

Contraceptive Care in the Rheumatic Diseases

A Review

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Abstract: Contraception can help individuals with rheumatic and musculoskeletal diseases (RMDs) to avoid undesired pregnancies and improve reproductive outcomes. Despite the importance of contraception in the care of females with RMDs, evidence suggests that many of these individuals do not receive consistent or disease-specific counseling regarding contraceptive options. This includes female patients receiving teratogenic prescriptions as part of the management of their RMDs, or who have severe disease activity that might culminate in adverse pregnancy and perinatal outcomes. Contraceptive counseling can help females with RMDs who wish to prevent pregnancy to select a contraceptive method that is best for them.

We conducted a narrative review of the primary literature addressing reversible, prescription-based contraception for females with RMDs, framed by published guidelines on contraceptive safety. Many safe and effective contraceptive options are available for females with RMDs. Special considerations must be given to individuals with systemic lupus erythematosus, whose disease activity may be exacerbated by exogenous estrogen. Females with positive antiphospholipid antibodies should avoid estrogen-containing contraception due to an unacceptable risk of thrombosis and should conditionally avoid depot medroxyprogesterone acetate, which appears to have a prothrombotic signature. Limited contraceptive options are available to male patients. Contraceptive care for adolescents with RMDs can be extrapolated from guidelines written for adult patients, with the additional consideration of barrier protection for individuals at risk for sexually transmitted infections. Future research is needed to assess the effects of contraception use on rheumatic disease activity and side effects.

Key Words: rheumatic disease, contraception, family planning, contraceptive safety

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Contraception has an important role in the healthcare of many patients with rheumatic and musculoskeletal diseases (RMDs). As with all birthing people, contraception can help people with RMDs to avoid undesired pregnancies. Contraception may also help people with RMDs to optimize the timing of their pregnancies, allowing for medical optimization of disease activity, and potentially enhancing reproductive outcomes.^{1,2} In addition, contraception can help to prevent inadvertent fetal exposures to teratogenic medications, including methotrexate, cyclophosphamide, mycophenolate mofetil, and thalidomide, which are often used in the treatment of RMDs.^{1–3} The 2020 American College of Rheumatology's Guideline for the Management of Reproductive Health in Rheumatic and Musculoskeletal Diseases underscores the importance of contraceptive counseling in the healthcare of reproductive-age females with RMDs, indicating that rheumatologists should routinely assess for pregnancy intention or preferences and should always address the potential need for contraception when prescribing teratogenic medications.⁴

However, research evidence overwhelmingly indicates health system gaps in the provision of contraception to females with RMDs.^{5–7} Only 32% of 2455 females with RMDs in a large healthcare system in Western Pennsylvania used prescribed contraception, and teratogenic medication use was not associated with increased provision of contraceptives.⁸ In a national registry of women with systemic lupus erythematosus (SLE) or rheumatoid arthritis (RA), only 9.1% of women were found to have documentation of contraception in their rheumatology records.⁹ In another study, almost half of women at risk for unintended pregnancy with SLE reported having unprotected sexual intercourse within the preceding 3 months.¹⁰

Some individuals with RMDs report greater comfort speaking with obstetrician-gynecologists (OB/GYNs) or primary care physicians (PCPs) about their contraceptive needs, but expect their rheumatologists to advise on disease-related aspects of contraception care.^{11,12} However, data suggest that such conversations are not a consistent part of routine rheumatology practice. One survey-based study found that fewer than half of United States–based rheumatologists discuss contraception with their patients.¹³ Another single-center study based in North Carolina found that only 57% of rheumatologists documented having conversations about contraceptive care with reproductive-age female patients.¹⁴ Qualitative work reveals that while rheumatologists acknowledge the need for contraceptive counseling, they prefer for PCPs and OB/GYNs to prescribe contraception.¹² However, PCPs may only rarely prescribe contraceptives—only 25% of internal medicine–trained PCPs reported doing so in 1 cohort of providers serving Medicaid beneficiaries.⁵ In an observational study, 76% of internists in Delaware reported that they prescribed contraception, as compared with only 25% in Texas, underscoring regional differences in access to reproductive healthcare.¹⁵ Although a higher percentage of OB/GYNs are comfortable providing contraceptive prescriptions,¹⁵ a single-center study reported that only one third of female patients with RMDs had documentation of an OB/GYN visit over a 2-year period.⁸

Following the US Supreme Court reversal of the *Roe v. Wade* decision in favor of the *Dobbs v. Jackson Women's Health Association* decision, abortion access has been severely limited for

TABLE 1. Summary of Safe Use of Commonly Used Reversible Contraceptive Methods in Individuals With RMDs According to the ACR Reproductive Health Guideline

Method	Well-Controlled or Minimally Active SLE	Moderately or Highly Active SLE	Positive or Unknown aPL Antibodies	High Osteoporosis Risk
Implant	Safe	Safe	Safe	Safe
Hormonal IUD	Safe	Safe	Safe	Safe
Copper IUD	Safe	Safe	Safe	Safe
DMPA	Safe	Safe	Avoid	Avoid
Pill				
Progestin-only	Safe	Safe	Safe	Safe
Combined	Safe	Avoid	Avoid	Safe
Patch	Avoid	Avoid	Avoid	Safe
Vaginal ring	Safe	Avoid	Avoid	Safe
Spermicide	Safe	Safe	Safe	Safe
Vaginal gel	Safe	Safe	Safe	Safe
Male condom	Safe	Safe	Safe	Safe

If marked as “safe,” the contraceptive method can be used without restriction in individuals with disease activity and/or disease characteristics as indicated. Combined pills refer to estrogen-containing oral contraceptives.⁴

many individuals in the United States.¹⁶ In the current reproductive health policy environment, it is perhaps more important than ever to ameliorate gaps in contraception access and care for patients with RMDs who wish to delay or prevent pregnancy. The current manuscript will address reversible, prescription-based methods of contraception, which are more effective at preventing pregnancy than other methods (eg, barrier contraception, natural family planning). Safety information for individuals with RMDs as addressed in this review is summarized in Table 1. As safety is not the only reason why people choose contraceptive methods, we include effectiveness, side effects, and potential benefits of various contraceptive methods in Table 2. We will also address the limited contraceptive options available to male patients, and issues related to contraception care for adolescent patients with RMDs. Of note, we use the term “female” preferentially in this manuscript to refer to individuals assigned female at birth, as we recognize that not all individuals with female reproductive organs identify with the term “woman” or “women.”

In addition to the primary literature, our review is largely informed by the American College of Rheumatology's Guideline for the Management of Reproductive Health in Rheumatic and Musculoskeletal Diseases published in 2020 (hereafter referred to as the ACR Reproductive Health Guideline) as well as the Centers for Disease Control and Prevention Medical Eligibility Criteria for Contraceptive Use (US MEC), published in 2016 and currently in revision.^{4,26} Some of the recommendations between these 2 resources vary, and we will address these discrepancies in this review.

SELECTED CONTRACEPTIVE OPTIONS AND SAFETY PROFILES IN RHEUMATIC DISEASE

Long-Acting Reversible Contraceptives

The reversible contraceptive options associated with highest efficacy are known collectively as long-acting reversible contraceptives and include intrauterine devices (IUDs) and progestin-containing implants.

Intrauterine Devices

IUDs are T-shaped copper- or progestin-containing devices that are inserted into the uterus in an office-based procedure.

The copper IUD (Cu-IUD, brand name ParaGard) does not contain hormones, and it functions by inhibiting sperm motility, egg fertilization, and embryonic implantation. The Cu-IUD has a duration of contraceptive action of at least 12 years.^{17,27,28} The remaining IUDs approved for use by the US Food and Drug Administration (FDA; brand names Mirena, Skyla, Kyleena, and Liletta) are produced in different sizes and contain variable doses of levonorgestrel, which act locally to inhibit ovulation and thicken cervical mucus, thereby impairing sperm motility and preventing embryonic implantation. The duration of approved contraceptive use varies with levonorgestrel dose, from 3 years in the lowest-dose formulation (Skyla) to 7 years in the highest-dose formulations (Liletta and Mirena).¹⁷

IUDs are safe for nearly all patients with RMDs, including for those with SLE and antiphospholipid (aPL) antibodies and/or antiphospholipid syndrome. In healthy populations, progestin-containing IUDs do not increase venous or arterial thrombotic risk, nor do they increase the risk of premenopausal bone fracture relative to nonuse of hormonal contraception.^{29–32} In immunocompromised females (including those with human immunodeficiency virus), IUD placement is not clearly associated with increased risk of pelvic inflammatory disease or other infections of the reproductive tract.^{33,34} The US MEC assigns the progestin-containing IUD to category 3 (“theoretical or proven risks usually outweigh the advantages”) for individuals with positive or unknown aPL antibody status, due to a theoretical risk of thrombosis with progestins.²⁶ However, these potential risks have not yet been demonstrated in the literature. Given the strong safety profile in the primary literature, the ACR Reproductive Health Guideline indicates that IUDs are safe for use regardless of underlying rheumatic disease, including both the Cu-IUD and levonorgestrel IUDs.⁴

Subdermal Implant

The contraceptive implant (brand name Nexplanon) is a flexible rod-shaped device that is implanted subdermally in the upper arm as an outpatient procedure. It slowly releases a steady dose of etonogestrel, which both prevents ovulation and thickens cervical mucus to impair sperm motility.¹⁸ The device provides contraceptive benefit for up to 5 years.³⁵

The implant has not been studied in populations with RMDs. The majority of evidence suggests that it does not increase the risk

TABLE 2. Commonly Used Reversible Contraceptive Methods and Summary of Counseling Guidelines for Individuals With RMDs

Method	Active Ingredient	Typical Use Failure Rate	Common Side Effects	Potential Benefits	Summary of Safe Use Per American College of Rheumatology
LARC Implant	Etonogestrel	0.1	Increased menstrual frequency (23%) or heaviness (32%), amenorrhea (30%)	Effective for 3 years	No restrictions
Hormonal IUD	Levonorgestrel	0.1–0.4	Irregular menses/amenorrhea (20% in first year for Mirena or Liletta, 6%–12% for Skyla or Kyleena)	Effective for 3–7 years, can use Mirena or Liletta for emergency contraception	No restrictions
Copper IUD	Copper	0.8	Heavier menses	Effective for at least 10 years, nonhormonal, can use as emergency contraception	No restrictions
DMPA Pill	Medroxyprogesterone acetate	4	Menstrual spotting, amenorrhea (46% at end of first year)	Effective for 3 months	Avoid with positive aPL antibodies, high osteoporosis risk
Progestin-only Pill	Progestin	7	Irregular bleeding (40%) or amenorrhea (10%)	No estrogen component	No restrictions
Combined estrogen/progestin Pill	Estrogen + progestin	7	Irregular bleeding or amenorrhea, nausea, breast tenderness	Regulate menses, decrease blood loss, improve cramping and premenstrual symptoms	Avoid with moderate-to-high SLE activity, positive aPL antibodies
Patch	Estrogen + norelgestromin	7	Application site irritation (20%), breast tenderness (19%), menstrual cramping (13%)	Regulate menses, decrease menstrual blood loss	Avoid with SLE, positive aPL antibodies
Vaginal ring	Estrogen + etonogestrel	7	Irregular bleeding, nausea, discomfort or expulsion (2%–6%)	Decrease menstrual blood loss, improve menstrual cramping	Avoid with highly active SLE, positive aPL antibodies
Spermicide Vaginal gel	Nonoxonyl-9 Lactic acid + citric acid + potassium bitartrate	10–22 14	Irritation (35%)	Microbicidal activity	No restrictions
Male condom		13	Displacement or breakage (2%), diminished penile sensation		No restrictions

Typical use failure rates expressed as percent of individuals who would become pregnant within 1 year of typical contraceptive use.^{4,17–25}
LARC, long-acting reversible contraceptive.

of thrombosis or significantly impact bone mineral density in the general population.^{19,32,36,37} One longitudinal study indicated that the implant may be associated with decreased bone mineral density at the distal radius over 3 years of use, but in the absence of significant differences in density at any other measured site, the clinical relevance of this finding is uncertain.³⁸

Because of this relative safety profile in the general population, the ACR Reproductive Health Guideline indicates that the subdermal implant is likely safe for use for all females with RMDs. Given the relative paucity of literature on the safety of the implant, the guideline recommendation for use of this contraceptive method is not strong.⁴ As with IUDs, these recommendations differ from the US MEC recommendations, which assign the implant a category 3 (“theoretical or proven risks usually outweigh the advantages”) for individuals with positive or unknown aPL antibody status.²⁶ However, this risk has not been substantiated in trials to date.

Oral Contraceptive Pills

Combined Oral Contraceptive Pills

Combined oral contraceptive pills (COCs) contain both estrogen and progesterone compounds. COCs can be taken continuously, or taken for cycles of typically 28 days (including planned 7-day placebo intervals). The contraceptive effect is primarily achieved via suppression of ovulation; the estrogen component of COCs may be additionally helpful in regulating menses.²⁰

Although the elevated incidence of venous thromboembolic disease in COC users is well-established, the overall incidence is low in young, healthy females. The estimate of venous thromboembolism (VTE) incidence in reproductive-age females ranges from 0.5–1 per 1000 person-years; in those taking COCs, that risk estimate increases only to 2–4 per 1000 person-years.³⁹ Estrogen also has a positive impact on bone mineral density (with its loss in the postmenopausal period conferring an elevated risk of osteoporosis), and the literature does not appear to support increased fracture risk with prolonged COC use.^{40,41}

Two landmark randomized trials have evaluated disease activity in individuals with SLE using COCs. In 1 of these trials, administration of COCs did not result in increased disease activity relative to placebo. Moreover, although not statistically evaluated, rates of venous thrombosis were similar in COC and placebo groups.⁴² The second trial compared COCs, progestin-only contraceptive pills (POPs), and the Cu-IUD, and showed no difference in disease activity or flare incidence over the 12-month follow-up period of the trial. Four participants developed venous or arterial thromboses (2 receiving COCs and 2 receiving POPs), all of whom had positive aPL antibodies.⁴³

Although literature on the impact of COCs in other RMDs is relatively sparse, there is no indication that hormonal contraceptives have an impact on disease activity in other RMDs, such as RA.⁴⁴

Given the above, the ACR Reproductive Health Guideline suggests that COCs are safe for most individuals with rheumatic disease. COCs can be used by females with moderate to high SLE disease activity, though the ACR Reproductive Health Guideline favors progestin-only or nonhormonal methods of contraception, such as the Cu-IUD, levonorgestrel IUD, and POPs. However, COCs should be avoided by individuals with positive aPL antibodies (including patients with positive lupus anticoagulant, high-titer anticardiolipin antibody, or high-titer anti- β_2 -glycoprotein I), due to an elevated baseline risk of thrombosis.⁴ These recommendations are somewhat more specific than the US MEC, which assigns COCs a category 4 (“unacceptable health risk”) in individuals with positive or unknown aPL antibody status,

but a category 2 (“advantages generally outweigh theoretical or proven risks”) in others with SLE.²⁶

Progestin-Only Pills

POPs contain progestin compounds without estrogen and are often taken continuously without placebo periods.⁴⁵ POPs need to be taken at a consistent time each day, as serum progestin levels rapidly decline to baseline after 20–24 hours of contraceptive effect.²¹ Notably, in 2019, a drospirenone-only pill with a half-life of 25–30 hours was approved by the FDA for contraceptive use (brand name Slynd). This longer half-life is anticipated to enhance flexibility with respect to daily timing of administration relative to other POPs, allowing people to miss a pill for a day without losing contraceptive benefit.²²

POPs do not appear to confer increased thrombogenic risk, nor do they appear to be associated with increased fracture risk, relative to nonuse of hormonal contraception.^{30,32,46,47} As above, a landmark trial comparing COCs, POPs, and the Cu-IUD in individuals with SLE showed no difference in incidence of disease flares over 1 year of follow-up, and the 2 participants receiving POPs who developed venous or arterial thrombosis were also found to have aPL antibody positivity, conferring elevated baseline risk of thrombogenesis.⁴³

The US MEC assigns POPs a category 3 (“theoretical or proven risks usually outweigh the advantages”) in individuals with positive or unknown aPL antibody status, based again on a theoretical risk of thrombosis related to progesterone.²⁶ In contrast, the ACR Reproductive Health Guideline suggests that POPs are safe for all individuals with RMDs, including individuals with aPL antibodies.⁴

Transdermal Patch

The contraceptive patch (brand name Xulane, formerly Ortho Evra) releases a steady transdermal daily dose of estrogen and the progestin norelgestromin.^{22,48} The patch is exchanged weekly for 21 days, followed by 7 hormone-free days. The transdermal patch functions to suppress ovulation and thicken cervical mucus to impede sperm motility.⁴⁸

Bone health does not appear to be impacted by use of the transdermal patch.⁴⁹ There has been concern regarding potentially elevated VTE risk associated with patch use, as the estrogen dose associated with the patch is higher than the estrogen dose within COCs,⁴⁸ and the procoagulant effect of exogenous estrogen appears to be similar to oral preparations regardless of route of absorption.⁵⁰ A systematic review examining VTE events with use of the patch found conflicting results, yielding uncertain overall risk status.⁵¹

In view of this conflicting information, but with known elevated estrogen exposure through the transdermal patch relative to COCs, the ACR Reproductive Health Guideline recommends against prescription of the contraceptive patch for individuals with aPL antibody positivity or SLE.⁴ These recommendations are somewhat more specific than those of the US MEC, in which the contraceptive patch is assigned a category 4 (“unacceptable health risk”) for individuals with positive aPL antibodies, but is only assigned a category 2 (“advantages generally outweigh theoretical or proven risks”) for other individuals with SLE.²⁶

In 2020, a combined estrogen-progesterone patch with lower estrogen dosing (brand name Twirla) was approved for contraceptive prescription by the FDA. Available safety data suggest that Twirla carries higher thrombotic risk and elevated failure rates in obese patients, and use is therefore recommended only for individuals with body mass index less than or equal to 30 kg/m².²² No safety data have yet been obtained for individuals with

RMDs, and at this time, this patch is not recommended for patients with SLE.⁴

Vaginal Ring

The vaginal contraceptive ring (brand name NuvaRing) contains estrogen and the progestin etonogestrel. It is a ring-shaped device that is inserted into the vagina for 21 days, during which time it releases a steady daily dose of hormone, followed by 7 ring-free days that facilitate a menstrual period. Like the COC and the transdermal patch, the vaginal ring functions to suppress ovulation and thicken cervical mucus to inhibit sperm motility.⁵²

The procoagulant effect of transvaginally absorbed estrogen appears to be equivalent to that of orally absorbed exogenous estrogen.⁵⁰ A systematic review examining VTE events associated with use of the vaginal ring compared with COC use found mixed results.⁵¹ There does not appear to be increased risk of bone mineral density loss with use of the vaginal ring.^{49,53}

The ACR Reproductive Health Guideline considers use of the vaginal ring safe for most patients with rheumatic disease, with the exception of individuals with aPL antibody positivity and highly active SLE.⁴ These recommendations are concordant with those of the US MEC, in which the vaginal ring is assigned a category 4 (“unacceptable health risk”) for those with aPL antibodies.²⁶

In 2018, the FDA approved a vaginal ring containing both estrogen and segesterone acetate that can be reused for contraception over 13 cycles or approximately 1 year (brand name Annovera).^{22,54} Safety data are incomplete for the estrogen/segesterone ring in obese patients,²² and no data have yet been obtained for its use in patients with RMDs.

Depot Medroxyprogesterone Acetate

Depot medroxyprogesterone acetate (DMPA) is a long-acting injectable progestin-based contraceptive that is administered every 3 months. DMPA injections result in a steady progestin concentration over 3 months, which acts to inhibit ovulation.⁵⁵

Although not studied in populations with RMDs, a growing body of literature suggests that DMPA use is linked to increased thrombotic risk in other populations. In a case-control study of women with first episode of venous thrombosis, a history of DMPA use conferred 3.6 times the odds of VTE compared with nonuse of hormonal contraception.²⁹ A meta-analysis found a significantly increased risk of VTE associated with DMPA use relative to nonuse of hormonal contraception.^{30,56} A study assessing DMPA administration in women with a history of prothrombotic gene mutation (factor V Leiden) found that these women had 16.7 times the odds of venous thrombosis relative to healthy women not using hormonal contraception.⁵⁷

The progestin contained in DMPA also acts on the pituitary-gonadal axis to suppress estrogen synthesis; low estrogen, in turn, is implicated in decreasing bone mineral density. The association between low bone mineral density and DMPA use has been well-established, and is the reason for a “black box” warning from the FDA against prolonged use of DMPA (particularly for use over 2 years).⁵⁵ Of note, bone mineral density appears to recover after cessation of DMPA use in healthy populations, and the World Health Organization and the American College of Obstetricians and Gynecologists do not support limiting DMPA use in the general population based on what appears to be a reversible impact on bone mineral density.⁵⁵

Because of its thrombogenicity, DMPA is not preferred in individuals with aPL antibody positivity per the ACR Reproductive Health Guideline and per the US MEC (where it is associated with a category 3 risk profile).^{4,26} Similarly, the ACR Reproductive

Health Guideline indicates that the impact of DMPA on bone mineral density renders it a less preferred option for those with RMDs at high risk for osteoporosis (for instance, those with prolonged use of corticosteroids).⁴

New Advances

A recent addition to the contraceptive pantheon is a nonhormonal vaginal gel that alters vaginal pH to a level inhospitable to sperm (Phexxi). Most frequent adverse events associated with Phexxi use include a local burning sensation and pruritis; there are currently no identified systemic effects.²²

Perhaps the newest advance is the FDA approval of a POP that can be sold over the counter beginning in 2024. Opill, containing norgestrel 0.075 mg for daily dosing, has an estimated failure rate of 4.4 pregnancies per 100 person-years of use.⁵⁸ Because it only contains progestin, and therefore is unlikely to carry increased thrombotic risk, it is anticipated to be safe in individuals with RMDs, though future research will be needed to confirm its safety profile in these populations.^{4,58} The pill must be taken at the same time each day in order to retain its contraceptive benefit.⁵⁸

SUMMARY OF ISSUES

Nearly every person with a rheumatic disease can safely pick at least 1 effective method of contraception. Table 1 provides a brief summary of the safety profiles of contraceptive methods addressed in this review. In addition to safety, many patients select contraceptive methods based on effectiveness and anticipated side effects. Table 2 summarizes guidance for contraceptive counseling that accounts for safety, effectiveness, key side effects, and potential benefits associated with contraceptive use.

Long-acting reversible contraceptives, including IUDs and the subdermal implant, are safe for use in all individuals with RMDs.⁴ The IUD does not appear to place individuals at increased risk for reproductive tract infections, even if immunocompromised.³³

COCs do not increase risk for disease flare in SLE, but do increase thrombotic risk, and are therefore unsafe for individuals with moderately to highly active SLE or aPL antibodies.^{4,42,43} POPs, by contrast, do not carry elevated thrombotic risk, and are therefore safe for use in all individuals with RMDs.^{4,30,46,47} There is no evidence as yet that COCs or POPs increase risk for osteoporosis.^{32,40,41}

The transdermal patch has a higher dose of estrogen than COCs and is therefore considered unsafe for individuals with SLE or with aPL antibodies.^{4,48} The vaginal ring is considered unsafe for individuals with highly active SLE or aPL antibodies.⁴ Neither method appears to be associated with increased osteoporotic risk.^{49,53}

Finally, DMPA has been associated with elevated thrombotic risk and loss of bone mineral density.^{29,30,55–57} DMPA is therefore considered unsafe for individuals with aPL antibodies and not an optimal choice for those at high risk for osteoporosis.⁴

Supplement A provides case examples that can be used as an exercise in real-world application of the information presented in this manuscript, <http://links.lww.com/RHU/A700>.

SPECIAL POPULATIONS

Males

Male contraceptive options are currently limited to surgical sterilization, the male condom, and withdrawal, none of which are anticipated to pose risks directly associated with rheumatic disease. There are several hormone-based male contraceptives being tested in clinical trials, typically including testosterone with or without a progestogen.⁵⁹ Safety data for these methods are still

pending in the general population; if approved, dedicated study will be needed to apply these safety profiles to the population of individuals with RMDs.

Adolescents

As adolescent females bear a disproportionate burden of unintended and undesired pregnancies, contraceptive counseling is particularly important for individuals of this age group with RMDs.⁶⁰ In qualitative work, adolescents with RMDs have raised similar concerns to adults with respect to family planning. Like adults, adolescents did not view their rheumatologists as reliable sources of information for reproductive health and did not feel appropriately counseled regarding contraceptive options. Adolescents—like adults—were additionally concerned about the potential impact of their rheumatic disease on contraception and on pregnancy and motherhood.^{11,12,61}

A paucity of literature is available to guide adolescents with RMDs in the selection of contraceptive methods. Nonetheless, recommendations for use of contraceptives in the pediatric population can be extrapolated from the ACR Reproductive Health Guideline. In addition to these methods, barrier methods (particularly the male condom) should be recommended in adolescents engaging in penetrative sex given the risk of sexually transmitted infections.⁶⁰

SHARED CONTRACEPTIVE DECISION-MAKING

Following the Supreme Court reversal of the longstanding *Roe v. Wade* decision, almost 1 in 3 females ages 15–44 currently live in states in which abortion is banned or nearly banned.⁶² State abortion policies that heavily restrict abortion are likely to disproportionately affect people who are socially and medically marginalized, which may include people of color, people who are poor, and people who cannot travel across state lines due to disease or disability.^{63,64} This underscores the urgency of meeting the contraceptive needs of patients who may be otherwise unable to terminate an undesired or medically risky pregnancy depending on the laws in the state in which they live. As such, it is imperative to consider ways in which patients' contraceptive needs can be addressed in a broader range of healthcare contexts, including within the rheumatology context.

In the current policy environment, rheumatologists and other clinicians who counsel patients on contraception may feel especially compelled to prioritize methods that are highly effective. However, several studies indicate that other factors are important to patients, including side effects, effects on libido, the presence of hormones, partner acceptability, recommendations from friends and family, and religious preferences.^{65,66} Some physicians may feel that encouraging patients to select a method based on factors other than safety or efficacy elicits ethical and legal considerations, as these pregnancies can be life-threatening, and inadvertent fetal exposures to teratogenic antirheumatic drugs may lead to neonates born with congenital anomalies. Nonetheless, studies suggest that patients who feel pressured or coerced into a contraceptive method are less likely to adhere to that method over time.^{67,68}

Several resources can provide guidance to physicians who wish to provide patient-centered contraceptive counseling. Detailed guides as developed by the Partners in Contraceptive Choice and Knowledge use pictographs that elicit contraceptive preferences from patients, with information about safety, efficacy, route of administration, major side effects (including effects on menstrual patterns), and fertility.⁶⁹ Resources on contraception specific to populations with RMDs have been developed by the American College of Rheumatology in concert with Bedsider, an organization that provides education about contraceptive methods.⁷⁰ A

contraceptive guide for patients with SLE is available through the Healthy Outcomes in Pregnancy with SLE Through Education of Providers (HOP-STEP) program.⁷¹

In order to facilitate informed contraception decision-making, further research is needed to explore the side effects of various contraceptive methods among patients with RMDs. For example, 1 study found that some patients with inflammatory arthritis experienced improvement of arthralgias and pain when using oral contraceptive pills.⁷¹ This type of information could be useful for patients who wish to consider their RMDs and side effects when making contraceptive decisions.

CONCLUSIONS

Contraception is safe and effective for patients with RMDs. Given unique family planning needs and concerns for individuals with RMDs, rheumatologists and other clinicians must become more adept at providing contraception to these patients. In the context of reproductive policy changes in the United States, facilitating reproductive shared decision-making and empowering patients with RMDs to make preference-sensitive and goals-concordant contraceptive decisions is urgently needed.

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