation, uterine aspiration, and overall satisfaction with pain control. Pain and satisfaction scores were compared using the Mann-Whitney U test. To detect a 15-mm difference in pain from injection of the paracervical block, at an α of .05 and 80% power with an estimated 10% dropout rate, we aimed to enroll 49 patients in each arm.

Results: From May 2017 to October 2018, 48 women received plain lidocaine for their paracervical block and 50 women received buffered lidocaine. Groups were similar in demographics. The median pain score after paracervical block injection for the control group was 44.50 [interquartile range (IQR) 18.25–65.00] as compared to 30.00 [IQR 15.25–64.50] in the intervention group ($U=1123.0$; $p=.323$). Secondary outcomes also were not statistically different between the control and intervention groups.

Conclusions: Using buffered lidocaine for paracervical blocks in first-trimester outpatient surgical abortions does not decrease injection pain as compared to plain lidocaine.

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P17

THE LAWS THAT GO UNNOTICED: A SURVEY OF KNOWLEDGE OF STATE ABORTION LAWS AND ABORTION MYTHS AMONG A NATIONALLY REPRESENTATIVE SAMPLE OF REPRODUCTIVE-AGED WOMEN

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Objectives: We investigated women's knowledge of laws regulating abortion in their state of residency. Our secondary objective was to describe women's ability to discern myths about abortion from facts.

Methods: We conducted a cross-sectional study of English- and Spanish-speaking women aged 18–49 in the United States. We enrolled members of the GfK Knowledge Panel, a probability-based, nationally representative online sample. Our primary outcome was the proportion of correct answers to 12 questions about laws regulating abortion in a participant's state. We asked five questions about abortion myths by adapting published abortion knowledge and myth questionnaires. We used descriptive and bivariate statistics.

Results: Of 2223 women contacted, 1057 (48%) completed the survey. On a scale from 0 to 100%, our sample had a mean proportion of correct answers to the 12 questions of 18.3% (95% CI: 17.1–19.7%). The most frequent answer was, "Don't know/not sure" for questions on state laws and myths. For three of five assessed myths (safety of abortion as compared to childbirth, depression and anxiety after abortion, and regret after abortion), women reported believing myths about abortion over facts. Women who were against abortion, described themselves as Republican, had not had an abortion and had not been pregnant were most likely to endorse myths.

Conclusions: Women have low levels of knowledge about state abortion laws and commonly endorse abortion myths. As restrictions on abortion increase, women may be less aware of the barriers they will face in accessing essential health care. They may also base their views of new restrictions on abortion myths.

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P18

COMPARING WEBSITE IDENTIFICATION FOR CRISIS PREGNANCY CENTERS AND ABORTION CLINICS

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Objectives: Prior research demonstrates that crisis pregnancy centers (CPCs) use deceptive practices to dissuade women with unwanted pregnancies from abortion. CPCs often appear in internet searches for abortion clinics. Our primary objective was to assess whether women are able to use screenshots from real websites to differentiate between CPCs and abortion clinics.

Methods: We conducted a cross-sectional study of English- and Spanish-speaking women aged 18–49 in the United States. We enrolled members of the GfK Knowledge Panel, a probability-based online sample. Participants were presented with screenshots from five CPC and five abortion clinic websites and asked if they thought an abortion could be obtained at that center. Correct answers were scored based on clinic type. Our primary outcome was score for identifying CPCs. Our secondary outcome was score for identifying abortion clinics.

Results: Among 2223 women contacted, 1057 (48%) completed the survey. The mean score for correctly identifying CPCs was 2.0 out of 5 (95% CI: 1.9–2.2), indicating women correctly identified CPCs 41% of the time. The mean score for abortion clinics was 3.8 out of 5 (95% CI: 3.7–4.0). Women with less education, lower income levels, low health literacy, and those who were native Spanish speakers or had not heard of CPCs were more likely to have a low score for correctly identifying CPCs.

Conclusions: When asked about what health centers provide abortion, websites of CPCs were more difficult for women to correctly identify than those of abortion clinics. Women with

educational and economic disadvantages may be particularly susceptible to deception.

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P19

IS SELF-ADMINISTERED MEDICAL ABORTION AS EFFECTIVE AND SAFE AS PROVIDER-ADMINISTERED MEDICAL ABORTION? A SYSTEMATIC REVIEW AND META-ANALYSIS

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Objectives: We compared the effectiveness, safety, and acceptability of self-administered versus provider-administered medical abortion (MA) among women of reproductive age (14–49 years) in any setting.

Methods: We conducted a systematic review that included randomized controlled trials (RCTs) and prospective cohort studies with a concurrent comparison group, using study designs that compared successful abortion by self-administered and provider-administered MA groups. In self-administered MA, the woman herself administers drugs without the supervision of a health-care provider. Two reviewers independently extracted the data, and we performed a meta-analysis where appropriate using RevMan. Quality assessment of the data used the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach.

Results: We included 18 studies (2 RCTs and 16 non-randomized studies) published from 2001 to 2018 comprising 11,043 women undergoing early MA (≤ 9 weeks gestation) in 10 countries. Successful abortion did not differ significantly between self-administered and provider-administered groups (RR 0.99; 95% CI: 0.98–1.0). Likewise, ongoing pregnancy did not differ significantly between the two groups (RR 1.34; 95% CI: 0.73–2.46). Safety outcomes, including complications requiring surgical intervention, favored provider administration, although findings were not statistically significant (RR 2.14; 95% CI: 0.80–5.71). The MA method was a highly acceptable means of early pregnancy termination for women in both groups in high and low-to-middle resource settings (RR 0.01; 95% CI: 0.03–0.05).

Conclusions: Women can self-administer part of the early MA procedures as effectively as women who undergo provider-administered procedures. Data are limited by scarcity of high-quality research study designs and risk of bias.

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P20

WHAT DO PATIENTS THINK ABOUT CONTRACEPTIVE COUNSELING AS A PART OF ABORTION CARE? RESULTS FROM A NATIONAL QUALITATIVE STUDY

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Objectives: The clinical abortion encounter is widely considered an important opportunity to counsel patients on their contraception options and provide a full range of methods. Using data from a large-scale qualitative study in Canada, we examined patients' experiences with and perceptions of contraceptive counseling in the context of receiving abortion care.

Methods: Between 2012 and 2016, we conducted 305 semi-structured interviews in English and French with Canadian women who had obtained an abortion. We audio-recorded and transcribed all interviews and conducted content and thematic analyses using deductive and inductive approaches.

Results: For some patients, their abortion provided a welcome opportunity to discuss contraceptive options and gain access to new and/or more effective methods, such as the intrauterine device (IUD). However, few patients reported adopting a new method post-abortion. Many patients described an informational and emotional overload on the day of their abortion and preferred to receive written materials without committing to a new method. A number of participants also reported feeling more comfortable discussing contraception with a trusted family doctor or nurse practitioner. Patients who were most likely to adopt an IUD had previously considered and researched the method and the abortion offered a convenient opportunity for insertion.

Conclusions: Our data suggest that treating the clinical abortion encounter as an intervention for contraceptive care is not necessarily reflective of patient needs or priorities. Patient-centered abortion care should include the offer of contraceptive counseling and a full range of methods and respond accordingly to what the patient wants at the time.

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P21

HOW DID THE INTRODUCTION OF MIFEPRISTONE IMPACT ACCESS TO ABORTION CARE IN OTTAWA? A QUALITATIVE CASE STUDY

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Objectives: Mifepristone became available in Ottawa, Canada's capital city, in February 2017. Medication abortion is offered in a combination pack with misoprostol under the trade name Mifegymiso®. Our qualitative study aimed to explore Ottawa residents' experiences obtaining abortion care before and after the introduction of mifepristone.

Methods: We conducted 40 semi-structured telephone interviews with Ottawa residents who had abortions before mifepristone was available (from 2008 to 2012, n=20) and after the drug's introduction (n=20). We audio-recorded and transcribed all interviews and conducted content and thematic analyses.

Results: Prior to the introduction of mifepristone, our participants reported obtaining abortion care at two facilities (one hospital, one free-standing clinic); half waited more than 3 weeks after initially contacting the facility to secure an appointment. In contrast, those who had an abortion after mifepristone became available reported obtaining care from a wider array of providers and few waited more than 2 weeks. However, several patients obtaining medication abortion in Ottawa reported having to go through a multi-step process that involved as many as nine separate appointments. Both groups reflected positively on their abortion experiences, but some patients who obtained medication abortion outside of traditional

abortion-providing settings did not feel as well-informed about the process as they would have liked.

Conclusions: The introduction of Mifegymiso® appears to have expanded the number of service delivery points and reduced wait times for those seeking abortion care in Ottawa. However, identifying ways to expand access to medication abortion information and streamline services appears warranted.

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P22

SELF-ADMINISTRATION OF VERY EARLY MEDICATION ABORTION PROVIDED THROUGH A GLOBAL ONLINE TELEMEDICINE SERVICE

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Objectives: We assessed the safety, efficacy, and acceptability of home administration of very early medication abortion (4–5 weeks' gestation) in low-resource and/or legally restricted settings provided through the Women Help Women direct-to-patient global online telemedicine service.

Methods: We used information collected from women who completed the Women Help Women online consultation and follow-up form between 2015 and 2018 to analyze demographics, gestational age, outcome of the medication abortion, satisfaction with online support and the medication abortion service, and symptoms that led to seeking additional medical treatment.

Results: From March 2015 to June 2018, Women Help Women received 1123 online consultation forms from women seeking medication abortion early in their pregnancy. Sixty-four percent of respondents were 4 weeks pregnant and 35% were 5 weeks pregnant. Nearly half (n=501, 45%) completed a follow-up evaluation about the outcome of the medication abortion. Ninety-four percent of these women reported taking the medication abortion pills; 5% reported that they did not take the medications because they experienced a spontaneous miscarriage or decided not to terminate the pregnancy. Of the 473 women who took the medicines, 98% reported the abortion was successful. Eleven percent of women (n=51) sought medical care following self-administration of the medications. However, only 7% (n=33) required additional medical treatment. Eighty-two percent were satisfied with the medication abortion process and 85% were satisfied with the online support received.

Conclusions: Home administration of medicines for very early medication abortion is safe, acceptable, and feasible in low-resource and/or legally restricted settings.

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P23

WOMEN'S 5-YEAR PERCEIVED ABORTION STIGMA TRAJECTORIES AFTER RECEIVING OR BEING DENIED AN ABORTION, AND THEIR EFFECTS ON WOMEN'S PSYCHOLOGICAL WELL-BEING

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Objectives: We prospectively assessed women's anticipated abortion stigma over 5 years after receiving or being denied an abortion.

Methods: We recruited women from 30 abortion facilities across the United States, and telephone-interviewed them 1 week after abortion seeking, then semiannually for 5 years. We used mixed effects regression analyses to examine the anticipated abortion stigma trajectories of women who obtained an abortion near a facility's gestational age limit (*near-limits*) compared to those denied an abortion because they were just over the limit and carried their pregnancies to term (*turnaway-births*).

Results: Of the 956 women recruited, we removed 28 due to ineligibility or missing data, leaving a final analysis sample of 928. At 1 week after abortion seeking, more than one-quarter of women seeking abortion felt they would be looked down upon "quite a bit" or "extremely" by people close to them (27%) or by their community (31%); 40% and 44%, respectively, reported they would be looked down upon "not at all." Women in the *turnaway-birth* group reported significantly lower baseline anticipated abortion stigma from people close to them (–0.35; 95% CI: –0.56, –0.14) and from people in their community (–0.29; 95% CI, –0.51, –0.08), than *near-limits*, differences that remained statistically significant for 1.5 years. Overall anticipated abortion stigma declined significantly ($p < .001$) for both study groups. Baseline anticipated abortion stigma was positively associated with experiencing psychological distress years later.

Conclusions: Most women considering abortion anticipate that they will experience abortion stigma, which is associated with psychological distress years later.

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P24

DO RACE AND PREGNANCY SITUATION AFFECT EMPATHY FOR WOMEN WHO SEEK ABORTIONS IN ARKANSAS? A RANDOMIZED-CONTROLLED VIDEO INTERVENTION

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Objectives: Despite the safety and prevalence of abortion in the United States, people who seek abortions encounter barriers via legislative restrictions and stigmatization. Empathy induction may reduce these barriers, especially in highly restrictive states like Arkansas. This study examined the effect of a video intervention on empathy induction among Arkansans.

Methods: Arkansas residents (N=369) participated in an online study comprising a pre-test survey, a video intervention, an immediate post-test survey, and a 2-week follow-up. Surveys included measures of demographic characteristics and post-video feelings of empathy. There were five video conditions, varying by actor's race and pregnancy narrative. Chi-squared analyses assessed differences in six empathy characteristics (e.g., moved, tender) by video condition. We regressed empathy sum scores on video conditions, baseline empathic concern, sex, sexual assault experience, and abortion experience.

Results: Participants who watched a testimonial in which the woman had become pregnant after being raped had higher empathetic scores. Post-test empathy sum scores were a function of respondents' sex, experience with abortion and sexual assault, baseline empathic concern, and video condition. The testimonial depicting a Black woman who had been raped induced the most empathy at post-test. In the 2-week follow-up, only personal experiences with abortion and sexual assault and baseline empathic concern predicted empathy sum scores.

Conclusions: Prior personal experiences and internalization of abortion stigma can affect empathy induction. People were more empathetic toward the woman who had become pregnant after being raped than the woman who had become pregnant as a result of consensual sex. The hierarchy of abortion narratives may influence perceptions of abortion seekers. Implications for future interventions to shift attitudes toward abortion seekers will be discussed.

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P25

AVAILABILITY AND LIMITATIONS OF ABORTION COVERAGE IN PRIVATE HEALTH INSURANCE PLANS

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Objectives: This project aims to document variations in abortion coverage across different private insurance market segments and assess the impact of state policies on plans outside of state jurisdiction.

Methods: We reviewed health plan contracts to identify abortion coverage limitations in the 24 state-based ACA marketplaces that permit abortion coverage. We also analyzed health plan contracts for the 2019 plan year in five states representing differing abortion coverage rules: California, Colorado, Michigan, New Mexico, and Virginia. More than 1000 plan documents in the individual; fully insured small- and large-group; self-insured single-state and multi-state employers; and state employee markets were reviewed using the AXIACI proprietary database developed by LEVERAGE.

Results: Our analysis finds wide variation in abortion coverage across plans, market segments, and states, with some employee health plans covering all “elective” abortions, but others limiting coverage to Hyde restrictions (rape, incest, or life endangerment), and some completely silent on abortion. In states with no ACA marketplace abortion coverage restrictions, we found coverage limitations for medication abortion, gestational limits, and annual or lifetime caps.

Conclusions: State laws, employer decisions, and plan rules shape the scope of coverage for women with private insurance. In addition to coverage bans, some plans apply limitations that block coverage of abortion under many circumstances. State policies that require abortion coverage could strengthen coverage and protect insured women from gaps in coverage.

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P26

A PROSPECTIVE, COMPARATIVE STUDY OF CLINICAL OUTCOMES FOLLOWING MIFEPRISTONE AND MISOPROSTOL ABORTION ACCESSED FROM HEALTH FACILITIES COMPARED WITH PHARMACIES

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Objectives: We sought to determine whether clinical outcomes differ between women receiving a combined medical abortion

regimen from a health facility and those receiving it from a pharmacy.

Methods: We conducted a multicenter, prospective, comparative study of women aged ≥ 15 years seeking medical abortion from five health facilities and five adjacent pharmacy-clusters in three provinces of Cambodia. Women were recruited in person at the point of purchase (facility or pharmacy) of quality-assured Medabon. Follow-up for self-reported pill use, acceptability and clinical outcomes occurred by telephone on days 14 and 30 after mifepristone administration.

Results: Over 10 months, we enrolled 2067 women—1048 from facilities and 1019 from pharmacies. Most were early in their pregnancy (mean gestational age of 6.3 and 6.1 weeks, respectively) and almost all took the pills correctly (98% and 96%; $p=.004$). Needing additional treatment to complete the abortion was similar between groups (12% and 9%; $p=.027$). Women from the facility group were more likely to have received additional care from a provider, such as antibiotics or diagnostic tests (11% and 3%; $p<.001$) than were women from the pharmacy group, and one ectopic pregnancy (pharmacy group) was successfully treated. Most women said they felt prepared for what happened after taking the pills (85% and 77%; $p<.001$). By day 30, only 48% and 38% ($p<.001$), respectively, had started a contraceptive method.

Conclusions: Self-use of a combined medical abortion product resulted in clinical outcomes similar to those following a clinical visit. Registration and availability of medical abortion as an over-the-counter product could increase women’s access to safe abortion.

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P27

THE IMPACT OF MEDICAID EXPANSION ON UTILIZATION OF MEDICAID-FINANCED ABORTION SERVICES AMONG OREGON WOMEN OF REPRODUCTIVE AGE

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Objectives: We investigated the impact of the Affordable Care Act Medicaid expansion on Medicaid-financed abortions among Oregon women of reproductive age. We explored how Medicaid-financed abortion rates were affected by expansion and whether expansion increased receipt of medication abortion (MA) relative to surgical abortion.

Methods: Using Medicaid claims and eligibility data we identified women aged 19–43 ($n=30,284$) who had abortions during pre-expansion (2008–2013) and post-expansion (2014–2016) periods. We used American Community Survey data to estimate the annual number of Oregon women aged 19–43 $<185\%$ FPL who would be eligible for a Medicaid-financed abortion. We conducted interrupted time series analyses using negative binomial and logistic regression models.

Results: Incidence of Medicaid-financed abortion increased from 13.4/1000 women in 2008 to 16.0/1000 in 2016. Before expansion, incidence declined by 2% annually ($p=.003$). In the first year of expansion, incidence increased by 18% ($p<.001$) before leveling off to a 5% annual increase ($p=.05$) in 2015–2016. MA receipt increased from 11.5% of abortions in 2008 to 31.5% in 2016. Before expansion, odds of MA increased by 14% annually ($p<.001$). The rate of increase changed significantly 1 year after expansion, to an annual 57% increase in odds in 2015 ($p<.001$), and then reverted to a 15% annual increase in odds during 2016.

Conclusions: Expansion increased utilization of Medicaid-financed abortions and may have reduced out-of-pocket payment among low-

income women. Increased receipt of MA may indicate that Medicaid expansion increased earlier access to services, possibly as a result of expanded pre-pregnancy Medicaid enrollment and greater continuity of care.

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P28

ABORTION REFERRAL PRACTICES AMONG A NATIONAL SAMPLE OF OBSTETRICIAN/GYNECOLOGISTS

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Objectives: Obstetrician/gynecologists (ob/gyns) play a critical role in facilitating timely access to abortion care. This study estimates the proportion of ob/gyns providing abortion referral in the prior year and compares differences in physician and practice setting characteristics.

Methods: In 2016–2017, we conducted a cross-sectional survey of a national sample of American College of Obstetricians and Gynecologists Fellows and Junior Fellows. We restricted our analyses to respondents who had patients in the last 12 months who sought an abortion (n=868, 68% of sample). We performed descriptive statistics and logistic regression analyses comparing respondents making direct referrals to an abortion provider to those who provided only contact information.

Results: Eighty-seven percent of respondents had provided abortion referrals in the prior year (753/868). Of those, 34% had provided a direct referral (255/753), while 66% had provided contact information (498/753). In multivariable analysis, physicians 61 years or older were more likely to have made a direct referral than those aged 46–60 (adjusted odds ratio [AOR] 2.03; 95% CI: 1.16–3.55). Male physicians (AOR 0.62; 95% CI: 0.40–0.98) were less likely to make a direct referral than female physicians. Physicians practicing in the South (AOR 0.51; 95% CI: 0.29–0.88) had lower odds of direct abortion referral than those practicing in the Northeast. Those providing abortion in the last year were nearly three times as likely to make a direct referral as those who not providing abortion (AOR 2.96; 95% CI: 1.92–4.54).

Conclusions: We found demographic and regional differences in abortion referral type among ob/gyns.

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P29

WHAT DEFINES A QUALITY ABORTION EXPERIENCE? PERSPECTIVES FROM ABORTION CLIENTS

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Objectives: Quality abortion care domains have primarily been driven by clinicians or institutions, resulting in the absence of the priorities and preferences of those who obtain abortion care in the definitions and measurement of abortion quality. This study aimed to explore what clients themselves prioritize in and define as high-quality abortion care.

Methods: We conducted interviews (n=97) and focus groups (n=7) with people who obtained abortions in four countries: Argentina, Bangladesh, Ethiopia, and Nigeria. Recruitment sites included a combination of public facilities, non-governmental clinics and call-centers, abortion hotlines, and grassroots organizations providing support for self-managed medication abortion.

Results: Abortion clients discussed a range of important aspects of care, spanning logistical, technical, and interpersonal domains. Some participants drew from their abortion experiences to define quality, while others reflected on previous health-care interactions. Expectations of abortion care, and the social stigma surrounding abortion, played a role in the way that clients perceived quality. Priorities that emerged for abortion clients included: kind, non-judgmental treatment by providers/counselors, feeling listened to, preparedness for the process, receiving complete information, cost, and privacy. The ability to make choices, manage pain, and receive follow-up care also emerged as important aspects of quality.

Conclusions: While there is some alignment between traditional clinical indicators of quality abortion care and client preferences, clients more strongly emphasize the interpersonal aspects—specifically respect, preparedness, shared communication, and accurate information—than are currently represented in clinical indicators. Acknowledgment and measurement of these client-centered quality domains is essential in order to improve access to quality care.

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P30

“MY BABY WENT STRAIGHT TO HEAVEN”: MORAL ACCOUNTS OF ABORTION IN ONLINE STORYTELLING

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Objectives: Anecdotal evidence suggests that women use a variety of moral frameworks to guide their abortion decision-making. Little empirical research, however, examines the moral arguments they use when telling about their abortion experiences. Given the morally contested status of abortion within the broader society, this study explores how women discuss morality in the context of abortion storytelling.

Methods: Using the sociological concept of “accounts,” this study uses narrative analysis to investigate 117 abortion stories posted anonymously on an abortion destigmatization website. Narratives were reviewed in full and then coded by relevant story components. Qualitative analysis focused on how storytellers searched for order and meaning in their abortion experiences.

Results: Moral accounts both reproduced and challenged dominant public discourses around abortion morality. Traditional moral arguments invoking individual freedom and bodily autonomy were apparent but not dominant in women's accounts. Most women regarded their abortion decisions as the most moral choice among other options, such as giving birth to a child who would suffer emotionally or financially. Other factors women found morally significant were careful contraceptive use, obligations to existing children, and the seriousness put into their decision-making. Many women assigned their fetus a moral status as potential life, yet ultimately felt other factors outweighed the obligation to sustain that life.

Conclusions: The moral frameworks guiding women's abortion decisions are more complex than previously documented. Dominant activist narratives invoking bodily autonomy or sanctity of fetal life may be too narrow to fully account for women's lived experiences of abortion.

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P31

ANALYSIS OF LIST EXPERIMENT DATA ON LIFETIME ABORTION PREVALENCE: RESULTS FROM A LARGE, POPULATION-BASED STUDY IN PAKISTAN

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Objectives: The prevalence of induced abortion is notoriously difficult to measure, but necessary for developing informed and responsive reproductive health programs and policies. This study aimed to improve survey-based measurement of lifetime abortion prevalence in Karachi, Pakistan.

Methods: We added a double-list experiment to a population-based survey of 4205 married women, aged 16–44, and compared resulting estimates to those obtained via direct question. We assessed the list experiment data for a design effect by calculating the difference between the treatment and control groups in the proportions of participants with at least one positive response. We also implemented a likelihood ratio test. Last, we estimated associations between respondent characteristics (wealth, age, education, and religion) and the two abortion measures using multivariate regression.

Results: The list experiment produced an estimate almost double that of the direct question (16% and 8% respectively). We found no statistical evidence of a design effect in list experiment data, affirming a key assumption of the method. We found a significant, negative association between wealth and history of abortion in one list at the $\alpha=.05$ level, but not the other. In contrast, analysis of the direct question showed a significant, positive association between wealth and abortion at the $\alpha=.05$ level.

Conclusions: The double-list experiment produced larger estimates of lifetime abortion prevalence than direct questioning, suggesting that indirect questioning may yield more reliable abortion data in this context. However, conflicting results of the multivariate analyses call into question the utility of utilizing the list experiment to assess characteristics associated with lifetime abortion prevalence.

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P32

THE ROLE OF RESEARCHER-POLICYMAKER PARTNERSHIPS ON ACCESS TO MIFEPRISTONE-INDUCED MEDICAL ABORTIONS IN CANADA: RESULTS OF A REALIST EVALUATION

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Objectives: Canadian mifepristone regulations affected safe and equitable uptake of this medication. To catalyze evidence-based regulatory change, we engaged health policy, system, and services decision-makers and health professional organizations in integrated knowledge translation (iKT), a method that includes decision-makers as equal partners with researchers. We aimed to evaluate iKT with and by decision-makers to reduce barriers, and optimize facilitators, for mifepristone abortion practice.

Methods: This was a 3-year realist evaluation of what iKT activities work, for whom, and in what contexts to affect federal mifepristone regulations. Initial theories about how iKT worked were derived from the literature and documentation of our iKT activities. Theories were refined through interviews with researchers and decision-makers that were conducted before and after mifepristone became available. Interviews and documents were subjected to thematic analysis. We also assessed the goal of each iKT activity and partnership, mode of delivery, duration, frequency, participants, and personnel involved.

Results: Analysis of 58 documents and 35 interviews indicated that researcher partnerships with decision-makers had a meaningful impact on the removal of restrictions. Key ingredients for successful iKT included: strategic use of media to highlight the policy problem for decision-makers; identification of the researcher as a content expert; alignment of researcher and decision-maker values and priorities; and researcher responsiveness to decision-makers' evidence needs in real time.

Conclusions: This study identifies several practical and adaptable approaches to impactful iKT. Protecting time and resources to adopt these approaches should be a consideration in applied health services and implementation research in family planning and broadly.

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P33

IS ABORTION CARE AN OPPORTUNITY FOR HEALTH PROMOTION? HPV VACCINATION AT TIME OF ABORTION VISIT

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Objectives: We aimed to determine whether the abortion visit is an acceptable opportunity for general health maintenance services and specifically, for the receipt of the human papillomavirus (HPV) vaccine.

Methods: We conducted a prospective cohort study in which we offered the HPV vaccine to eligible patients presenting for abortion services at an outpatient abortion center. We administered surveys to all participants at the initial study visit, to assess utilization of health services, knowledge of the HPV vaccine, and reasons for not having initiated or completed the vaccine series previously.

Results: A total of 101 study participants were offered HPV vaccination; 50 participants accepted and 51 participants declined. All participants completed the survey. Vaccine acceptance was significantly associated with not being previously aware that HPV causes cervical cancer (acceptors=72.0%, decliners=52.9%; $p=.048$). The most common reason in both groups for not initiating the vaccine was "No one offered it to me" (acceptors=58.0%, decliners=53.5%; $p=.455$).

In all, 87.1% of study participants described the abortion visit as a good opportunity to receive other health-care services. The top three services participants were interested in receiving at the time of an abortion visit were STI testing, contraceptive counseling, and mental health screening.

Conclusions: The majority of patients presenting for abortion were receptive to receiving additional services. More than half of these patients

had never previously been offered the HPV vaccine. The abortion visit may be an opportunity to start or finish the HPV vaccine series.

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P34

SUPPORTING IMPLEMENTATION OF MIFEPRISTONE ABORTION IN CANADA: A MIXED METHODS STUDY OF THE CAPS COMMUNITY OF PRACTICE

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Objectives: Mifepristone became available in Canada in January 2017. As part of an implementation research project that explored and mitigated barriers to providing mifepristone, we created and assessed the impact of an on-line “Community of Practice” (CoP) to support mifepristone practice by multidisciplinary health-care providers.

Methods: Practitioners interested in mifepristone provision were invited to join the Canadian Abortion Providers Support (CAPS) CoP and complete surveys about their practice and experience with CAPS. CAPS offered clinical and practical resources for implementation, a discussion forum, and weekly e-mail member announcements. We conducted interviews with a subset of member and non-member survey respondents. We analyzed site metrics and survey data using descriptive statistics, and thematically analyzed interviews and “ask the expert” content.

Results: CAPS membership increased steadily between January 2017 and February 2019 to 408 physicians, 301 pharmacists, 82 nurse practitioners and 64 midwives. Web site visits peaked in July 2017. At the 6-month survey, 63% of CAPS physicians agreed CAPS was useful/very useful; 56% were providing mifepristone, compared with 35% of non-members ($p=.07$). “Ask the expert” questions centered on mifepristone use in clinical situations (e.g., breast-feeding) or provision in settings with limited infrastructure (e.g., timely ultrasound or lab). Interviews revealed enthusiasm for e-mail member announcements to stay current with policies and new developments.

Conclusions: Practitioners new to mifepristone abortion care from across Canada joined and used resources of the CoP. They also valued e-mails to keep up to date and build community. Ongoing research will examine CAPS’ impact on supporting nurse practitioner adoption of mifepristone abortion.

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P35

“IT MAKES SENSE”: PHARMACISTS’ ATTITUDES TOWARD DISPENSING MIFEPRISTONE FOR MEDICATION ABORTION

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Objectives: We explored pharmacists’ perspectives on dispensing mifepristone for medication abortion (MAB).

Methods: From May 2018 to March 2019, we enrolled 21 pharmacists at 8 pharmacies in California and Washington as the first step of initiating a clinical trial assessing pharmacist dispensing of mifepristone for MAB. We consented pharmacists to participate in semi-structured interviews regarding acceptability of dispensing mifepristone. We transcribed and coded the interviews and summarized emergent themes.

Results: Pharmacists strongly supported the model, feeling it would improve quality of care by providing more convenient MAB access and more streamlined service delivery, taking advantage of pharmacists’ expertise and availability. Pharmacists felt dispensing mifepristone would not be notably different from other medications and would “make sense that [all MAB medications] could be picked up at once.” Pharmacists considered mifepristone dispensing to be more accessible, safe, and supportive for patients than having mifepristone available only from MAB providers: “If [pharmacists] were able to dispense these medications, then we would be not only improving access of care to patients, but also reducing the burden on providers.” All pharmacists, except one with moral objections to abortion, reported they would feel comfortable dispensing mifepristone if they had enough knowledge about mifepristone to counsel patients adequately. Pharmacists felt the model would improve overall access to MAB, but expressed concern that in conservative areas or small pharmacies, pharmacists’ refusal to dispense mifepristone could impede patients’ access to MAB.

Conclusions: In this engaged group, most pharmacists supported dispensing mifepristone and were comfortable doing so following education on mifepristone and MAB.

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P36

DECREASING OUT-OF-STATE REFERRALS AND EXPANDING ACCESS TO LATER ABORTION IN MAINE

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Objectives: In 2014, no clinic was providing abortion services in 81% of Maine counties (where 55% of the state’s female residents lived). In addition, no clear referral process existed among the four clinics in Maine, resulting in patients being referred out of state. In collaboration with the four existing Maine abortion clinics, Ibis developed an intervention to improve the in-state referral process, specifically after 19 weeks’ gestation.

Methods: In order to assess in-state and out-of-state referral patterns and identify areas for improvement, baseline data were collected from the clinics on services provided, referral practices, and interest in expanding services, in 2016. A stakeholder meeting was convened to discuss provider experience and generate strategies to improve referrals. Using these inputs, a toolkit was developed for all abortion providers to improve referral practices. The intervention began in March 2017, and an end-line survey was conducted in 2018.

Results: At baseline, providers described limited communication with other in-state clinics, and a referral process that was unclear and time-intensive. At end-line, we observed a 33% decrease in out-of-state referrals. Due to the intervention, patients who were beyond the gestational age limit or those with medical conditions were referred within the state and were saved from traveling more than 100 additional miles. The stakeholder meetings allowed clinics to

build relationships with each other and contribute to the development and implementation of a streamlined referral tool.

Conclusions: Collecting data and establishing ways for providers to contribute to, share, and build strategies can improve referrals and minimize patient costs and delays.

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P37

SAFETY OF 1–2-DAY PROTOCOLS IN LATER ABORTION PROVISION: DATA FROM A RETROSPECTIVE CHART REVIEW STUDY FROM FIVE US STATES

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Objectives: The abortion process at later gestational ages—from placement of dilators to completion of procedure—can have a duration of up to 3 days. Coupled with mandatory waiting periods in many states, later-abortion procedures often place undue burdens on patients (increased travel, accommodation, and administrative costs). We present evidence on the safety of later-abortion protocols that are carried out in 1–2 days, which can result in cost savings for clients.

Methods: We conducted a retrospective review of 1325 patient medical charts from 3 different clinics (in 5 states) that provide abortions for gestational ages 18–24 weeks, within 1–2 days. Data were collected using an online data collection platform. We used Stata 15 to clean data and perform preliminary descriptive analysis.

Results: We found that, on average, complications occurred in 3% (n=36) of all procedures. The literature suggests that for D&E procedures occurring at 14–24 weeks, complications occur in 4% of cases (Autry et al., 2002). In our study, cervical tear was the most common complication (1.2%, n=17), followed by hemorrhage (0.3%, n=5). Overall, 2.1% of all procedures were resolved in the clinic itself on the day of the procedure or at follow-up (n=28), and 0.3% (n=4) required a hospital transfer.

Conclusions: In general, 1–2-day procedures result in a low occurrence of complications—similar to what has been reported for longer procedures—and rarely need hospital admission. Adopting shorter procedures can reduce the financial burden on patients, especially those traveling long distances, and can expand access to later abortion care.

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P38

DIFFERENCES IN FEELINGS OF AFFINITY FOR WOMEN WHO SEEK ABORTIONS AFTER WATCHING AN EMPATHY-INDUCING VIDEO INTERVENTION

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Objectives: Abortion seekers in the United States encounter stigma from many sources potentially causing them to feel “othered.” Increasing self-identification (e.g., affinity) for abortion seekers may reduce stigma, especially in highly restrictive states. This study examined differences in affinity for women who seek abortions among Arkansans who viewed an empathy-inducing video.

Methods: Arkansas residents (n=369) watched a video of a woman describing her abortion experience. Participants then completed a survey assessing their feelings of affinity with women who seek abortions using a single-item pictorial measure of closeness, and an open-ended question to explain their response. Univariate comparisons analyzed demographic differences. Open-ended responses were analyzed via thematic analysis.

Results: Females, democrats, people who identified as pro-choice, and people with abortion experience had higher affinity scores. Themes emerged from the open-ended data indicating why people selected their affinity response such as ability to perspective-take, drawing on life experiences, effect of gender, and feelings about abortion. Most men who provided open-ended responses stated they could not relate because of their gender. Conversely, women stated they empathized because they could envision themselves in a similar situation. Possibly because the video focused on describing legislative abortion restrictions, some responses mentioned feeling empathy for abortion seekers and the obstacles they face. Additionally, many responses demonstrated complex abortion attitudes (e.g., “I would never have an abortion, but...”).

Conclusions: Closed and open-ended data suggested the ability to feel affinity is contingent on personal characteristics and experiences, gender perceptions, and internalized abortion stigma. Implications for future stigmatization work will be discussed.

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P39

A NEW TOOL FOR ADOLESCENT CONTRACEPTION COUNSELING DEVELOPED BY YOUNG PEOPLE USING HUMAN-CENTERED DESIGN

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Objectives: We conducted a series of human-centered design engagements for young people to generate and prototype adolescent-centered sexual health care tools and services.

Methods: Young people were engaged as human-centered designers to provide formative data and to improve adolescent sexual health care on a mobile health unit (MHU). Simulated visits with an MHU provider allowed young people to explore the current state of care and subsequently design ways to improve it, including contraception counseling. Young people’s ideas were prototyped and iteratively developed with other youth and providers.

Results: Thirty-one young people, aged 14–20, were engaged as human-centered designers. Formative research revealed that health-care providers sometimes do not counsel on all contraceptive methods, imparting their own ideas about which methods are appropriate for young people, limiting information and access to a range of methods that might fit their needs. Also, many providers use handouts with pictures and text; however, these documents lack user-experience information that young people want.

Through the human-centered design process, young people mocked up a low-fidelity version of a counseling tool that tangibly demonstrates all of the contraceptive methods. The low-fidelity model was iteratively prototyped

and tested with 20 additional young people and 10 providers through a series of interviews and mock consultations to ensure clinical feasibility.

Conclusions: Young people desire information about the contraceptive user experience, including being able to touch the method. This finding and the resultant tool have implications for the structure and practice of contraception counseling by health-care providers.

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P40

INTEGRATION OF MEDICAL ETHICS AND CATHOLIC VALUES IN THE PROVISION OF FAMILY PLANNING SERVICES: A QUALITATIVE STUDY

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Objectives: This study explored how Catholic obstetrician-gynecologists (ob-gyns) in the United States integrate religious values and medical ethical principles when providing family planning services.

Methods: We conducted a qualitative investigation of self-identified Catholic ob-gyns who provide reproductive health care. Using an online survey, we purposively sampled those who provide natural family planning only (low providers), some additional contraceptive methods (moderate providers), and family planning services including abortion (high providers). During telephone interviews, we used a semi-structured guide to explore the integration of Catholic values and medical ethics. Three coders analyzed responses using grounded theory.

Results: Participants included 10 low, 15 moderate, and 9 high providers from 19 states. Within each group, three themes emerged reflecting how they provide family planning services as Catholic ob-gyns; we categorized each theme as either autonomy, beneficence, nonmaleficence, or justice. Low providers primarily promoted natural approaches to avoid iatrogenic risks, reflecting nonmaleficence. Alternatively, moderate providers mainly focused on nonmaleficence by offering contraceptives to prevent abortions. High providers primarily promoted patient autonomy by separating religious doctrine from medical practice. All providers also had concerns for beneficence. Notably, in each group, one of the four medical ethical principles was underrepresented.

Conclusions: Among Catholic ob-gyns, we found that religious values and medical ethical principles differentially contribute to various family planning practice patterns with certain ethical principles emphasized more than others. Our findings suggest that Catholic ob-gyns often reconcile their religious values and professional obligations, regardless of their practice patterns. Understanding the dilemmas Catholic ob-gyns face can guide professionalism efforts and inform ongoing discussions about conscience protections.

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P41

MOST PATIENTS WITH BLEEDING AND CRAMPING IN EARLY PREGNANCY CAN BE SAFELY TRIAGED TO THE AMBULATORY SETTING

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Objectives: “Pregnant and bleeding” is a common chief complaint in emergency departments (EDs). We measured predictors of emergency interventions in this population.

Methods: We conducted a prospective, observational study of pregnant patients at ≤ 15 weeks’ gestation presenting to three urban EDs with chief complaints of bleeding and/or pain. Participants responded to a seven-item survey intended to identify potential predictors of stability. Clinical variables, including interventions and disposition, were extracted from the medical record. We applied logistic regression to identify independent predictors of emergency intervention or admission, including surgery, versus discharge after evaluation alone, and computed the sensitivity, specificity, area under the Receiver Operating Characteristic (ROC) curve, and positive likelihood ratio (LR+).

Results: Of 486 eligible participants, 390 (80.1%) received a pelvic exam and 435 (89.3%) received a pelvic ultrasound for evaluation. Twenty-four (4.9%) required hospital admission, a blood transfusion, or urgent uterine aspiration in the ED. Survey questions independently associated with a higher likelihood of emergency intervention (LR+ 5.6) were history of ectopic pregnancy (OR 7.4; 95% CI: 2.9–19.1) and self-reported heavy bleeding in the past 2 hours (OR 10.6; 95% CI: 3.6–31.3), after controlling for BMI and a prior ED visit in current pregnancy. The final model had an area under the ROC curve of 0.83, 66.7% sensitivity, and 88.1% specificity to identify patients requiring these emergency services.

Conclusions: Most “pregnant and bleeding” patients are discharged from the ED after evaluation without emergency intervention. Future studies can include questions obtained through patient report in a prediction rule for safe triage to ambulatory care.

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P42

PROVISION OF CONTRACEPTIVE IMPLANTS IN SCHOOL-BASED HEALTH CENTERS: A COST-EFFECTIVENESS ANALYSIS

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Objectives: To evaluate the cost-effectiveness of providing the contraceptive implant at New York City school-based health centers (SBHCs) at different time horizons, compared with the usual model of referral to a traditional adolescent clinic.

Methods: We developed an innovative microsimulation model of teen pregnancy to assess the health and economic impact of different contraceptive strategies. Using the public payer perspective, we compared the cost-effectiveness of providing contraceptive implant in SBHCs with the current practice of referral to a large Adolescent Health Center (AHC) over 3 years. We calculated the number of pregnancies as well as the total costs for each scenario. The incremental cost-effectiveness ratio (ICER) of providing contraceptive implants in SBHCs compared with the referral to a traditional clinic was also calculated. Model inputs were derived from published literature and a retrospective chart review of adolescent patients aged 15–19 at the AHC. One-way sensitivity analyses were used to examine different model parameters to assess the impact of parameter uncertainty on the cost-effectiveness results.

Results: In the baseline analysis, referral for the contraceptive implant resulted in 50 more pregnancies per 1000 adolescents and cost \$44 per person more than immediate provision in SBHCs over 3 years.

Conclusions: The provision of the contraceptive implant in SBHCs is cost-effective relative to the current model of a referral system for

adolescents. This patient-centered model of immediate on-site provision is also cost saving for the medical system and should be expanded to other locations.

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P43

FACILITATORS AND BARRIERS TO PROVIDING EARLY ABORTION SERVICES

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Objectives: Research has shown the safety of abortion before 5 weeks' gestation, though data suggest that fewer than 50% of abortion providers offer services at this gestation.

Methods: We conducted semi-structured interviews with providers in the greater Boston area about early abortion services (EAS), defined as services provided when an intrauterine pregnancy cannot be verified by ultrasound. We utilized an implementation science framework to ask about providers' current EAS practices, along with facilitators and barriers to providing this care.

Results: Participants (n=25) were ob/gyn (60%) and family medicine (24%) physicians and women's health nurse practitioners (16%). Facilitators of providing EAS included access to formal ultrasonography, options for follow-up including external laboratories, and comprehensive staff training. Providers' comfort with EAS aligned with clarity; they were more apt to provide EAS in the presence of straightforward guidelines, clear staff roles, and a concrete plan for follow-up. Barriers to providing EAS included time burden for providers and staff, lack of infrastructure, and concerns about patient reliability for follow-up. Providers had varying perspectives about patient safety—fear of causing harm with EAS (risk of abortion failure, performing an unnecessary procedure or missing an ectopic pregnancy) versus EAS as a tool for harm reduction (promptly ending an unwanted pregnancy, expediting a diagnosis of ectopic pregnancy). All providers expressed a desire for patient-centered care, but many were conflicted about the comparative patient burdens of returning when the pregnancy location was verifiable versus the need for multiple follow-up visits.

Conclusions: We identified critical elements to address within clinical sites in order to broaden access to early abortion services.

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P44

CLINIC FACTORS AFFECTING IUD ACCESS AND UTILIZATION AT TIME OF SURGICAL ABORTION

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Objectives: Evaluate current availability of and barriers to post-surgical abortion intrauterine device (IUD) uptake and utilization.

Methods: Surgical abortion providers attending a national reproductive health meeting in 2018 completed surveys about

abortion and contraception access. The surveys obtained information about provider and facility characteristics, payment methods, and contraceptive counseling and provision. We compared outcomes using Fisher exact testing.

Results: Overall, 84 providers from 27 different states completed surveys. The clinicians' primary practice was most often a private (n=44, 52%), Planned Parenthood (n=14, 17%) or University-based or student health clinic (n=12, 14%). Thirteen (18%) clinicians provided care at clinics that were cash only. Forty (48%) providers reported their primary facility was non-profit but 7 (8%) were not sure. Most (73, 87%) provided abortion after 14.0 weeks and 56 (67%) after 20.0 weeks. Eighty-three (99%) providers stated their facility counseled about IUDs but only 65 (77%) provide post-procedure IUDs. Most (n=70, 83%) stated their clinics provide both hormonal and copper IUDs; 10 (12%) offer just hormonal and 4 (5%) offer just copper IUDs. Of the 10 facilities that do not offer any IUDs on site, the providers stated the primary reason for 9 (90%) was acquisition cost or high price for patients. Six of these clinics accepted cash only and none were known to qualify for federal discount drug pricing.

Conclusions: Although a high proportion of facilities offer post-abortion IUD placement, high cost in this setting remains a barrier for access at those locations that do not offer this service.

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P45

MENSTRUAL BLEEDING AND SPOTTING WITH THE LEVONORGESTREL INTRAUTERINE SYSTEM: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Objectives: We aimed to systematically calculate the mean number of bleeding-only, spotting-only and combined bleeding and/or spotting days experienced by a general population of LNG-IUS users during the first year after insertion. By providing these measures, we hope to improve counseling on menstrual bleeding changes associated with this method.

Methods: We searched 12 biomedical and scientific literature databases for clinical studies that reported data on LNG-IUS devices releasing 20 mcg of levonorgestrel per day, collected daily menstrual bleeding data from written diaries for at least 90 consecutive days, and defined bleeding and spotting according to WHO standards. Two reviewers independently conducted all review stages and rated the quality of evidence for each article. Where possible, data were pooled using a random-effects model. We weighted bleeding and spotting measures for inter- and intra-study variance.

Results: Among 3403 potentially relevant studies, we included 9 in our meta-analysis. Combined menstrual bleeding and spotting days gradually decreased throughout the first year after insertion, from 35.6 days during the first 90-day interval to 19.1, 14.2, and 11.7 days in the second, third, and fourth intervals (I-squared values revealed reliable measures, <50%). Measures for bleeding-only and spotting-only days similarly decreased throughout the first year after insertion, with the greatest decrease between the first and second intervals.

Conclusions: Our study provides specific 90-day reference period measures that characterize menstrual patterns. Changes in menstrual bleeding pattern are of high concern to many hormonal contraceptive

users; accurately establishing expectations with the LNG-IUS may improve informed selection and decrease discontinuation.

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P46

BARRIERS TO ACCESSING FAMILY PLANNING CARE AMONG WOMEN WITH SEVERE MENTAL ILLNESS

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Objectives: Little research has focused on unmet needs for family planning among women diagnosed with severe mental illness (SMI), a population at increased risk of adverse reproductive health outcomes. We explored the family planning perspectives, experiences, and needs of women diagnosed with SMI.

Methods: We qualitatively interviewed 17 English-speaking women aged 18–55 with previously diagnosed SMI who were currently receiving treatment at an outpatient mental health clinic in metropolitan Atlanta, Georgia. We conducted in-depth, in-person interviews with semi-structured guides to elicit information on experiences receiving family planning health care, including contraceptive, prenatal, postpartum, and abortion care. Using thematic analysis and deductive and inductive approaches, two investigators independently analyzed key codes and themes.

Results: The most common diagnoses among the sample were major depressive disorder and post-traumatic stress disorder. Most felt that despite their desire for family planning, they often were unable to access reproductive health care due to barriers at the structural, institutional, and individual levels. Structural barriers included cost and transportation, such as prohibitive copays and inconvenient clinic locations. Institutional barriers included an often tenuous insurance status requiring additional time or steps for reapplication. Individual barriers included personal perceptions about contraception and abortion, often shaped by families and partners.

Conclusions: Barriers identified mirror those experienced by patients who do not have SMI but do have limited resources similar to those of our participants. Our findings suggest that successful interventions— including programs to improve service delivery in the non-mental health sphere—can be applied to address family planning needs for women with SMI.

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P47

TRICHOMONAS VAGINALIS PREVALENCE IN PATIENTS PRESENTING FOR ABORTION

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Objectives: With widely available trichomonas nucleic acid amplification testing (NAAT), the CDC recommends considering trichomonas screening

of asymptomatic cisgender women who receive care in high prevalence settings. Whether abortion care constitutes a high prevalence setting is unknown. We screened patients presenting for abortion for trichomonas to assess feasibility and inform guidelines.

Methods: We offered trichomonas screening in conjunction with other sexually transmitted infection (STI) screening to all patients presenting to Zuckerberg San Francisco General Hospital's Women's Options Center from October through December 2018. Vaginal swabs were obtained by self-collection (medical abortion) or by a clinician immediately before the abortion or osmotic dilator placement (procedural abortion). We used NAAT to diagnose trichomonas and completed a retrospective chart review to assess for associations with demographics and clinical history.

Results: Of 367 patients, 309 (84%) were screened. The median age was 28 (range 16–45), with 33% identifying as Black, 17% White, 16% Latinx, 13% Asian, and 21% other/declined. Of those screened, trichomonas prevalence was 6.5% (95% CI: 4.0–9.8). Trichomonas infection was associated with Black race (OR 5.2; 1.9–13.9); concurrent diagnosis of another STI (OR 4.4; 95% CI: 1.1–17.6); and history of sex with a man who has sex with men, injects drugs, or is living with HIV (OR 4.1; 95% CI: 1.1–16.2). Of patients diagnosed with trichomonas, 100% (20/20) were notified and treated.

Conclusions: Trichomonas vaginalis is highly prevalent among patients presenting for abortion in an urban hospital. Consistent with CDC guidelines, trichomonas screening may be considered for asymptomatic women presenting for abortion.

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P48

BARRIERS TO PATIENT-PROVIDER COMMUNICATION IN THE REPRODUCTIVE HEALTH CARE SETTING: A QUALITATIVE STUDY AMONG RESETTLED SYRIAN REFUGEES IN SAN DIEGO, CALIFORNIA

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Objectives: Communication barriers can limit providers' ability to provide high-quality, person-centered care to immigrant, refugee, and limited-English-proficiency populations. This qualitative study among Syrian refugee women resettled in San Diego, California, sought to identify factors that negatively affect patient-provider communication and, consequently, rapport in sexual and reproductive health care (SRH) settings.

Methods: Sixty qualitative, person-centered interviews were conducted in Arabic with 20 Syrian refugee women (three interviews with each individual) over a 12-month period of ethnographic research in San Diego, California. Interviews were audio recorded, transcribed, and iteratively coded according to emergent themes.

Results: Results demonstrated that many women felt uncomfortable discussing contraception with providers through male phone interpreters. In addition, interpreters were often unfamiliar with the nuances of medical terminology related to SRH and subtle errors in translation affected quality of care (e.g., “unintended pregnancy” mistranslated as “unwanted pregnancy”).

Conclusions: Resettled refugee women—already at high risk of unintended pregnancy—experience communication barriers within the patient-provider relationship that negatively affect satisfaction with and utilization of SRH services. Although technological advances have increased patients' access to interpretation services over the last decade,

further research is urgently needed to understand how the person-centered model of contraceptive counseling can best be adapted to the context of interpreter-facilitated clinical encounters.

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P49

EXPLORING THE PHYSICIAN'S ROLE IN CONTRACEPTIVE COUNSELING AT THE TIME OF ABORTION

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Objectives: We explored how abortion providers conceptualize their role in contraceptive counseling at the time of abortion, including identifying clinician attitudes that may lead to patients' perceptions of contraceptive coercion.

Methods: We performed semi-structured interviews with questions based on components of the Theory of Planned Behavior. All interviews were transcribed and coded by two researchers, and constant comparative analysis was used to identify common themes.

Results: We interviewed 39 participants from all regions in the United States. Participants primarily self-reported as white females, aged 25–44, practicing obstetrics and gynecology in an academic setting, and without Family Planning Fellowship training. Abortion providers identified their unique role in contraceptive counseling at the time of abortion, and reported that contraceptive counseling practices are influenced by their training, perceptions about patient characteristics, and multi-level barriers within clinical sites. Participants said they had been trained to value contraceptive efficacy and recommended LARC when discussing contraception at the time of abortion. Although some participants reported that they developed less directive contraceptive counseling techniques over time, many feel conflicted when patients do not practice contraception after an abortion. This conflict was stronger when counseling adolescents, those with multiple abortions, and patients without insurance or on public insurance. Participants reported modifying their counseling practices to push a contraceptive plan on these patients. Many participants identified institutional barriers to providing comprehensive contraception, particularly LARC, at the time of abortion.

Conclusions: Abortion providers face a conflict between patients declining contraception after an abortion and reducing unintended pregnancies when counseling about contraception at the time of abortion for specific patient populations.

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P50

EVALUATION OF A CLINICAL DECISION SUPPORT TOOL TO ENHANCE COMPREHENSIVE FAMILY PLANNING SERVICE DOCUMENTATION AT A FAMILY MEDICINE-STAFFED URBAN FEDERALLY QUALIFIED COMMUNITY HEALTH CENTER NETWORK

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Objectives: This study aimed to assess whether a clinical decision support (CDS) implemented at seven sites in an urban Federally Qualified Health Center network 1) improved documentation of family planning services (FPS) for female patients of reproductive age and 2) differed in effect for certain patients or in distinct clinical settings.

Methods: We implemented a CDS comprising an FPS needs screening question and linked documentation and ordering tool. We used difference-in-differences design to measure the intervention's effect on FPS documentation during primary care medical visits by non-pregnant females aged 13–44, 52 weeks prior to and after implementation. We used random effects logistic regression to assess effect modification by patient characteristics and site.

Results: A total of 27,817 eligible patients made 91,185 visits during the study period. With the CDS, sites' FPS documentation during visits ranged from 48.2% to 70.4%, compared with 48.8% to 65.5% prior to implementation. There was substantial variation in intervention effect across sites. Compared to baseline, aggregate visits with CDS had 1.4 times (95% CI: 1.25–1.58) the odds of having FPS documentation, amounting to an adjusted 3.43% increase (95% CI: 2.24–4.63). Interaction of effect occurred by race, insurance, and site, but not by age-group or ethnicity.

Conclusions: This CDS modestly improves FPS documentation in our network; its effect varies across sites. Given the frequency with which people need FPS, even a modest improvement could affect thousands. Further study is needed to elucidate the contextual factors that enable certain sites to achieve greater change with this CDS.

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P51

FAMILY PLANNING VALUE CONCORDANCE: A NEW MEASUREMENT MODEL FOR PATIENT-CENTERED CARE

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Objectives: Tailoring family planning care to patients' unique preferences and values has been recognized as an effective approach aligned with patient-centered care. *Value concordance* is defined as "the degree to which patients' experiences or treatments reflect their preferences." This study aims to explore the role of family planning value concordance (FPVC) by developing and pilot-testing an original measure. Preliminary empirical analysis using FPVC is also presented to test the predictive validity on select patient outcomes.

Methods: An original FPVC instrument was developed using qualitative interviews and focus groups with women aged 18–45 years (n=53) and technical expert panel review (n=9). We also pilot-tested the measure in a sample of 110 patients to conduct standard factor analyses and psychometric tests for reliability and validity of the FPVC measure. Multivariate regression analyses were used to pilot-test how FPVC correlates with select patient outcomes.

Results: FPVC was observed at 0.573, indicating that about 57% of patient preferences and values matched their experience with family planning care. Using a moderate alpha (0.10) FPVC scores were positively associated with patients' satisfaction and accurate family planning knowledge. No evidence of relationships between FPVC and contraceptive behavior was observed. The FPVC scale exhibited moderate reliability with an overall internal consistency of $\alpha=0.696$.

Conclusions: This study offers a preliminary tool that may be used to assess patient preferences and values about family planning and translate them into clinical care. With additional refinement, the

FPVC instrument represents a promising step toward ensuring high quality, patient-centered family planning care for all patients.

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P52

OVER-THE-COUNTER ACCESS TO LEVONORGESTREL EMERGENCY CONTRACEPTION IN SOUTH TEXAS: DOES OVER-THE-COUNTER MEAN READY TO BUY?

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Objectives: We sought to determine the percentage of pharmacies in Hidalgo County, Texas, with unrestricted over-the-counter (OTC) access to levonorgestrel (LNG) emergency contraceptive pills (ECPs), defined as in-stock, and without additional security barriers, and to compare this access to that of other reproductive health items.

Methods: We conducted a secret shopper survey from October 2018 to March 2019, proportionally sampled by city, recording OTC availability of LNG-ECPs, security barriers, and price. The same information was collected for condom multipacks, ovulation prediction test kits, and pregnancy tests. We planned to sample 89 of 159 pharmacies to estimate unrestricted LNG-ECP access within 5% with 95% confidence, based on 15% predicted access.

Results: In all, 76 pharmacies were surveyed, with 31 (40.8%) proving OTC LNG-ECPs, of which 26 (83.9%) were in stock and 2 (6.5% +/- 4%) had unrestricted access. For condom multipacks, 40 pharmacies provided OTC access, 38 (95%) with product in stock, of which 38 (95%) had unrestricted access. For ovulation prediction test kits, 41 pharmacies provided OTC access, all in stock, of which 39 (95.1%) had unrestricted access. For pregnancy tests, 45 pharmacies provided OTC access, all in stock, of which 43 (95.6%) had unrestricted access. The difference in unrestricted access between LNG-ECPs and the other products was statistically significant ($p < .01$).

Conclusions: While previous research has noted high prevalence of LNG-ECP availability in pharmacies, potential purchasers of OTC LNG-ECPs are met with additional access barriers not associated with other reproductive health products that may increase consumer discomfort, decrease privacy, and delay access.

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P53

DOES ACCESS TO NO-COST CONTRACEPTION CHANGE METHOD SELECTION AMONG INDIVIDUALS WHO REPORT TROUBLE PAYING FOR HEALTH-RELATED CARE?

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Objectives: Out-of-pocket costs continue to be a barrier to accessing necessary health-care services, including contraception. We explored how elimination of contraceptive costs affects method choice among women reporting difficulty paying for health care in the previous year.

Methods: We utilized data from the HER Salt Lake Contraceptive Initiative, a prospective cohort study that provided women with no-cost contraception (April 2016 through March 2017) following a control period (September 2015 through March 2016). We restricted the study population to those who reported difficulty paying for health care in the past 12 months ($n=953$). We ran simultaneous multivariable logistic regression models for each method comparing intervention and control periods, applying test corrections for multiple comparisons. Covariates included: enrollment site, age, race, ethnicity, employment, insurance, federal poverty status, parity, prior LARC use, history of abortion, and receipt of government assistance.

Results: After other factors were controlled, women were 5.98 times as likely to choose the implant (95% CI: 2.70–13.23) and were 2.93 times as likely to choose the hormonal IUD (95% CI: 1.58–5.41) during the intervention than during the control period. Women were significantly less likely to choose the injection (aOR=0.38; 95% CI: 0.240.60) or the pill (aOR=0.36; 95% CI: 0.24–0.53) in the intervention period as in the control period. Selection of copper IUD and vaginal ring did not change significantly across time periods.

Conclusions: Eliminating cost disproportionately increases the likelihood of selecting an IUD or implant among women who report difficulty paying for health care, compared with women who report no such difficulty.

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P54

MAKING THE CASE FOR PAYERS TO COVER IMMEDIATE POSTPARTUM IUD: A COST ANALYSIS

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Objectives: Clinical guidelines support immediate postpartum intrauterine device (IUD) insertion; however, inpatient placement remains infrequent and private insurance coverage inconsistent. We performed a cost analysis to compare postpartum IUD insertion inpatient (immediately postpartum) to outpatient (6 weeks postpartum).

Methods: Using a decision tree model, following a hypothetical cohort of people who desire an IUD after initial delivery, we conducted a cost analysis comparing inpatient versus outpatient insertion. Using a 2-year time frame, probability and cost estimates were derived from literature review. Our main outcome was total accrued costs to the payer. Secondly, we examined rates of early repeat pregnancy, and sensitivity to estimates of key inputs including expulsion rates and IUD cost.

Results: While inpatient placement's up-front costs were higher, total costs over time were lower. Including costs of managing expulsions and complications, our model suggests that for every 1000 people desiring a postpartum IUD, intended inpatient placement resulted in a total cost savings of \$280,120 and prevention of 36 additional pregnancies as compared to outpatient placement. Inpatient cost saving was superior to outpatient cost saving, largely due to the known high proportion not returning for outpatient placement. In sensitivity analyses, we found that total cost to the payer was most sensitive to IUD device and insertion costs and to the probability of expulsion after immediate postpartum IUD placement. **Conclusions:** For beneficiaries desiring a postpartum IUD, payers are likely to save money by fully reimbursing inpatient placement rather than incentivizing placement at the frequently missed postpartum

visit. These results support the financial case for full payer coverage of immediate postpartum IUD placement.

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P55

PREDICTORS OF COMFORT WITH PHARMACY-ACCESSED CONTRACEPTION IN UTAH

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Objectives: In 2018, Utah passed “Pharmacy Dispensing Authority Amendments” (S.B.184) allowing pharmacists to dispense self-administered hormonal contraception to women aged 18 or older. Here we assess factors associated with comfort and plans to obtain contraceptives from pharmacists.

Methods: We conducted a cross-sectional survey of reproductive-aged individuals. After excluding males, we examined correlations and conducted a multinomial regression to relate comfort getting contraceptives from a pharmacist to socioeconomic and demographic characteristics (e.g., age, insurance, race, year in college, sexual activity, and religiosity) and a logistic regression relating comfort to plans for obtaining contraceptives from a pharmacy.

Results: Of the 1256 women who completed the survey, 18% were aware of the new law, 805 (64%) indicated they were comfortable obtaining methods from pharmacists, 240 (19%) were neutral, and 211 (17%) were not comfortable. Sexually active individuals were more likely to report comfort (aRR: 1.4; 95% CI: 1.0–2.1), and religiosity was the strongest predictor of discomfort (aRR: 2.1; 95% CI: 1.5–3.0) with pharmacy access when other factors were controlled. One in five (18%) women plan to obtain contraceptives from a pharmacist in the next year, with comfort level being the strongest predictor (aOR: 2.7; 95% CI: 1.7–4.3). Agreement with statements that pharmacists are knowledgeable about contraception was positively correlated with comfort (0.52).

Conclusions: We found low awareness of pharmacy access and few people with plans to obtain care from a pharmacy, but high levels of comfort with pharmacy access. Increasing public awareness of the rule and positive perception of pharmacist contraceptive expertise may increase adoption.

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P56

COMPARISON OF 12-MONTH CONTRACEPTIVE CONTINUATION BETWEEN TWO MODELS OF CONTRACEPTIVE CARE IMPLEMENTED IN COMMUNITY HEALTH CENTERS

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Objectives: To compare rates of contraceptive continuation at 12 months between two models of contraceptive provision adapted from the Contraceptive CHOICE Project and implemented in three federally-qualified health centers (FQHC).

Methods: We enrolled 502 women receiving structured contraceptive counseling plus usual care (“Enhanced Care”) and 506 women receiving counseling plus healthcare provider education and no-cost long-acting reversible contraceptive (LARC) methods with on-the-shelf supply (“Complete CHOICE”) at three FQHCs. Participants completed surveys at baseline, 3, 6, and 12 months. We compared composite 12-month continuation rates between groups and between LARC vs non-LARC users using Kaplan-Meier survival function. We performed univariate and multivariable Cox proportional hazards regressions to investigate associations between group, baseline characteristics and method continuation.

Results: Women in “Complete CHOICE” had higher rates of any contraceptive use at 12 months; 55.4 versus 44.3 per 100 reproductive-age women years ($p < 0.01$). LARC users were more likely to continue use of their method at 12 months compared to non-LARC users; 73.5 compared to 39.5 per 100 reproductive-age women-years ($p < 0.01$). After adjusting for confounders, adolescent age was associated with a lower risk of discontinuation (HR_{adj} 0.75, 95%CI 0.57–0.97). Women who desired a pregnancy in 1–3 years and non-LARC users had a higher risk of discontinuation (HR_{adj} 1.78, 95%CI 1.37–2.30 and HR_{adj} 3.08, 95%CI 2.34–4.05 respectively).

Conclusions: Women in “Complete CHOICE” had higher rates of contraceptive continuation at 12 months, likely due to higher LARC uptake and higher continuation among LARC users. Interventions that address multiple barriers to contraceptive access may lead to increased contraceptive continuation.

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P57

ASSOCIATION OF CONTRACEPTIVE DECISION-MAKING CONCORDANCE AND MODERN CONTRACEPTIVE USE IN DYADIC COUPLES' DATA FROM RURAL INDIA

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Objectives: India is the country with the greatest number of women with an unmet need for contraception worldwide. Joint decision making by couples likely increases contraceptive use, though findings are mixed across studies and nations. This study examines the association of couple decision-making concordance with modern contraceptive use in India.

Methods: This is a cross-sectional analysis of N=800 couples from the CHARM2 [Counseling Husbands to Achieve Reproductive Health and Marital Equity] study. We assessed the effect of a four-level report of wife's involvement in contraceptive decision making on wife's report of current modern contraceptive use. Both the wife and the husband were asked separately: concordant equitable (agree wife involved), concordant inequitable excluded (agree wife not involved), discordant empowered (wife reporting wife involved and husband reporting wife not involved), and discordant unempowered (wife reporting wife not involved and husband reporting wife involved). Multivariable logistic regression assessed the association between decision making and contraceptive use, adjusting for covariates hypothesized to be in the causal pathway (contraceptive discussion concordance, knowledge and socio demographics).

Results: A total of 35.8% of wives reported using a modern contraceptive. In all, 70.5% of couples reported concordant equitable, 3.9% concordant

inequitable, 12.5% discordant empowered, and 13.0% discordant unempowered decision making. Multivariable analysis indicates that discordant unempowered couples were significantly less likely to report modern contraceptive use than were concordant equitable couples (AOR=0.37; $p=.002$; 95% CI 0.19–0.70). No other concordance category was significantly associated with use.

Conclusions: Couples believing their spouse controls contraceptive decision making are less likely to use contraceptives, possibly because neither spouse is responsible for contraception. There is potential value of couple-focused contraceptive counseling encouraging joint decision making.

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P58

CHANGES IN GENDER OF SEXUAL PARTNERS AND CONTRACEPTION DISCONTINUATION AND SWITCHING

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Objectives: Roughly 15% of reproductive-aged women have had a sexual relationship with another woman. Little research has examined how partner gender, and specifically, changes in the gender of partners affects contraceptive discontinuation or switching.

Methods: Data come from the HER Salt Lake Contraceptive Initiative, a prospective study of women who received a contraceptive method of their choice at no cost. Contraceptive use and gender of sexual partner were assessed at enrollment, 1-month, 3-month, and 6-month follow-up ($n=4221$). Our dependent variable measured whether respondents reported continued use of the method at enrollment (referent), discontinued their contraceptive method, or switched methods at 6 months after enrollment. A dichotomous measure captured whether respondents who reported only male partners or no sexual partners at enrollment reported a female partner by 6-month follow-up ($n=71$). Multinomial logistic regression documented the effect of establishing a new female partner on contraceptive continuation patterns while adjusting for baseline self-reported sexual identity, age, race/ethnicity, and education.

Results: Respondents who reported a new female partner were more likely to discontinue their contraceptive method than respondents who did not report a new female partner (RRR=2.09, $p<.05$). A new female partner was not associated with switching contraceptive methods.

Conclusions: Changes in gender of sexual or romantic partners may contribute to contraceptive discontinuation.

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P59

ORAL DIMETHANDROLONE UNDECANOATE IS A HIGHLY ACCEPTABLE POTENTIAL MALE CONTRACEPTIVE PILL: RESULTS FROM A RANDOMIZED, PLACEBO-CONTROLLED TRIAL

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Objectives: Male hormonal contraception (MHC) trials using testosterone or combination testosterone/progestin injections demonstrate both efficacy and safety. However, surveys indicate that men prefer pill-based formulations. Oral dimethandrolone undecanoate (DMAU) binds to progesterone and androgen receptors, effectively suppressing serum gonadotropins, with reportedly tolerable side effects. As oral DMAU is a promising MHC pill candidate, we evaluated participant satisfaction with and willingness to use an oral regimen for primary contraception in a 28-day clinical trial setting.

Methods: In a double-blind, randomized, placebo-controlled trial of a 28-day regimen of daily oral DMAU at two academic medical centers, healthy male volunteers completed a questionnaire to assess their experience and contraceptive satisfaction.

Results: Of 100 randomized participants, 84 completed the questionnaire (27 placebo, 57 DMAU). Few men (2%) reported dissatisfaction with their previous contraceptive method(s), yet more than half (55%) reported willingness to use oral DMAU for primary contraception if commercially available. Overall, 80% reported satisfaction with the regimen, with satisfaction linked to receiving active DMAU versus placebo (67% placebo, 87% DMAU; $p=.04$). While only 5% were dissatisfied with active DMAU; 82% of participants receiving active DMAU would recommend it. Of note, both DMAU and placebo were taken following a high-fat meal ($>25-30g$); most men in both groups reported no difficulty with dietary adherence and timing of food and drug administration ($<30min$).

Conclusions: The majority of participants in this 28-day randomized, placebo-controlled trial of a daily MHC pill regimen were satisfied with its delivery requirements and indicated high usability. Oral DMAU is a potentially convenient, acceptable MHC pill.

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P60

ACCESS TO MEN'S SEXUAL AND REPRODUCTIVE HEALTH SERVICES: A SURVEY OF FAMILY PLANNING SERVICE PROVIDERS IN CALIFORNIA

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Objectives: California's Family Planning, Access, Care, and Treatment (FPACT) program provides low-income men with coverage for contraceptive counseling, condoms, vasectomy, and STD testing/treatment. Gender-based disparities in the uptake of sexual and reproductive health (SRH) services may thus be related to the lack of men's providers, rather than men's inability to afford or unwillingness to use services. This study explored the availability of men's SRH services in California.

Methods: We conducted telephone surveys with a random sample of 150 FPACT-registered clinics/providers who cared for at least 15 male patients in 2016, as identified by California's Department of Health Care Services. Survey items queried provision of 20 SRH services for men. Surveys were also administered to California PP affiliates. SRH service provision was compared for FPACT versus PP providers and urban versus rural settings, using chi-square tests of association.

Results: More than half (53%, n=77/144) of sampled FPACT providers and PP clinics (58%, n=62/107) completed surveys. Services offered most widely across SRH providers were gonorrhea/chlamydia (98%) and HIV/syphilis (98%) screening; vasectomy (5%) and emergency contraception (42%) were provided least widely across sites. PP providers were more likely than FPACT providers to test men for HIV/syphilis and trichomonas, vaccinate against HPV, counsel about condoms, screen for intimate partner violence, and perform penile/testicular exams ($p<.05$). No service-related differences were identified between urban and rural sites.

Conclusions: Men's SRH services are more likely to be provided by PP rather than FPACT providers. However, vasectomy is the least widely provided service across all sites, which may explain its comparative underutilization.

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P61

A MIXED-METHODS EXPLORATION OF WOMEN'S PREFERENCES REGARDING FORMAT AND LOCATION OF CONTRACEPTIVE EDUCATION

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Objectives: This study explored women's preferences for contraceptive education to inform the development of a contraceptive education tool.

Methods: We administered quantitative, written surveys and conducted in-depth interviews with women aged 16–29 to explore preferences regarding receipt of contraceptive information. In-depth interviews also solicited feedback on existing educational tools. We used grounded theory to identify common themes from qualitative interviews.

Results: A total of 300 women completed surveys, of which 43 completed in-depth interviews. Women most commonly preferred receiving contraceptive information in person from health-care providers (87%), in person from health center staff (46%), brochures or handouts (37%), or a self-directed Internet search (35%). Women most preferred to receive contraception information directly from a health-care provider at a health-care visit (82%), in the exam room (67%), at home (63%), or in a waiting room (42%).

Qualitative themes identified included preference for online educational tools, presentation of information about contraceptive methods in order of effectiveness, and personalization of information to the individual. Women described factors that increased the trustworthiness of sources including provider recommendation, evidence-based information, and experiences of individuals with perceived similarities. The experience and expertise of providers was identified as important in lending credibility to a tool. Participants felt most comfortable accessing an educational tool in the exam room or at home.

Conclusions: Women's preferences for an online format for contraceptive education, presentation of methods in order of effectiveness, and use in a private location should be incorporated into the development of future contraceptive education tools.

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P62

DESIGNING A MASCULINITY-DRIVEN INTERVENTION TO INCREASE MALE ACCEPTANCE OF FAMILY PLANNING IN WESTERN KENYA

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Objectives: Male resistance to family planning (FP) is an important contributor to unmet need for contraception and can be driven by traditional masculine norms. Few FP interventions have addressed these norms to improve contraceptive use. Based on our extensive formative research of masculine norms among men in Western Kenya, we developed a masculinities-grounded intervention to increase men's FP acceptance.

Methods: We implemented a community-based intervention using small-group workshops with men to provide FP education and guide critical discussions about gender norms and FP, and community dialogues to increase social network support for male FP involvement. We evaluated the intervention in a mixed-method, quasi-experimental study in Kisumu County, Kenya, among 150 men and their female partners.

Results: We witnessed high levels of participation in the intervention. Anecdotal data show that the intervention resonated strongly with male participants; they appreciated the unusual opportunity to talk (and be heard) about their experiences as men and were enthusiastic about information on FP and anatomy. Community reactions to the dialogues were positive. Many asked that the intervention be offered to their female partners and communities, reaffirming the significance of the relational nature of gender.

Conclusions: Using formative research and theory to guide our work improved the acceptability of our approach and enabled us to identify hypothesized norms and conceptual pathways to guide our evaluation of intervention effectiveness. FP interventions should explore how to scale gender transformative approaches in work with couples and communities.

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P63

INTRAUTERINE DEVICE PERFORATION, MIGRATION, AND ORGAN INJURY: A SYSTEMATIC REVIEW OF 196 CASE REPORTS

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Objectives: To describe the presenting symptoms, diagnostic methodology, management, and outcomes following intrauterine device (IUD) perforation and organ injury.

Methods: Systematic review of case reports published in English up to September 19, 2017.

Results: After careful screening, 196 reports (describing 232 patients) met inclusion criteria. There were 12 different intrauterine device types reported, of which the copper intrauterine device was

cited most frequently. Sites of perforation were bladder (63 cases), bowel (98 cases), and female reproductive tract (70 cases).

For cases of bladder perforation, dysuria (46%) and urinary frequency (41%) were the most common symptoms. For cases of bowel and reproductive tract perforation, abdominal pain (51% and 37%) and no complaints (19% and 29%) were the most common presentation.

Only 8% of bladder perforation cases were managed with laparotomy, as compared to 47% and 40% for bowel and reproductive tract perforation cases, respectively. To assess whether the high laparotomy rate was merely an artifact of time, we did a sub-analysis and looked exclusively at cases in the current decade (starting in 2010). For cases of bowel perforation in which the report was published in the current decade, there were 28 patients in total, and the laparotomy rate was 25%. Overall, 93% of the patients made a full recovery with no short-term complications.

Conclusions: When IUD perforation occurs, the symptom pattern and need for laparotomy varies by the site of organ injury. Overall, most make a complete recovery without short-term complications.

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P64

THE PHASE 2 VERACEPT™ INTRAUTERINE CONTRACEPTIVE TRIAL: 36-MONTH EFFICACY, SAFETY, AND TOLERABILITY OUTCOMES

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Objectives: This study was designed to assess the efficacy, safety, and tolerability of a new, low-dose copper (175mm²) intrauterine contraceptive with a flexible nitinol frame, provided preloaded in an inserter.

Methods: Inclusion and exclusion criteria conformed to the US MEC for a copper-based IUD. Eligible subjects included parous and nulliparous women who had IUD placement on any day in the menstrual cycle after assurance that the participant was not pregnant. We used the Pearl Index to calculate the primary outcome of efficacy. Secondary outcomes included safety assessed through frequency of adverse events, placement success, pain at insertion assessed by a Likert scale of 0–4, expulsion, and continuation. We followed participants for up to 36 months.

Results: A total of 286 women in 12 U.S. centers provided 6883 cycles evaluable for pregnancy. Average subject age at enrollment was 27.1 years. Nulliparous women made up 60.8% of subjects. We identified two pregnancies (one intrauterine, one ectopic) over 36 months of observation (Pearl Index=0.73; 95% CI: 0.09–2.65) and 10 serious adverse events; none was study related. Placement was successful in 283 subjects (98.9%) with a mean insertion pain score of 1.44. There were four expulsions (1.4%) over 3 years of use, one report of PID, and no uterine perforations. Among participants, 107 continued to 36 months and 48 (16.8%) reported an adverse event as their reason for discontinuation prior to 36 months of use.

Conclusions: This novel, low-dose copper contraceptive demonstrated promising safety and efficacy outcomes. A U.S. Phase 3 multi-center study is underway.

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P65

STRENGTHENING THE EVIDENCE OF LAY HEALTH WORKER PROVISION OF INJECTABLE CONTRACEPTION: A RANDOMIZED CONTROLLED TRIAL IN PAKISTAN

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Objectives: The World Health Organization (WHO) supports the administration of injectable contraceptives by lay health workers with targeted monitoring and evaluation (M&E). WHO requires strong evidence to consider withdrawal of the recommendation for targeted M&E. To strengthen the evidence for lay health worker provision of injectable contraceptives, we conducted the first randomized controlled trial (RCT) to compare lay with clinically trained health workers.

Methods: We randomized 271 clients in urban Karachi and 94 in rural Thatta district to be screened and counseled for Depo Provera (DMPA) use by clinically trained Family Welfare Workers (FWWs) or their lay counterparts, Lady Health Workers (LHWs). Research staff observed appropriateness of screening and counseling, while a facility nurse, blinded to provider type, verified DMPA eligibility. We tested the non-inferiority hypothesis that LHWs can screen and counsel clients for DMPA initiation as well as FWWs.

Results: Sensitivity tests revealed that urban and rural providers were dissimilar and should not be pooled. Therefore, non-inferiority tests were conducted with urban data only, with rural data restricted to descriptive analysis. The results showed that LHWs did not screen new DMPA clients as well as FWWs in Karachi (77% vs. 88%), but both provider types performed equally poorly on counseling clients. However, the proportions of rural LHWs and FWWs observed to screen and counsel new DMPA clients appropriately were much higher than those of both types of urban providers.

Conclusions: Dissimilar findings from urban and rural sites suggest that the service delivery context may be an important factor in DMPA provision.

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P66

DOES THE ASSOCIATION BETWEEN DEPRESSION AND CONTRACEPTIVE DISCONTINUATION VARY BY METHOD INITIATED AND TIME SINCE INITIATION?

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Objectives: This study examined whether the association between depression and discontinuation varied by the type of contraceptive initiated.

Methods: We used health records from 51,435 women aged 19–29 who initiated prescribed contraceptives at Kaiser Permanente Northern California in 2014–2016. We followed women from the first dispensed date of pills, patch, or ring, insertion of LARC, or administration of shot until the prescription end date, removal date, missed 3-month administration, or a year, whichever came first. Depression was determined by documented diagnosis or dispensed

antidepressant in the prior year. For LARC, we used Cox Proportional Hazard models to examine the association between depression and discontinuation; and for all other methods, we used multinomial logistic regressions to examine the association between depression and discontinuation within 3 months and at 3–6, 6–9, and 9–12 months after initiation compared with not discontinuing, adjusting for age, race/ethnicity, income, and recent abortion and childbirth.

Results: For women who initiated LARC, depression was associated with increased risk of discontinuing over the year [AHR=1.20; 95% CI: 1.07–1.35]. For women who initiated pills, depression was associated with discontinuing within 3 months [AOR=1.46; 95% CI: 1.32–1.61] and at 3–6 months [AOR=1.48; 95% CI: 1.31–1.66], 6–9 months [AOR=1.39; 95% CI: 1.22–1.58], and 9–12 months [AOR=1.23; 95% CI: 1.06–1.43]. For women who initiated patch, ring, or shot, depression was not significantly associated with discontinuation ($p>.05$).

Conclusions: Results suggest that the association between depression and discontinuation varies by method type. Clinical implications will be discussed.

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P67

MEN'S ACCESS TO EMERGENCY CONTRACEPTION: A SURVEY OF PHARMACIES IN LOS ANGELES COUNTY, CA, USA

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Objectives: Over-the-counter levonorgestrel emergency contraception (OTC EC) is safe and effective, but is underutilized for postcoital pregnancy prevention. Men's purchase of EC is underrecognized and gender-based access barriers may exist. This study examined the persistence of gender bias and characterized barriers faced by men attempting to obtain OTC EC.

Methods: We conducted a cross-sectional survey of 100 registered community pharmacies (California State Board of Pharmacy), randomly chosen from the regions with the highest unintended pregnancy rates in Los Angeles County. The survey was adapted from the 2017 ASEC EC Access & Price Survey and administered in person to pharmacy staff to assess EC knowledge, attitudes, and experience, with attention to men's EC access.

Results: We surveyed 139 staff members (45% pharmacists, 20% technicians, 26% retail) from 93 pharmacies accessible to the public. Ten pharmacies did not stock EC. Age restrictions were cited by half of respondents; gender-based restrictions were reported by nearly 10%. More than 75% of respondents had been asked for EC by a man; 7% had refused to sell to a man. About 30% reported that men frequently purchased EC; pharmacists were more likely than technicians or retail staff to believe men rarely purchased EC ($p=.01$). The most frequently cited concern about selling to men was inability to confirm the female partner's age.

Conclusions: While gender-based restrictions on sale of EC are rare, age-based restrictions continue to be reported by more than half of pharmacy staff. Inability to verify the female partner's age may underlie cases where men are unable to purchase OTC EC.

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P68

SIX-MONTH ULTRASOUND ASSESSMENT OF COPPER IUDS INSERTED DURING CESAREAN DELIVERY

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Objectives: We assessed the proportion of correctly positioned, malpositioned, partially expelled, and expelled copper IUDs by 6 months postpartum after insertion during cesarean delivery.

Methods: This prospective, observational study of subjects who received a postplacental TCu380A IUD at cesarean delivery beyond 33 weeks' gestation utilized pelvic ultrasound to assess IUD location. The primary outcome was the proportion of correctly positioned IUDs at 6 months postpartum. We calculated the sensitivity and specificity of the 6-week postpartum string check to predict IUD position.

Results: Of 111 subjects, 69 (62.2%) completed the 6-month ultrasound. Forty-one IUDs (59.4% [95% CI, 46.9%–71.1%]) were correctly positioned, 21 (30.4% [95% CI, 19.1%–42.7%]) were malpositioned (rotated, inverted, or not at the fundus), 3 (4.3% [95% CI, 0.9%–12.2%]) were partially expelled (IUD below internal os), and 2 (2.9% [95% CI, 0.4%–10.1%]) were completely expelled. Due to loss of insurance coverage and need for additional appointments for removal, 12 of 21 (57.4%) subjects continued using a malpositioned IUD. At 6 weeks postpartum, 68 of 88 (77.3%) had missing IUD strings on pelvic exam. The absence of IUD strings had 81.5% sensitivity and 18.9% specificity to indicate an incorrectly positioned IUD. Of 64 subjects who completed a satisfaction survey at 6 months postpartum, 50 (78.1% [95% CI, 66.0%–87.5%]) were happy or extremely happy with their IUD.

Conclusions: Nearly one-third of postplacental copper IUDs placed during cesarean delivery were malpositioned. IUD string checks were not predictive of correct IUD position in our population. The clinical significance of non-fundal copper IUDs is unknown but merits further research.

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P69

EFFECT OF THE CONTRACEPTIVE RING ON BACTERIAL VAGINOSIS AMONG WOMEN AT HIGH RISK FOR RECURRENCE: A PROSPECTIVE COHORT STUDY

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Objectives: We sought to assess the incidence of bacterial vaginosis (BV) and vulvovaginal candidiasis (VVC) among women with a history of BV initiating the ethinyl estradiol and etonogestrel contraceptive vaginal ring (CVR).

Methods: Premenopausal women with a history of BV within the past year were enrolled and treated for BV if positive by Amsel criteria. After 2 monthly assessments, they initiated the CVR and were followed monthly for 4 months with saline microscopy. We

used logistic regression models with mixed effects and robust standard errors to compare the proportion of women with BV at 1 month (immediate post-CVR) and 2–4 months (sustained post-CVR) relative to the pre-CVR visits.

Results: Eighty-one women (median age, 28 years) were enrolled and 57 initiated the CVR. BV was diagnosed at 13.2% of the pre-CVR visits, 10.7% of the immediate post-CVR visits, and 2.6% of the sustained post-CVR visits. In a mixed model adjusted for age and unprotected intercourse, we observed a significant decrease in BV over the sustained post-CVR visits (OR 0.10; 95% CI: 0.03–0.40, $p=.001$). The proportion of women with VVC increased from 4.4% pre-CVR to 12.6% during sustained post-CVR visits ($p=.03$).

Conclusions: Use of the CVR may reduce the incidence of BV among women at high risk of BV recurrence; a concomitant increase in VVC may occur. BV is associated with an elevated risk for HIV acquisition and upper genital tract infection; thus, these findings have important implications for enhancing reproductive health for women.

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P70

POSTPARTUM CONTRACEPTION: A LOOK AT POSTPARTUM LONG-ACTING REVERSIBLE CONTRACEPTIVE (LARC) USE AND REPEAT PREGNANCY

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Objectives: Long-acting reversible methods of contraception (LARC), despite their safety and efficacy, are not the mainstay postpartum contraceptive. The study investigated how many women received LARC 3–60 days postpartum and how many LARC users had a repeat pregnancy compared with users of other contraceptives.

Methods: Records from a large integrated health system were retrieved for women aged 18–44 who delivered a singleton baby and continued care for 3 years. Current procedural terminology (CPT), and international classification for disease (ICD 9 and 10) were utilized to code for pregnancy, contraceptive use, and sterilization. Crude and multi-variable analyses were conducted by logistic regression. Only IUD and implants were considered LARC. Other contraceptives included pills, ring, patch, and depo shot.

Results: Of 122,277 patients, only 13.2% were contraceptive users at 3–60 days postpartum. Overall, 7% had a LARC, while 6.1% had another type of contraceptive.

At 1 year after the index birth, 1.6% of LARC users and 6% of other contraceptive users had a repeat pregnancy. At 18 months, there were 3.9% and 13.7% repeat pregnancies, while at 3 years, there were 14.4% and 33%, respectively.

After adjusting for age, race, education and parity, LARC users had 74% lower odds of pregnancy within 1 year and 62% lower odds of pregnancy within 3 years than women who used other contraceptives.

Conclusions: The study showed that LARC uptake postpartum may be correlated with a decrease in repeat pregnancy. Therefore, more effort should be made to increase contraceptive use during the postpartum period.

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P71

CONTRACEPTIVE USE IN SCHOOL-BASED HEALTH CENTERS: A CHART REVIEW

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Objectives: To describe contraceptive usage among sexually active female adolescents accessing school-based health centers (SBHCs). To assess emergency contraceptive (EC) use and initiation and continuation of non-emergent contraception (NEC) after use of EC.

Methods: We performed a retrospective chart review of all female patients accessing care in three SBHCs in New York City. Patients who identified themselves as sexually active were included in the study. The chart was queried for the following: demographic factors, health and sexual history, contraceptive history and contraceptive provided. Patients accessing EC were assessed for initiation and, when possible, continuation of NEC.

Results: A total of 900 sexually active female students were seen in the study time frame. Mean age at first visit was 16.3 years (SD, 1.2 years). The majority (91.8%) of students had Medicaid coverage. The study population was diverse, with 22.7% identifying as Black, 11.8% White, 2.0% Asian, and 52.6% other; 51.9% of participants were Hispanic or Latina. The most commonly used primary forms of contraception were condoms at 33.1% and EC at 29.0%; 11% used no contraceptive. Of EC users, 55.8% initiated NEC at their EC visit. The most commonly initiated NEC method was OCPs (51.1%), followed by depot-medroxyprogesterone (21.3%). Of those initiating NEC, 63.5% were confirmed to continue NEC.

Conclusions: Adolescents primarily use less effective contraceptives, in the form of condoms and EC. At the time of SBHC visits for EC, NEC methods are effectively initiated and continued. EC visits are an opportunity for patient education and promotion of NEC.

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P72

PHARMACY IMPLEMENTATION OF A NEW LAW ALLOWING YEAR-LONG HORMONAL CONTRACEPTIVE SUPPLIES

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Objectives: To assess pharmacist awareness and implementation of a 2017 California law (SB-999, Chap 499, 2016) requiring insurance coverage of a year-long supply of prescription birth control when dispensed from pharmacies on patient's request.

Methods: From 7/2017 through 11/2017, a random selection of 600 community pharmacies were called requesting a pharmacist ($n=532$, 88.7% response) and asked if they had heard of the new law and perceived obstacles to dispensing year-long supplies. Pharmacies were randomized to three groups and asked if they would dispense year-long supplies to cash-paying, privately or publicly insured patients. Using multivariate analysis, ORs were calculated comparing perceived obstacles impeding dispensation of year-long supplies by insurance type.

Results: Most pharmacists responded that they would dispense 12-month supplies to cash-paying patients, regardless of knowledge of the new law (70% of “knew”, 81% of “did not know”, $p=.1046$). The top two perceived obstacles were insurance compensation (55.8%) and store policy (13.4%). When insurance was the obstacle, pharmacists were 6.2 and 10.1 times as likely to dispense to cash-paying clients as to privately and publicly insured clients, respectively. When store policy was the obstacle, pharmacists were 2.8 and 4.4 times as likely to dispense to cash-paying clients as to privately and publicly insured clients, respectively.

Conclusions: Despite enactment of a new law requiring insurance coverage of a year-long supply of prescription birth control over 6 months before the study, most pharmacists were unaware of it, and of those who were aware, the majority did not clearly understand it. Compliance among insurance plans is unknown. There was no implementation plan or awareness campaign for the new law.

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P73

A COMPARISON OF CONTRACEPTIVE KNOWLEDGE AMONG FEMALES AND MALES RECEIVING MEDICATION TREATMENT FOR OPIOID USE DISORDER OR PRIMARY CARE SERVICES

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Objectives: Approximately 40% of U.S. adults currently receiving medication treatment for opioid use disorder (OUD) are of reproductive age (18–45 years old). The rate of unintended pregnancy among women receiving medication treatment is disproportionately high compared to the general population (~80% vs. 45%, respectively). Fewer than half of women receiving medication treatment for OUD who do not want to get pregnant report any contraceptive use. Lack of knowledge about family planning may be contributing to low rates of contraceptive use in this population.

Methods: Participants were convenience samples of reproductive-aged women and men receiving medication treatment for OUD or primary care services. Knowledge was assessed with the recently validated Contraceptive Knowledge Assessment (CKA), a self-administered 25-question multiple-choice survey. The total number of correct responses for each participant was calculated to identify the mean percentage of correct answers.

Results: Female patients ($n=169$) answered 56% ($SD=18\%$) of CKA questions correctly, compared with 44% ($SD=15\%$) for male patients ($n=163$), $p<.0001$. Patients enrolled in medication treatment ($n=167$) answered 47% ($SD=16\%$) correctly, compared with 53% ($SD=18\%$) for primary care patients ($n=165$), $p<.001$. The interaction effect between patient sample and sex was not significant.

Conclusions: Patients enrolled in medication treatment for OUD had significantly less knowledge about family planning, although the low overall mean of correct responses suggests all participants would benefit from increased knowledge about family planning. Individuals with OUD may encounter additional obstacles to obtaining family planning services and utilizing contraceptives. More research is necessary to better understand how to affect behavioral change around family planning for individuals with OUD.

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P74

THE DELAWARE INITIATIVE TO REDUCE UNINTENDED PREGNANCY: IMPLEMENTATION FINDINGS AND RECOMMENDATIONS

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Objectives: In 2015, Delaware launched a groundbreaking statewide initiative to reduce unintended pregnancy. Primary care providers were trained to ask patients about pregnancy intentions and offer same-day provision of contraceptive care, including long-acting reversible contraceptive (LARC) methods (IUDs and implants). Communities across the country are awaiting recommendations from this project to guide implementation of future initiatives to increase access to contraceptive care.

Methods: As part of a larger process evaluation, we conducted qualitative interviews with administrators from 26 practice settings across the state. Interviews were designed to learn about implementation experiences, barriers, and successes in order to inform implementation of similar interventions in other communities. We used grounded theory techniques to code the data in three waves.

Results: Overall, most practices perceived an increased use of LARCs by female patients. Many practices had to adapt the intervention to fit the needs and constraints of their settings and patient populations. Greater barriers were experienced by smaller practices, primary care practices, and practices that served large numbers of adolescents. The most common challenges faced by practices trying to provide same-day LARC insertions were preceptorship to prepare clinicians to perform the procedures independently, billing and inventory control, and adjustments to workflow procedures.

Conclusions: This initiative incentivized culture change within clinical practices. However, significant flexibility and responsiveness to context were necessary for successful implementation across varied practice settings. Specific lessons learned, and recommendations regarding increasing access to contraceptive care in primary care settings, will be discussed.

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P75

IMPROVING AWARENESS OF CONTRACEPTIVE METHODS AMONG COMMUNITY COLLEGE STUDENTS OF DIFFERING SEXUAL ORIENTATIONS

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Objectives: Community college students, comprising more than one-third of U.S. undergraduates, have low contraceptive knowledge. Effective interventions are needed to educate youth on the full range of methods in a manner that is inclusive of sexual minorities. We examined the impact of an educational intervention on awareness of available contraceptives among community college students of diverse sexual identities, an essential first step toward reproductive agency.

Methods: We developed an educational intervention featuring youth-friendly visual tools and tested its impact on awareness of

contraceptive methods among 1051 students aged 18–25 years at five community colleges, including 14% who identified as LGBTQ. We used generalized estimating equations (GEE) to test changes in knowledge of the full range of methods, including male and female condoms, the pill, patch, vaginal ring, shot, intrauterine devices (IUDs), the implant, and emergency contraceptive pills.

Results: Although most students were aware of male condoms and the pill at baseline, few had heard of other options. Awareness of the full range of methods increased from 31% to 55% (adjusted odds ratio [aOR]: 3.09 [95% CI: 2.63, 3.63]) among female students and from 11% to 36% (aOR: 4.917 [95% CI: 3.75, 6.45]) among male students following the intervention. The intervention was equally effective in increasing contraceptive knowledge for youth of all sexual identities.

Conclusions: This simple educational intervention significantly improved all students' knowledge of a comprehensive method mix, and also revealed that students benefit from ongoing education to ensure they have the knowledge to adopt a method that best suits their needs.

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P76

TO WHAT EXTENT IS OVERALL CONTRACEPTIVE SATISFACTION CORRELATED WITH METHOD-RELATED SEXUAL EFFECTS? RESULTS FROM THE HER SALT LAKE INITIATIVE

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Objectives: Contraceptive sexual acceptability may be a key but under-examined contributor to contraceptive satisfaction.

Methods: Analyses leverage data from HER Salt Lake, a prospective cohort study of patients who received contraceptive methods of their choice at no cost. At 1, 3, and 6 months after enrollment, participants reported level of satisfaction with current method, bleeding changes and side effects, and a five-point scale of perceived sexual changes due to method in the last month (with responses ranging from “improved my sex life a lot” to “made my sex life a lot worse”). Longitudinal regression examined associations between contraceptive satisfaction and perceived sexual impacts while controlling for covariates (method selected, bleeding changes and side effects, and current health status) and socio-demographic controls.

Results: Analyses included 3613 individuals who selected one of six long- or short-acting methods at baseline. Over 6 months of use, overall contraceptive satisfaction differed significantly by perceived sexual changes due to method (χ^2 $p < .001$) across methods. For example, at 1 month, among individuals completely satisfied with their method, 31% perceived a method-related sexual improvement in the last month, compared with only 3% of people completely dissatisfied with their method. In multivariate models out to 6 months, people who perceived a strongly negative sexual impact had a correlation coefficient of -0.31 ($p < .001$) with reported method satisfaction. Those who perceived a strongly positive sexual impact had a 1.42 correlation coefficient ($p < .001$), when adjustments were made for covariates and controls.

Conclusions: People's sexual experiences with their methods constitute a major part of method satisfaction.

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P77

CONTRACEPTIVE STRATEGIES USED IN THE 4 WEEKS BEFORE AND AFTER NEW CONTRACEPTIVE VISITS IN HER SALT LAKE'S TITLE X CLINICS

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Objectives: This study describes the contraceptive strategies used 4 weeks prior to a new contraceptive visit at a Title X clinic and compares relative typical-use efficacy change between the HER Salt Lake Contraceptive Initiatives' standard of care (control) and the removal of cost (intervention).

Methods: We examine data from the HER Salt Lake contraceptive initiative, including demographics, recent contraceptive strategies, and method selected at baseline. We identify pre- and post-visit contraceptive strategies and relate sociodemographic characteristics to shifts in efficacy using multinomial regression. We also assess changes in typical-use efficacy increases between pre- and post-visit methods.

Results: Of a total of 3727 clients, 78% chose a new method with increased efficacy, 19% selected a method with similar efficacy, and 3% selected methods with lower efficacy. Clients with higher education were less likely to have shifts in efficacy; however, those actively dating (aRR 2.5; 95% CI 1.6–3.8) and those receiving no-cost care during the intervention (aRR 6.7; 95% CI 5.28–8.53) had an increased likelihood of shifting to more efficacious methods. Title X clinic visits in this cohort were associated with a 26% average efficacy increase. Removal of costs resulted in an additional 11% efficacy increase (17% during control vs. 28% during intervention).

Conclusions: Title X helps people obtain access to effective contraceptives. Removing cost was associated with an additional increase in efficacy from strategies used in the previous 4 weeks.

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P78

DOES THE IMPACT OF MOTHERHOOD ON WOMEN'S EMPLOYMENT AND WAGES DIFFER FOR WOMEN WHO PLAN THEIR TRANSITION INTO MOTHERHOOD?

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Objectives: Women's employment and wages decline substantially once they transition to motherhood, with some evidence suggesting that white women experience larger declines than black women. About a third of births are unplanned, and it is unknown whether the effect of motherhood on employment, hours worked or wages is smaller for women who planned their transition into motherhood than for those who did not.

Methods: To explore this, we examine fixed-effects models to estimate the association of unplanned birth with employment, hours worked, and wages, each using panel data from the National Longitudinal Survey of Youth 1979–2014. We also examine differences by race.

Results: Among white women, those who plan their transition into motherhood experience a significantly larger decline in their likelihood of being employed than do those who report that their first birth was not planned, after statistically adjustment for background characteristics. Among those who remain employed, those with planned births work fewer hours and have lower wages than those with unplanned births. The association between motherhood and women's labor market outcomes does not significantly differ by planning status among black women.

Conclusions: In order to reduce the negative impact of childrearing on women's labor market outcomes, we suspect that access to family planning needs to be complemented with larger structural changes. This evidence can inform policymakers as efforts are formulated to ensure that women have the tools to fulfill their fertility and professional goals.

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P79

A NOVEL, THEORY-DRIVEN CONTRACEPTIVE DECISION TOOL FOR WOMEN WITH MEDICAL CONDITIONS: A MIXED-METHODS APPROACH TO INTERVENTION DESIGN

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Objectives: This study was undertaken to design a contraceptive decision tool tailored to meet the unique needs of people with medical conditions and implementation in community-based primary care clinics.

Methods: Using a mixed-methods study design, we collected quantitative (surveys) and qualitative data (in-depth interviews, field observations) in six primary care clinics (n=30 patients, n=33 providers/staff). The surveys and interview guides were informed by the Health Behavior Theory and a reproductive justice framework (patient-level), the Theoretical Domains Framework (provider-level), and the Consolidated Framework for Implementation Research (practice-level). Triangulation of qualitative and quantitative data was conducted to identify critical features and content for a contraceptive decision tool.

Results: Participants reported medical conditions including but not limited to depression (83%), migraines (43%), hypertension (27%), and diabetes (17%). Patients' contraceptive concerns were more similar among those with shared perceptions of their overall health (reported as very good, good, poor, or fair) than by those with shared medical diagnoses. Patients preferred a contraceptive decision tool that could be accessed through a smartphone or a home device *prior* to a clinical visit to allow time to synthesize information. Providers who were unaware of the U.S. Medical Eligibility Criteria (US MEC) were the least familiar with evidence-based contraceptive recommendations related to various medical conditions.

Conclusions: This theory-driven, mixed-methods analysis identified the need for the contraceptive decision tool to be accessible via mobile and web-based platforms, address patients' contraceptive concerns related to their overall health in addition to condition-specific concerns, and integrate clinical decision support from the US MEC to address provider knowledge gaps.

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P80

"HERE'S YOUR OPTIONS; ABSTINENCE, CONDOM, DIAPHRAGM, THAT'S IT.": A MIXED METHODS STUDY OF PATIENT AND HEALTH CARE PROVIDER PERSPECTIVES REGARDING CONTRACEPTION FOR YOUNG PEOPLE WITH BREAST CANCER

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Objectives: This study sought to describe the perspectives of pre-menopausal people with breast cancer and their health care providers regarding contraceptive use in the setting of breast cancer.

Methods: Using a mixed methods study design, we simultaneously collected quantitative (survey) and qualitative data (in-depth interviews) of pre-menopausal, English-speaking patients aged 18–45 who had been diagnosed with breast cancer within the last 5 years and an interprofessional group of health care providers at an academic institution in the Midwest. We purposefully sampled patients for variations in breast cancer hormone receptor status and providers for variation in professional training until theoretical saturation was achieved. A mixed methods analysis was performed by comparing qualitative and quantitative strands of data and triangulation by data source (patient, provider).

Results: Health care providers (n=30) included medical oncologists (48%), primary care providers (26%), obstetrician/gynecologists (16%), surgical oncologists (7%) and others (3%). Half of patients (7 of 14) had "triple negative" hormone receptor breast cancer. Key mixed methods findings were: 1) general consensus among providers and patients that the copper IUD is safe to use; 2) significant variation in patient and provider perceptions regarding the safety of the levonorgestrel IUD, regardless of hormone receptor status or years since cancer diagnosis; and 3) patients' frustrations that they were "only allowed" to use a few contraceptive methods that they perceived as suboptimal or impractical.

Conclusions: There is a need for improved contraceptive counseling and shared decision making in the setting of breast cancer, particularly regarding the levonorgestrel IUD and coitus-dependent methods.

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P81

LOSS OF TITLE X FUNDING AND CHANGES IN CONFIDENTIAL HEALTH SERVICES FOR MINOR TEENS AT FAMILY PLANNING ORGANIZATIONS IN TEXAS

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Objectives: Between 2011 and 2013, the Texas legislature enacted policies that excluded many family planning organizations from the state's Title X network. We explore subsequent changes in the provision of confidential reproductive health services for minor teens and Texas's requirements for parental consent.

Methods: Between February 2012 and February 2015, we conducted three waves of in-depth interviews with program administrators at 57 publicly funded family planning organizations in Texas about changes in

service delivery, including services available to teens and protocols for documenting parental consent. We conducted a thematic analysis of transcripts related to the provision of services to minor teens.

Results: Of the 42 organizations that received Title X before 2013, 29 (69%) lost program funding during the study period. Respondents at these organizations frequently reported a decrease in teen clients, and many believed the loss of confidential services deterred teens from seeking care. At the majority of non-Title X sites, uninsured teens could receive screening and treatment for sexually transmitted infections, pregnancy testing, and contraceptive counseling without parental consent, but some organizations required parental consent for all services; all organizations provided confidential services to minors enrolled in Medicaid. Most organizations required a parent to provide in-person, written consent for contraceptive services, but some allowed teens to return a signed form without a parent being present.

Conclusions: Loss of Title X funding decreased access to family planning services for minor teens, resulting in inconsistent care across and within organizations. Organizations' experiences in Texas foreshadow what might occur nationally if the new Title X regulations are implemented.

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P82

OBSTETRICIAN-GYNECOLOGISTS' ATTITUDES AND EXPERIENCES SURROUNDING THE MEDICAID STERILIZATION CONSENT FORM

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Objectives: Prior research has identified the lack of a valid Medicaid consent form as a reason for non-fulfillment of desired postpartum sterilization. While patient attitudes and experiences with this form and process have been previously studied, the experiences of physicians have not been reported. We sought to better understand the attitudes of obstetrician-gynecologists nationwide regarding postpartum sterilization in the Medicaid population.

Methods: We conducted semi-structured, qualitative in-depth interviews with 30 obstetrician-gynecologists practicing in 10 states. Physicians were recruited from the publicly available database of Fellows of the American College of Obstetricians and Gynecologists. Interviews were conducted via telephone using an interview guide that focused on physician attitudes, beliefs, and experiences with the Medicaid sterilization consent form. Interviews were transcribed, coded, and analyzed using principles of grounded theory.

Results: Physicians largely had negative attitudes toward the Medicaid sterilization form related to the lack of clarity in the form's terminology, lack of benefit of improving informed consent, redundancy with standard clinical practice, and its discriminatory nature. While physicians were aware of the history and purpose of the form, in general they felt the form served as a barrier to the very population it was designed to protect. There was variability about the perceived utility of the required waiting period. Physicians disclosed diverse practice strategies when a patient desired sterilization without a valid consent form.

Conclusions: In our study, physicians generally viewed the Medicaid sterilization consent form as a barrier to patient care and utilized strategies to facilitate low-income women's access to desired postpartum sterilization.

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P83

HORMONAL CONTRACEPTIVE USE AMONG POSTPARTUM WOMEN IN TEXAS

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Objectives: Hormonal methods are often the first used for contraception after delivery. We assess continuation of hormonal methods among postpartum women, characteristics associated with discontinuation, and subsequent contraceptive use.

Methods: We use a cohort study of low-income women who delivered in eight Texas hospitals and wanted to delay childbearing for at least 2 years. Using life tables and Cox proportional hazard models, we analyze contraceptive continuation and associated predictors among women who use the pill, patch, ring, or injectable as their first method postpartum (n=410). We describe reasons for discontinuation and subsequent method use.

Results: Most (77%) women initiated their first hormonal method within 6 weeks postpartum. Three months after initiation, 33% discontinued (95% CI, 0.28–0.37). After 6 and 12 months, 60% and 74% discontinued, respectively (95% CI, 0.56–0.65; 95% CI, 0.70–0.78). Differences by method type were not significant. After adjustment for sociodemographic characteristics, women who wanted to use LARC or a permanent method by 6 months postpartum were more likely to discontinue than those using their preferred method (HR, 1.57; 95% CI, 1.19–2.07). Among women who discontinued, 42% stopped due to method issues and 42% due to affordability or access. Subsequently, 48% used condoms, withdrawal, or natural methods, while 14% used LARC or permanent methods. Only 12% switched to their preferred method.

Conclusions: Hormonal contraceptive discontinuation is substantially higher among postpartum women in Texas than in nationally representative samples of reproductive-aged women. Providing postpartum women with their preferred method would likely decrease overall hormonal use, but substantially increase hormonal continuation.

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P84

EMERGENCY CONTRACEPTIVE USE AMONG WOMEN IN THE 2011–2017 NATIONAL SURVEY OF FAMILY GROWTH

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Objectives: Emergency contraception (EC) is an effective but underutilized method of preventing unintended pregnancy. Our primary objective was to identify correlates of oral EC use, including concurrent methods of contraception, in a national dataset. Secondary objectives were to assess reasons for EC use and means of obtaining and paying for EC.

Methods: We analyzed 2011–2017 data from the National Survey of Family Growth (NSFG). Our analysis included women who were at risk for unintended pregnancy (not pregnant or trying to conceive and no history of permanent contraception or sterilization) and had

ever been sexually active. We used weighted bivariate and multivariable analyses to determine correlates of lifetime and recent EC use and secondary EC outcomes.

Results: We analyzed data from 9243 women at risk for unintended pregnancy. More than one-quarter (26.5%) had ever used EC, including 4.7% within the previous year. EC use was associated with younger age, multiple partners, nulliparity, non-white race, and use of less-effective contraceptive methods. The majority of women (82.0%) had most recently purchased EC without a prescription, regardless of insurance status, including 90.3% of women who had used EC within the past 12 months. The most common reason for EC use was not using another contraceptive method (51.6%), followed by concern about method failure (40.6%).

Conclusions: Women who use less effective methods of contraception are more likely to use EC, but rates of recent EC use are low overall. The majority of women continue to pay for EC out of pocket regardless of insurance status.

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P85

MULTIPURPOSE PREVENTION TECHNOLOGY DEVELOPMENT PROGRESS OF A VAGINAL RING CONTAINING DAPIVIRINE AND LEVONORGESTREL FOR THE PREVENTION OF HIV AND UNINTENDED PREGNANCY

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Objectives: Multipurpose prevention technologies offer opportunities to simultaneously address the large unmet needs for both contraception and HIV prevention. IPM proposes the use of a vaginal ring system for the delivery of dapivirine, a locally active non-nucleoside reverse transcription inhibitor, and the progestin levonorgestrel to address these needs.

Methods: Formulation research for a 90-day vaginal ring containing dapivirine and levonorgestrel was conducted leading to selection of a silicone matrix-type vaginal ring prototype containing 200 mg dapivirine and 320 mg levonorgestrel for advancement. The lead prototype was manufactured in accordance with strict Good Manufacturing Practices for conducting non-clinical biocompatibility research and subsequent clinical testing. A Phase I clinical trial, MTN-030/IPM 041, was conducted through partnership with the Microbicides Trial Network, a division of NIH DAIDS, to evaluate the safety and pharmacokinetics of the vaginal ring over 14 days.

Results: Formulation research indicated that the 200 mg dapivirine and 320 mg levonorgestrel vaginal ring was most stable and achieved *in-vitro* release targets. The use of the ring in 12 participants in study MTN-030/IPM 041 was well tolerated and produced no product-related safety concerns. Pharmacokinetic data demonstrated that dapivirine and levonorgestrel achieve levels that have been associated with HIV prevention and contraceptive efficacy in other established vaginal products.

Conclusions: A vaginal ring containing dapivirine and levonorgestrel has been developed by IPM for the prevention of HIV and unintended pregnancy. The dapivirine and levonorgestrel ring was well tolerated and released therapeutic levels of both active pharmaceutical ingredients in a 14-day clinical study, supporting further clinical evaluation and development.

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P86

POSTPLACENTAL LEVONORGESTREL INTRAUTERINE SYSTEM INSERTION PROGRAM EVALUATION: RETENTION RATES IN YEARS 1, 2, AND 3

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Objectives: We sought to estimate, in years 1, 2, and 3 after program implementation, the levonorgestrel intrauterine system (LNG-IUS) retention rates at 12 weeks postpartum following postplacental insertion.

Methods: We performed a retrospective cohort study from January 2016 to December 2018 of women delivered by the OB/GYN resident service at the largest maternity hospital in Rhode Island who underwent postplacental LNG-IUS insertion after vaginal or cesarean delivery. We reviewed the medical records of women who had a successful insertion to estimate retention rates per year of the program and factors associated with expulsion.

Results: During the study period, we identified 281 postplacental LNG-IUS insertions. Two-thirds of the population had a vaginal delivery and one-third underwent a cesarean. At vaginal delivery, the majority of insertions were performed under ultrasound guidance (90%) with ring forceps (65%). In 2016, 2017, and 2018, LNG-IUS expulsion rates were 26%, 10%, and 14%, respectively ($p=.063$). In the entire cohort, at 12 weeks postpartum, 14% of LNG-IUS devices were expelled and 10% were removed per patient request. Of devices expelled, 15% were replaced. In all, 18% of LNG-IUS devices inserted at the time of vaginal delivery were expelled, compared with 6% inserted after cesarean ($p=.01$). In the vaginal delivery group, 16% of devices inserted with ring forceps were expelled, compared with 14% of those inserted manually ($p=.069$).

Conclusions: LNG-IUS expulsion rates decreased after the first year of the program. There was no difference in expulsion rates by insertion technique after vaginal delivery. Understanding modifiable factors associated with expulsion rates may help to inform insertion protocols within training institutions.

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P87

MEASURING CONTRACEPTIVE AUTONOMY IN NOUNA, BURKINA FASO: A PROOF-OF-CONCEPT FOR A NOVEL FAMILY PLANNING INDICATOR

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Objectives: Although interest in patient-centered approaches to family planning (FP) has increased, there are no population-based indicators that focus explicitly on dimensions of quality or autonomy. Here, we pilot a first-of-its-kind survey instrument, and then calculate a proof-of-concept for a novel "contraceptive autonomy" indicator.

Methods: Using a random sample of 2701 women of reproductive age (15–49) from the Nouna Health and Demographic Surveillance

System in Burkina Faso, we conducted a household survey that included novel survey questions on three subdomains of contraceptive autonomy: 1) informed choice; 2) full choice; and 3) free choice. Using these results, we calculate descriptive statistics of each of these subdomains and then show two possible calculations of the final contraceptive autonomy indicator. We then use multiple logistic regression to explore possible sociodemographic correlates and predictors of contraceptive autonomy.

Results: In all, 62.6% of women in our sample had an informed choice, 94.9% had full choice, and 95.5% had free choice. Levels of general family planning knowledge and access were high, but knowledge about risks, disadvantages and side-effects and access to LARC removal were lower than access to method provision and knowledge of FP benefits. Overall contraceptive autonomy was 52% using an “all-or-nothing” approach to calculation, and 88% using an approach that allows for partial credit. Factors significantly associated with autonomy in the regression model include education, marital status and parity.

Conclusions: More work is needed to validate this indicator, but this proof-of-concept is an important step toward creating a population-based FP indicator that measures dimensions of rights-based and patient-centered care.

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P88

PREDICTORS OF SEVERE PAIN ASSOCIATED WITH LEVONORGESTREL-RELEASING INTRAUTERINE SYSTEM PLACEMENT IN NULLIGRAVIDAS

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Objectives: The aim of this study was to identify sociodemographic and clinical factors associated with severe pain at the 52mg levonorgestrel-releasing intrauterine system (LNG-IUS) placement in nulligravidas.

Methods: This is a secondary analysis of a randomized controlled trial that evaluated lidocaine intracervical block for pain during LNG-IUS placement. We assessed the association of severe pain at LNG-IUS insertion in nulligravidas with sociodemographic and clinical characteristics (depression and anxiety screening scales, uterine length by uterine sounding, position of the uterus, body mass index, history of dysmenorrhea, difficult IUS insertion, and receiving a lidocaine intracervical block). Severe pain was defined as reporting a visual analog scale (VAS) score equal or greater than seven cm at device placement. Multiple logistic regression analysis was used to determine predictors of severe pain at LNG-IUS placement.

Results: Of 300 nulligravidas who had a successful LNG-IUS insertion, 137 (45.7) reported severe pain at LNG-IUS insertion. The multiple regression analysis showed that receiving lidocaine intracervical block reduced the risk of reporting severe pain at IUS insertion (adjusted relative risk, 0.55; 95% CI, 0.37–0.80), while having a history of dysmenorrhea increased the risk of reporting severe pain at IUS insertion (1.36; 1.08–1.72).

Conclusions: For nulligravidas, having a history of dysmenorrhea was positively associated and receiving a lidocaine intracervical block was negatively associated with severe pain at LNG-IUS placement.

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P89

INTEGRATING REPRODUCTIVE GOALS ASSESSMENT WITH CONTRACEPTIVE-DECISION SUPPORT IN PRIMARY CARE: A PILOT TEST OF THE MYPATH TOOL

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Objectives: This study was conducted to pilot test MyPath, a patient-facing web-based decision support tool integrating reproductive goals assessment, pre-pregnancy health education, and contraceptive-decision support, in Veterans Health Administration primary care.

Methods: We performed a pilot study among female veterans aged 18–44 scheduled for a visit with 8 primary care providers. A control group (n=28) was recruited prior to, and an intervention group (n=30) recruited after, introducing MyPath into the clinic. Intervention participants used MyPath on iPads in the clinic before their visit. We assessed acceptability and feasibility by surveying intervention participants and providers. Occurrence of family planning (contraceptive and/or pre-pregnancy health) discussions; changes in pre/post visit family planning knowledge, communication self-efficacy, contraceptive decisional conflict; and change from non-prescription/no method to prescription methods (pill, patch, ring, injection, implant, intrauterine device) were compared between groups with t-tests or chi-square tests as appropriate.

Results: Nearly all participants who used MyPath reported they learned new information (97%) and 93% reported they would recommend it to other veterans. No providers reported that the tool significantly increased their workload. A greater proportion of intervention participants than of controls reported having family planning discussions during their visit (93% vs. 68%; p=.02). Compared with controls, intervention participants experienced greater increases in knowledge (+1.7 vs. +0.2; p<.001) and communication self-efficacy (+0.8 vs. +0.2; p=.02), and trends toward greater reduction in decision conflict (–23% vs. –7%; p=.11) and change to prescription methods (+13% vs. +4%; p=.20).

Conclusions: MyPath was highly acceptable to female veterans, and increased family planning discussions and improved decision quality without increasing providers' perceived workload. A larger randomized evaluation of effectiveness is warranted.

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P90

RACIAL DIFFERENCES IN SIDE EFFECTS DURING THE FIRST YEAR OF LEVONORGESTREL 52MG INTRAUTERINE SYSTEM USE

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Objectives: This study describes differences by race in reported side effects over the first year of levonorgestrel 52mg intrauterine system (IUS) use.

Methods: Women aged 16–45 years enrolled in a trial evaluating a levonorgestrel 52mg IUS. Investigators asked participants at each contact about side effects or other concerns. We evaluated potential IUS-related side effects during the first year of use by race, excluding

women who did not report race during screening and those using an IUS in the month prior to enrollment. We compared side effects reported by white and black women with a multivariable analysis designed a priori to adjust for hormonal contraceptive use in the month before IUS placement, parity, obesity, and age.

Results: The population included 1242 (80.6%) white, 208 (13.5%) black, 63 (4.1%) Asian and 27 (1.7%) other women. In univariate analysis including all women, side-effect reporting differed significantly ($p < .05$) by race for acne, vaginal bacterial infection, headache, and leukorrhea. In multivariable analysis including only white and black women, white women more frequently reported mood changes (5.4% vs. 1.9%, aOR=3.3 [95% CI=1.2–9.2]) and acne (13.5% vs. 5.3%, aOR=2.1 [95% CI=1.1–4.0]). Black women more frequently reported leukorrhea (10.1% vs. 2.7%, aOR=4.1 [95% CI=2.2–7.5]), dysmenorrhea (3.4% vs. 1.0%, aOR=3.8 [95% CI=1.5–9.8]), vaginal bacterial infection (25.0% vs. 8.1%, aOR=3.1 [95% CI=2.1–4.6]), dyspareunia (9.1% vs. 5.5%, aOR=1.9 [95% CI=1.1–3.4]), mastalgia (7.7% vs. 4.3%, aOR=1.9 [95% CI=1.0–3.6]) and headache (10.6% vs. 5.9%, aOR=1.8 [95% CI=1.1–3.0]).

Conclusions: Women of different races using a levonorgestrel 52mg IUS may report similar types of side effects but with a difference in frequency, suggesting a need for tailored counseling of women planning IUS use.

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P91

PROVIDER PERSPECTIVES ON BARRIERS AND FACILITATORS OF LONG-ACTING REVERSIBLE CONTRACEPTIVE (LARC) USE IN A LARGE HEALTH SYSTEM IN WESTERN PENNSYLVANIA

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Objectives: Though a primary goal of the ACA mandate was to eliminate cost as a barrier to accessing the full range of contraceptive methods, including LARCs, only 10% of women in the United States utilized LARC methods in 2015–2017. Qualitative interviews were conducted with obstetrics/gynecology providers to understand perceived barriers and facilitators to LARC access.

Methods: Thirty interviews were conducted with “high-uptake” (>42 LARCs administered in 2017 [median administration rate]), and “low-uptake” (<42 LARCs administered) providers. Interviews were recorded and transcribed. Two coders developed a codebook based on an iterative review of transcripts and then applied themes to remaining transcripts, holding regular meetings to adjudicate coding disagreements. Directed content analysis was utilized throughout the analytic process.

Results: Providers emphasized insurance pre-authorization processes and provider preferences for menstruation, STI testing, multiple pregnancy tests, and use of misoprostol around timing of LARC placement as barriers to LARC access. Almost half of providers delayed difficult IUD placements/removals due to not having ultrasound or hysteroscope capabilities at their practices. Two-thirds of providers reported their practice keeps LARCs in stock and stated this was beneficial for same-day placement. Clinic-level facilitators included extending office hours, having pre-assembled LARC insertion kits, and training all staff on how to prepare LARC consent forms.

Conclusions: Understanding the diversity of barriers and facilitators is vital for optimizing LARC provision. These findings demonstrate heterogeneity across participating providers and practices regarding their LARC provision policies and may provide guidance for

organizational changes that support standardized guidelines for LARC provision.

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P92

ARE BIRTHS FOLLOWING LARC USE MORE LIKELY TO BE INTENDED?

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Objectives: Long-acting reversible contraceptive (LARC) methods have been promoted as an effective means of protection against unintended pregnancy and for increasing the proportion of pregnancies that are intended. Whether births following LARC use are more likely to be intended than births following use of other reversible contraceptive methods has yet to be examined at a population-based level.

Methods: Drawing on nationally representative data for 3023 women aged 15–44 who reported a live birth in the 3–4 years prior to the 2006–10, 2011–13, and 2013–15 National Survey of Family Growth (NSFG), we estimated the intendedness ratio by last reported contraceptive method used before the birth. In addition to LARC, we distinguished between moderately effective (e.g., hormonal pill) and less-effective (e.g., condom, withdrawal) contraceptives. Binary logistic models regressed intendedness status on contraceptive type while adjusting for key sociodemographic background factors.

Results: In bivariate analysis, 79.1% (95% CI: 68.5–86.9) of births following LARC use were intended, compared with 61.4% (57.1–65.6) and 62.3% (58.7–65.8) of births following moderately effective and less effective methods, respectively. Multivariate models confirm that births following LARC use are more likely to be intended (OR=2.2; 95% CI: 1.2–4.0) than those following use of a moderately effective method. No significant difference in intendedness was found between use of a less-effective and use of a moderately effective method (OR=1.1; 95% CI: 0.9–1.4).

Conclusions: We find strong evidence that, at a population-based level, births following LARC use are more likely to be intended than births following use of other reversible methods.

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P93

VALIDATION OF THE INTERPERSONAL QUALITY OF FAMILY PLANNING SCALE IN A RURAL INDIAN SETTING

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Objectives: Family planning (FP) providers influence contraceptive choice, knowledge, and satisfaction. Dehlendorf et al. established the

Interpersonal Quality of Family Planning (IQFP) scale to measure FP provider care quality, and validated it in the United States. We explore whether the scale remains appropriate in a novel low/middle income country (LMIC) context as part of the CHARM2 (Counseling Husbands & Wives to Achieve Reproductive Health and Marital Equity) study in rural India.

Methods: These analyses use 800 surveys of women aged 18–29, conducted September 2018–March 2019. Respondents rated their most recent FP provider from “poor” (1) to “excellent” (5) across 11 items. Scale reliability was assessed via Chronbach’s alpha test. Exploratory factor analysis was used to evaluate scale unidimensionality. Regression models of plausibly related outcomes (FP use, discontinuation, desired method) were used to assess criterion validity.

Results: Forty-five percent (364) of individuals had seen an FP provider; 96% of those (351/364) answered all items. Scale reliability was very high ($\alpha=0.96$). Exploratory factor analyses support unidimensionality, with all factor loadings >0.4 . A one-point increase in average IQFP score was associated with nearly double the odds of current modern method use ($OR=1.94$; 95% CI: 1.45–2.60); this remained when adjusting for age, parity, education, poverty, religion, and caste ($aOR=1.81$; 95% CI: 1.33–2.47). There was no observed association between IQFP score and other tested outcomes.

Conclusions: The IQFP scale appears appropriate in this context, and use of the scale in LMIC settings should be considered. The IQFP scale adds value in understanding drivers of FP utilization in a range of contexts.

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P95

LONG-ACTING REVERSIBLE CONTRACEPTION AND IMPLICATIONS FOR CONDOM USE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Objectives: Long-acting reversible contraceptives (LARC) are highly effective for preventing pregnancy. However, because LARC does not prevent sexually transmitted infections (STIs), use of condoms with these methods is recommended for women at risk for STIs. We conducted a systematic review and meta-analysis comparing condom use between users of LARC (intrauterine devices and implants) and moderately effective methods (oral contraceptives, injectables, patches, and rings).

Methods: This analysis was part of a broader review, in which we used keyword database searches and systematic screening to identify peer-reviewed, English-language studies that quantitatively compared at least one STI-related outcome between LARC users and users of moderately effective methods. Two individuals independently extracted data from eligible studies, and condom use findings were synthesized qualitatively and using random effects meta-analysis in R.

Results: Fifteen eligible studies examined condom use, of which 12 indicated LARC users were less likely than users of moderately effective methods to use condoms. Thirteen studies with similar measures of recent condom use had a pooled risk ratio (RR) of 0.61 (95% CI: 0.50–0.74), comparing LARC users to users of moderately effective methods. The pooled effect remained significant for LARC versus oral contraceptive users ($RR=0.53$; 95% CI: 0.37–0.75), but not for LARC versus the combined group of injectable, patch, and/or ring users ($RR=0.81$; 95% CI: 0.64–1.03).

Conclusions: Given findings suggesting that LARC users are less likely to use condoms than oral contraceptive users, it is important to understand differences in STI risk profiles and promote condom use with LARC explicitly for STI prevention among sexually active individuals at risk for STIs.

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P96

IMPACT OF A MASCULINITIES-DRIVEN INTERVENTION ON MALE ACCEPTANCE OF FAMILY PLANNING

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Objectives: Norms of masculinity underlie men’s resistance to women’s contraceptive use, yet few family planning (FP) interventions have addressed these norms to increase male acceptance of contraception. We developed a community-based intervention to transform masculine norms toward support for contraception and positive FP involvement and evaluated its effects among partnered men in two western Kenyan communities.

Methods: We administered pre- and post-intervention surveys to 150 men in intervention and control groups. Contraceptive acceptance was assessed using the Masculine Norms and Family Planning Acceptance Scale (range: 0–20), which was developed and psychometrically tested for our study. Surveys also assessed FP knowledge (range: 0–1), FP discussions (prior 6 months), and current contraceptive use. We used a series of linear and logistic regression models to evaluate differences by arm in outcomes post-intervention, accounting for pre-intervention differences.

Results: Intervention participation was significantly associated with stronger male contraceptive acceptance (coefficient: 1.21, 95% CI: 0.35–2.07, $p<.01$); more FP knowledge (coefficient: 0.23, 95% CI: 0.14–0.31, $p<.001$); and higher odds of FP discussions with main partners ($OR: 3.00$, 95% CI: 1.00–9.02, $p=.05$) and with others ($OR: 6.44$, 95% CI: 2.55–16.29, $p<.001$). The intervention was not associated with current use of a modern contraceptive ($OR: 0.92$, 95% CI: 0.36–2.33, $p=.85$).

Conclusions: Gender-transformative FP interventions show promise in shifting men toward greater contraceptive acceptance and involvement. Research is needed to better understand whether and how greater male contraceptive acceptance translates into contraceptive use. Future interventions should include couples and communities to achieve greater scale.

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P97

LONG-ACTING REVERSIBLE CONTRACEPTIVE USE WITHIN 6 MONTHS OF FIRST LIVE BIRTH AND INTERPREGNANCY INTERVAL

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Objectives: Women with an interpregnancy interval (IPI) of <18 months may experience delayed prenatal care and adverse pregnancy outcomes. Our objective was to describe the timing of long-acting reversible contraceptive (LARC) use within 6 months postpartum and subsequent IPI. **Methods:** Electronic medical records from two large health systems in the Mountain West were probabilistically linked to live birth/fetal death records to establish a cohort of 53,708 women who had had their first live birth in 2008–2014. LARC use by 6 months postpartum was identified from medical procedure and billing codes. IPI was calculated for subsequent pregnancies leading to live birth/fetal death (2008–2015). Cox regression was used to calculate adjusted hazard ratios (HRs).

Results: Overall, 5725 women obtained LARC by 6 months postpartum (10.7%). Of these, 5.8% obtained LARC by 6 weeks postpartum, 79.8% at 7–12 weeks postpartum, and 14% at 3–6 months postpartum. Median follow-up time was 18 months. LARC users were less likely to experience a subsequent pregnancy (37.9%) than non-LARC users (50.0%, $p < .005$). In a multivariable model, the HRs for IPI <18 months associated with LARC utilization by 6 weeks, 7–12 weeks, and 3–6 months postpartum compared with no LARC use were 0.83 (95% CI: 0.66–1.04), 0.73 (95% CI: 0.66–0.81), and 0.71 (95% CI: 0.61–0.82), respectively.

Conclusions: LARC use occurred in slightly more than 10% of women by 6 months postpartum. LARC users were less likely to have had a subsequent pregnancy and less likely to have experienced IPI <18 months than were non-LARC users, regardless of the timing of LARC insertion.

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P98

PREGNANCY AND PREGNANCY OUTCOMES: FINAL RESULTS FROM THE NEXPLANON® OBSERVATIONAL RISK ASSESSMENT STUDY (NORA)

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Objectives: We sought to monitor the occurrence of pregnancy and pregnancy outcomes among Nexplanon® users in the United States during standard clinical practice.

Methods: This large, non-interventional cohort study followed 7364 new users of Nexplanon® recruited by health care professionals between December 2011 and March 2014. Questionnaires were completed by patients at 6-month intervals (beginning on the day of insertion and ending 6 months after implant removal). Data analysis characterized the frequency of non-insertion pregnancy (implant not present, confirmed by negative etonogestrel [ENG] blood test), pre-treatment pregnancy (conception before implant insertion), in-treatment pregnancy (conception from day of implant insertion up to and including day of implant removal) and post-treatment pregnancy (conception up to 14 days after removal) and their outcomes.

Results: The sole non-insertion pregnancy (conception 182 days after assumed insertion) resulted in a healthy baby. Eight pre-treatment pregnancies (conception 1–33 days before insertion) resulted in six healthy babies and two elective pregnancy terminations (one completed, one planned). Three in-treatment pregnancies resulted in a Pearl Index of 0.02 (95% CI, 0.00–0.06): one patient (conception 7 days after insertion) had a spontaneous abortion; one patient (conception 5 days after insertion) had a medically treated ectopic pregnancy; one patient presented for implant removal when 7 months pregnant (implant not detected via ultrasound, no X-ray or ENG test performed) and had a healthy baby. Of 14 post-treatment pregnancies, three conceived within 7

days of implant removal (all healthy babies), 11 conceived 8–14 days after implant removal (nine healthy babies, two cases with unknown health status).

Conclusions: Nexplanon® demonstrated contraceptive effectiveness.

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P99

DECIDE + BE READY: ADAPTING MY BIRTH CONTROL, A CONTRACEPTIVE DECISION SUPPORT TOOL, FOR USE BY WOMEN IN THE U.S. MILITARY

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Objectives: U.S. servicewomen face unique barriers to contraceptive use and experience higher rates of unintended pregnancy than the general population. Strategies are needed to improve contraceptive counseling in the military and support informed decision making. We sought to adapt My Birth Control, a tablet-based contraceptive decision support tool (DST), to a mobile application format specifically for use by servicewomen, in order to provide information on contraceptive options during annual and pre-deployment health screenings.

Methods: The development of the mobile application drew on available evidence regarding best practices for the structure and content of DSTs. Feedback was elicited from servicewoman and provider stakeholders in a variety of military settings through usability testing and piloting around specific contextual factors and needs of this population.

Results: The application, titled “Decide + Be Ready,” highlights information on method efficacy, administration, side effects, return to fertility, and information for the specific needs of servicewomen. The servicewoman-specific content highlights special considerations such as timing of method initiation, menstrual side effects and suppression, as well as supply, storage and use while deployed. Stakeholder feedback informed the addition of information regarding access to emergency contraception, fertility awareness methods and postpartum contraception.

Conclusions: A mobile application providing contraceptive decision support offers an innovative approach for meeting servicewomen’s contraceptive needs and may improve the quality of contraceptive counseling for women seeking care in the Military Health System. Next steps include evaluating Decide + Be Ready’s impact on patient-centered outcomes and counseling.

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P100

PARENTS OF FAITH SUPPORT SCHOOL-BASED SEX EDUCATION: A LOUISIANA STUDY

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Objectives: Schools are an important equalizer in young people's access to sex education (SE), but Louisiana state law does not require SE in public schools. Locally and nationally, religious identity and beliefs are often invoked to oppose access to sexual and reproductive health care and education. The purpose of this study was to explore support for SE among Louisiana parents, focusing on how religiosity may influence parents' support for SE.

Methods: Participants included 1197 Louisiana parents and caregivers of children in grades K–12 who completed a web-based survey. Multivariate logistic regression analysis was used to determine associations between covariates and support for SE.

Results: Sixty-eight percent of parents reported that their overall approach to life is based on their religion or faith. Of those parents, 77% agreed that schools should be required to offer SE. In multivariate analysis, parents who reported that their whole approach to life is based on their religion or faith were 26% less likely to support required SE than parents whose whole approach to life was not based on their religion; however, this difference was not statistically significant (adjusted OR 0.74; 95% CI: 0.44–1.24). Although support for required SE declined as religiosity increased, a strong majority of parents support requiring SE in Louisiana schools, regardless of religiosity.

Conclusions: Contrary to opposition claims, strong support for SE exists among Louisiana parents and caregivers of faith. Parents and leaders of faith may be engaged as partners in advocacy for SE as well as other sexual and reproductive health issues.

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P101

EXPLORING THE REPRODUCTIVE HEALTH AND PSYCHOSOCIAL SUPPORT NEEDS OF YAZIDI WOMEN IN IRAQ WHO HAVE BEEN RELEASED FROM CAPTIVITY

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Objectives: In August 2014, the Islamic State of Iraq and Syria (ISIS) attacked the Yazidis' ancestral homeland in northwestern Iraq. Subsequently, thousands of Yazidi women and girls were killed, enslaved, kidnapped, raped and/or tortured. Our study aimed to document Yazidi women's sexual and reproductive health and violence experiences while in captivity, as well as their experiences of re-entry into their communities upon release.

Methods: In the summer of 2018, we conducted nine in-depth interviews with women and girls who had been abducted by and later released from ISIS. We audio-recorded and translated all discussions from Arabic and Kurdish to English and conducted content and thematic analyses using deductive and inductive techniques.

Results: All of our participants reported having experienced systematic rape and violence during captivity. They also reported that their captor(s) forced them to use a contraceptive method; several were released or sold back to their families after becoming pregnant. Despite discussing a range of mental health issues, none of our participants received adequate psychosocial treatment after their release from captivity. Most expressed having received support from within their families and communities. A number reported that they hoped to get married and have children in the future.

Conclusions: Our findings suggest that current gender-based violence interventions are not sufficiently meeting the reproductive health and psychosocial needs of Yazidi women and girls. Developing

tailored interventions specifically for the Yazidi community that integrate reproductive and psychosocial health and capitalize on the positive support women and girls receive from their communities appears warranted.

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P102

WOMEN'S PREFERENCES FOR CONTRACEPTIVE FEATURES: RESULTS OF A NATIONAL SURVEY

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Objectives: We aimed to assess women's preferences for various contraceptive features, including differences by race/ethnicity.

Methods: We surveyed U.S. females aged 18–44 in 2018 using a nationally representative online panel. Respondents rated the importance of contraceptive features. We used chi-square tests to examine differences by race/ethnicity.

Results: A total of 1801 women completed the survey. Their mean age was 31; 56% identified as White, 20% Hispanic, 13% Black, and 8% Asian/Pacific Islander.

The most important feature was that a method be very effective at preventing pregnancy: 71% rated this extremely/very important. Similarly, 71% said that being easy to use was important. Sixty-six percent rated no bad side effects as important; 65% easy to get; and 60% low-cost. Fifty-six percent said it was important that they have control over when/whether to use a method and 49% that they could stop using it without visiting a provider. Half (50%) said it was important that they not have to remember to use the method each time they have sex.

Women of color were more likely than White women to rate the following as important: preventing STDs; does not depend on their partner; do not have to take every day; rapid return to fertility; no changes to periods; being able to stop without visiting a provider; and only using the method when having sex. Latina women were more likely to prioritize non-hormonal methods.

Conclusions: It is critical for providers to understand patients' individual preferences for contraceptives in order to provide patient-centered care. Continued contraceptive development should be informed by women's diverse preferences.

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P103

PATIENT PREGNANCY INTENTIONS: ARE PROVIDERS ASKING?

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Objectives: We aimed to assess whether health care providers are asking patients about their pregnancy intentions and to examine differences by sociodemographic characteristics.

Methods: We surveyed U.S. females aged 18–44 in 2018 using a nationally representative online panel. We asked respondents whether their provider asked about their pregnancy intentions at their last visit. We calculated descriptive statistics and performed chi-square tests to examine differences by sociodemographic characteristics.

Results: A total of 1801 women completed the survey. Their weighted mean age was 31 years; 56% identified as White, 20% Hispanic, 13% Black, and 8% Asian/Pacific Islander.

Of those who had been to a provider for birth control (n=1297), 34% said their provider asked them whether they would like to become pregnant in the next year; 36% said their provider did not ask and 29% did not remember. Black and Latina women were significantly more likely to report having been asked about pregnancy intentions than White women; the same was true for older women and those who had visited an ob/gyn provider rather than a primary care provider. Women who had been to Planned Parenthood before were more likely to report having been asked about their pregnancy intentions, but this difference was not statistically significant.

Conclusions: The majority of women reported that providers had not asked about their pregnancy intentions. Results suggest differences by race/ethnicity, age, and provider type. Discussing patient pregnancy desires may provide opportunities to discuss contraception and/or pre-pregnancy care in order to best meet individual patient needs and preferences and optimize health outcomes.

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P104

TIMING AND PATHWAYS OF PREGNANCY SUSPICION AND CONFIRMATION

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Objectives: State legislation limiting the gestation at which individuals can obtain abortion is increasingly common. Understanding pathways to pregnancy suspicion and testing, including barriers to home pregnancy test (HPT) use, might facilitate earlier entry into pregnancy-related care and identify individuals most likely to be affected by gestation-based restrictions.

Methods: We use data from 259 individuals with known or suspected pregnancies participating in a cross-sectional survey at eight clinics across the United States (2016–2017). We used chi-square and Kruskal-Willis tests to identify differences in utilization of HPTs, barriers to use, and gestational age at HPT use.

Results: Most women (74%) had taken an HPT as the first step in confirming pregnancy. This figure was lower among adolescents than among young adults (65% vs. 81%, p=.06) and among parous than among nulliparous women (69% vs. 83%, p=.04). Two-thirds (64%) reported delays in HPT use, most often because they wanted to wait and see if they got their period (52%) or feared the result (35%). Adolescents more often reported experiencing delays, and took a longer time to suspect pregnancy; as a result, their average gestation at HPT use was 7.7 weeks (SD 3.7) versus 5.7 weeks (SD 2.9) among adults, p=.03. Among participants who did not take an HPT, 43% cited concerns about its accuracy. Logistic barriers such as cost, difficulty obtaining, or confidentiality concerns were less common (9–11% each).

Conclusions: Utilization of HPTs is high but varies by age. Adolescents may be most affected by gestation-based state abortion

restrictions. Efforts to increase knowledge about HPT accuracy may be important in increasing utilization.

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P105

MINORS' REASONS FOR AND EXPERIENCE WITH OBTAINING JUDICIAL BYPASS FOR ABORTION IN ILLINOIS

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Objectives: Minors seeking abortion in states with parental involvement requirements can obtain judicial bypass as an alternative. Research on minors' reasons for choosing bypass and obstacles associated with bypass is limited, yet needed to ensure this alternative to mandated parental involvement does not pose an undue burden.

Methods: We summarized data obtained with client consent from the Illinois Judicial Bypass Coordination Project (JBCP) on minors (<18 years) seeking judicial bypass in 2017 and 2018.

Results: The majority of minors seeking bypass (n=128) were aged 17 (55%) and lived with one parent (54%). Just under one-third were African-American (30%) or Latina (29%). A minority were already parenting (6%) or lived with someone besides a parent or on their own (16%). Minors' primary reasons for seeking bypass included concern about being forced to continue the pregnancy (46%) or being kicked out or cut off financially (40%); having no/minimal relationship with parents (15%) or fear of physical/emotional abuse (13%) were also noted. Minors traveled an average of 24 miles (range: 1–270 miles) to the court hearing; distance traveled was higher for minors from out of state (average 131 miles) or within Illinois but outside Chicago (26 miles) as compared to Chicago minors (9 miles, p<.001). On average, 6.4 days elapsed between contacting the JBCP and the court hearing.

Conclusions: Findings reinforce the importance of judicial bypass in supporting young people's autonomy in pregnancy decision making and ensuring their well-being. They also highlight the logistic barriers created by needing to go before a judge that result in delayed access to care.

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P106

“I CAN'T JUST WALK DOWN THE STREET”: AN EXPLORATION OF YOUTH-FRIENDLY SEXUAL AND REPRODUCTIVE HEALTH SERVICES ON CHICAGO'S SOUTH SIDE

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Objectives: We aimed to understand how adolescents from Chicago's South Side characterize “youth-friendly” sexual and reproductive health (SRH) services.

Methods: We conducted three focus groups with adolescents aged 15–17 who live on Chicago's South Side. Focus groups were stratified by gender

and sexual identity as follows: straight cisgender women, straight cisgender men, and LGBTQ participants. The constant comparison method was used to analyze qualitative data about participants' perceptions of "youth-friendly" SRH services according to their particular needs and preferences.

Results: Fifteen participants made up the study sample. In addition to commonly cited accessibility issues for adolescents such as service costs, hours, and location, participants described barriers unique to those in under-resourced neighborhoods. They included: safety concerns due to community violence, privacy concerns due to limited neighborhood SRH care options, and stigma from peers who might connect the receipt of SRH services to sexual activity or STIs. Participants characterized youth-friendly SRH care provision as non-judgmental and empathetic, with limited use of scientific jargon. LGBTQ participants also noted the importance of discussing non-heteronormative sexual preferences and behaviors.

Conclusions: In contrast to traditional notions of youth-friendly SRH care that pertain to service provision within health care settings, our findings highlight the importance of considering young people's lives in under-resourced communities beyond clinic doors. SRH care providers and policymakers need to consider a complete picture of the barriers and facilitators of equitable SRH access for all youth. Making health care accessible requires attention at the individual, social, and policy levels to support young people within and outside of clinic doors.

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P107

CHARACTERISTICS OF WOMEN IN THE UNITED STATES WHO HAVE NEVER USED HORMONAL CONTRACEPTIVES COMPARED WITH THOSE WHO HAVE

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Objectives: When studying hormonal contraceptives (HC), investigators often compare women who have never used HC with women who have used HC. However, these groups may differ in ways that can influence study findings. We sought to explore differences between never and ever HC users.

Methods: We used 2011–2017 data from the National Survey of Family Growth for women aged 15–44. We compared weighted distributions of demographic, health, and reproductive characteristics among never versus ever HC users, and stratified by age and sexual activity.

Results: Among 16,191 women, 22% had never used any HC. The proportion who had never used HC varied significantly ($p < .05$) by age-group (60% for ages 15–19; 20% for ages 20–29; 12% for ages 30–39; 11% for ages 40–44) and sexual activity (14% of those who had ever had sex; 78% of those who had not). Overall, the distribution of characteristics differed significantly by never- and ever-users. Respectively, a higher proportion of never- than of ever-users were Hispanic (27% vs. 18%), never-married (77% vs. 44%), had not completed high school (38% vs. 13%), and had incomes below 100% of the federal poverty level (35% vs. 25%). Lower proportions of never- compared with ever-users had ever smoked (13% vs. 35%), had diabetes/pre-diabetes (6% vs. 8%) or had a history of cancer (2% vs. 4%). Some of these associations were modified by age and sexual activity.

Conclusions: Women who have never used HC have characteristics different from those of women who have. Therefore, investigators should carefully consider differences between these two groups that may bias study findings.

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P108

PERSPECTIVES ON PREGNANCY, CONTRACEPTION, AND ABORTION AMONG YOUNG MEN INVOLVED IN THE JUVENILE JUSTICE SYSTEM

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Objectives: Juvenile justice-involved youth experience high rates of undesired pregnancy; we explored attitudes toward family planning in order to better serve this vulnerable population.

Methods: We conducted semi-structured in-depth interviews with young men ($n=15$) involved in the juvenile justice system (JJS). We recruited a purposive sample between May 2018 and January 2019 by partnering with youth-serving organizations. Participants completed a brief questionnaire; interviews were audio-recorded and transcribed. Two coders conducted a thematic analysis using Dedoose. We explored young men's pregnancy intentions and attitudes toward family planning using an intersectionality framework with attention to masculinity norms and sexual risk behaviors (SRB).

Results: Participants were primarily racial/ethnic minorities aged 15–18. Narratives about dysfunctional upbringings were linked to early sexual debut, SRB, and fragmented sexual/romantic relationships. Key influencers (caregivers, peers, older sexual partners) reinforced traditional gender roles, sexualization of women, and normalized SRB, including unprotected sex. Participants had limited knowledge about contraception and abortion. Caregivers, school, the JJS, and pornography shaped understanding of sexual health issues. Traditional masculinity norms were prominent in participants' rationale for not wanting to have children, opposition to abortion and adoption. However, few participants were actively preventing pregnancy, and all identified a preference for a son over a daughter if pregnancy were to occur, given gendered differences in child-rearing expectations. Most felt private conversations about sex with a non-judgmental ally would be helpful but hadn't found such a resource.

Conclusions: Tailored pregnancy prevention programs are needed to reduce undesired pregnancy among young men in the JJS.

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P109

COMPENSATION EXPECTATIONS FOR CONTRACEPTIVE CLINICAL TRIAL PARTICIPATION: A CROSS-SECTIONAL SURVEY CONDUCTED IN A UNIVERSITY SETTING

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Objectives: This study was conducted to describe expectations for compensation for participation in a contraceptive clinical trial, to match expectations of the community and the researchers conducting these studies.

Methods: We conducted an online, cross-sectional survey within a metropolitan university setting. Men and women aged 18–50 were surveyed on reasons why they might participate in contraceptive research and their expectations for compensation for individual elements of a clinical trial, e.g., online surveys, in-person interviews, focus groups, blood draws, pelvic exams, and ultrasounds. Expected

compensation was assessed via free response, with medians calculated and analyzed against demographic variables.

Results: A total of 329 respondents completed the survey (completion rate, 65.7%); 89.3% were female. For each item, at least 84.6% of respondents reported willingness to participate for compensation; up to 6.6% stated that they would not participate for any compensation. The frequently cited reasons for participating in research were perception of research as important and research being a way to make extra money. Median compensation expected was \$10 for a 15-minute in-person or 30-minute online survey, \$15 for a 30-minute in-person survey, \$25 for a one-hour in-person interview or focus group, and \$25 for a blood draw. For studies involving more invasive procedures, e.g., a pelvic exam or ultrasound, respondents expected a median compensation of \$50.

Conclusions: Up to 6.6% of respondents reported an unwillingness to participate in compensated contraceptive research. Respondents considered the pursuit of research an important reason for their participation, noting that compensation was also a reason to participate.

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P110

HOW MEDICAL STUDENTS' DISCUSSION OF ABORTION REFLECTS THEIR INDIVIDUAL PROFESSIONALISM: A QUALITATIVE EXPLORATION

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Objectives: Medical education must train learners to achieve professionalism competencies. Given its intrinsic reliance on professionalism tenets, abortion may be an ideal topic to facilitate student reflection on professionalism. The goal of this study was to examine the extent to which medical students' discussions about abortion could both teach and assess professionalism more broadly.

Methods: We conducted semi-structured qualitative interviews with 74 4th-year medical students planning to pursue ob/gyn residency. Conversations explored attitudes toward abortion, influences on attitude formation, and perception of abortion's potential relevance to their future practice. Transcripts were analyzed for alignment with the professionalism competencies of the American Association of Medical Colleges (AAMC).

Results: Respondents were racially diverse, included men and women, covered all U.S. census regions, and the majority (50/74) identified as religious. Twelve opposed abortion in all or most cases. Regardless of personal attitudes or demographic factors, when discussing abortion, students spontaneously commented on themes related to all six of the AAMC professionalism competencies: 1) compassion, integrity and respect for others; 2) responsiveness to patient needs superseding self-interest; 3) respecting patient privacy and autonomy; 4) accountability to patients, society, and the profession; 5) sensitivity and responsiveness to a diverse patient population; and 6) commitment to ethical principles.

Conclusions: Contemplating abortion enabled students to reflect on their personal commitment to professionalism and analyze challenges to professionalism that arise when physicians' and patients' values and preferences misalign. Case-based discussions of abortion with the aim of exploring students' attitudes could be a useful method for medical educators to teach and assess professionalism.

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