

SPECIAL SECTION

THE 2021 SCIENTIFIC MEETING OF THE SOCIETY OF GYNECOLOGIC **SURGEONS**



Megan Schimpf, MD, MHSA Associate Professor Obstetrics and Gynecology & Urology

Ambulatory Care Clinical Chief Obstetrics and Gynecology University of Michigan Ann Arbor, Michigan

Cecile A. Ferrando, MD, MPH

Associate Professor Obstetrics and Gynecology Subspecialty Care for Women's Health Cleveland Clinic Cleveland, Ohio

Katie Propst, MD

Urogynecologist Assistant Professor Obstetrics and Gynecology Subspecialty Care for Women's Health Cleveland Clinic Cleveland, Ohio

Olivia Cardenas-Trowers, MD

Fellow, Female Pelvic Medicine & Reconstructive Surgery University of Arizona College of Medicine

Tucson, Arizona

Oluwateniola Brown, MD

Fellow, Female Pelvic Medicine & Reconstructive Surgery Northwestern University Chicago, Illinois

Cassandra Carberry, MD, MS

Associate Professor Clinician Educator Obstetrics & Gynecology Alpert Medical School of Brown University Providence, Rhode Island

Moiuri Siddique, MD, MPH

Resident Obstetrics & Gynecology Alpert Medical School of Brown University

Annetta Madsen, MD

Urogynecologist Allina Health United Women's Health Clinic St. Paul, Minnesota

Blair Washington, MD, MHA

Clinical Associate Professor Elson S. Floyd College of Medicine Washington State University

A sizzling hybrid meeting of the Society of Gynecologic Surgeons

At 115°, the temperatures at the 2021 annual meeting in Palm Springs, California, held June 27–30, truly made the event a hot, and educational, affair

Megan Schimpf, MD, MHSA

he 47th Annual Scientific Meeting of the Society of Gynecologic Surgeons (SGS), like so many things in our modern world, endured many changes and had to stay nimble and evolve to changing times. In the end, however, SGS was able to adapt and succeed, just like a skilled gynecologic surgeon in the operating room, to deliver a fresh new type of meeting.

When we chose the meeting theme, "Working together: How collaboration enables us to better help our patients," we anticipated a meeting discussing medical colleagues and consultants. In our forever-changed world, we knew we needed to reinterpret this to a broader social context. Our special lectures and panel discussions sought to open attendees' eyes to disparities in health care for people of color and women.

While we highlighted the realities faced by colleagues in medicine, the topics addressed also were designed to grow awareness about struggles our patients encounter as well. Social disparities are sobering, long-standing, and sometimes require creative collaborations to achieve successful outcomes for all patients. The faculty of one of our postgraduate courses reviews in this special 2-part section to OBG Management strategies on dismantling racism (see page SS9), and Christine Heisler, MD, MS, and Sarah M. Temkin, MD, summarize their recent research and special lecture on gender equity in gynecologic surgery (see part 2 of this series in next month's issue of OBG Management).

Dr. Schimpf is Associate Professor, Female Pelvic Medicine and Reconstructive Surgery, Departments of Obstetrics and Gynecology and Urology, University of Michigan, and Ambulatory Care Clinical Chief, Obstetrics and Gynecology, Ann Arbor, Michigan.

doi: 10.12788/obgm.0125

The meeting also kicked off with a postgraduate course on fibroid management, with workshops on harnessing the power of social media and lessons on leadership from a female Fortune 500 CEO, Lori Ryerkerk, offered as well. As the scientific program launched, we were once again treated to strong science on gynecologic surgery, with only a small dip in abstract submissions, despite the challenges of research during a pandemic. Mark Walters, MD, gave the inaugural lecture in his name on the crucial topic of surgical education and teaching. We also heard a special report from the SGS SO-COVID research group, led by Dr. Rosanne Kho, on gynecologic surgery during the pandemic. We also convened a virtual panel for our hybrid attendees on the benefits to patients of a multidisciplinary approach to gynecologic surgery, presented here by Cecile Ferrando, MD (see page SS3).

As our practices continue to grow and evolve, the introduction of innovative technologies can pose a new challenge, as Miles Murphy, MD, and members of the panel on novel gynecologic office procedures will present in this series next month.

The TeLinde keynote speaker was Janet Dombrowski, who works as a coach for many surgeons in various disciplines across the country. She spoke to the resilience gained through community and collaboration.

While our meeting theme dated to the "before" pandemic era, those who were able to be in attendance in person can attest to the value we can all place now on community and personal interactions. With experience strengthened by science, I hope this meeting summary serves to highlight the many ways in which we can collaborate to improve outcomes for ourselves in medicine and for patients.

A multidisciplinary approach to gyn care: A single center's experience

The Cleveland Clinic's combined specialist team approach for patients with complex gynecologic conditions makes a difference in the way patients receive and perceive their care

Cecile A. Ferrando, MD, MPH, and Katie Propst, MD

n her book *The Silo Effect: The Peril of Expertise* and the Promise of Breaking Down Barriers, Gillian Tett wrote that "the word 'silo' does not just refer to a physical structure or organization (such as a department). It can also be a state of mind. Silos exist in structures. But they exist in our minds and social groups too. Silos breed tribalism. But they can also go hand in hand with tunnel vision."

Tertiary care referral centers seem to be trending toward being more and more "un-siloed" and collaborative within their own departments and between departments in order to care for patients. The terms *multidisciplinary* and *intradisciplinary* have become popular in medicine, and teams are joining forces to create care paths for patients that are intended to improve the efficiency of and the quality of care that is rendered. There is no better example of the move to improve collaboration in medicine than the theme of the 2021 Society of Gynecologic Surgeons annual meeting, "Working Together: How Collaboration Enables Us to Better Help Our Patients."

In this article, we provide examples of how collaborating with other specialties—within and outside of an ObGyn department—should become the standard of care. We discuss how to make this team approach easier and provide evidence that patients experience favorable outcomes. While data on combined care remain sparse, the existing literature on this topic helps us to guide and counsel patients about what to expect when a combined approach is taken.

Dr. Ferrando reports receiving royalties from UpToDate, Inc. Dr. Propst reports no financial relationships relevant to this article.

doi: 10.12788/obgm.0122

Addressing pelvic floor disorders in women with gynecologic malignancy

In 2018, authors of a systematic review that looked at concurrent pelvic floor disorders in gynecologic oncologic survivors found that the prevalence of these disorders was high enough to warrant evaluation and management of these conditions to help improve quality of life for patients. Furthermore, it is possible that the prevalence of urinary incontinence is higher in patients who have undergone surgery for a gynecologic malignancy compared with controls, which has been reported in previous studies.^{2,3} At Cleveland Clinic, we recognize the need to evaluate our patients receiving oncologic care for urinary, fecal, and pelvic organ prolapse symptoms. Our oncologists routinely inquire about these symptoms once their patients have undergone surgery with them, and they make referrals for all their symptomatic patients. They have even learned about our own counseling, and they pre-emptively let patients know what our counseling may encompass.

For instance, many patients who received radiation therapy have stress urinary incontinence that is likely related to a hypomobile urethra, and they may benefit more from transurethral bulking than an anti-incontinence procedure in the operating room. Reassuring patients ahead of time that they do not need major interventions for their symptoms is helpful, as these patients are already experiencing tremendous burden from their oncologic conditions. We have made our referral patterns easy for these patients, and most patients are seen within days to weeks of the referral placed, depending on the urgency of the consult and the need to proceed with their oncologic treatment plan.

Gynecologic oncology patients who present with preoperative stress urinary incontinence and pelvic organ prolapse also are referred to a urogynecology specialist for concurrent care. Care paths have been created to help inform both the urogynecologists and the oncologists about options for patients depending on their respective conditions, as both their malignancy and their pelvic floor disorder(s) are considered in treatment planning. There is agreement in this planning that the oncologic surgery takes priority, and the urogynecologic approach is based on the oncologic plan.

Our urogynecologists routinely ask if future radiation is in the treatment plan, as this usually precludes us from placing a midurethral sling at the time of any surgery. Surgical approach (vaginal versus abdominal; open or minimally invasive) also is determined by the oncologic team. At the time of surgery, patient positioning is considered to optimize access for all of the surgeons. For instance, having the oncologist know that the patient needs to be far down on the bed as their steep Trendelenburg positioning during laparoscopy or robotic surgery may cause the patient to slide cephalad during the case may make a vaginal repair or sling placement at the end of the case challenging. All these small nuances are important, and a collaborative team develops the right plan for each patient in advance.

Data on the outcomes of combined surgery are sparse. In a retrospective matched cohort study, our group compared outcomes in women who underwent concurrent surgery with those who underwent urogynecologic surgery alone. ⁴ We found that concurrent surgeries had an increased incidence of minor but not serious perioperative adverse events. Importantly, we determined that 1 in 10 planned urogynecologic procedures needed to be either modified or abandoned as a result of the oncologic plan. These data help guide our counseling, and both the oncologist and urogynecologist contributing to the combined case counsel patients according to these data.

Concurrent colorectal and gynecologic surgery

Many women have pelvic floor disorders. As gynecologists, we often compartmentalize these conditions as gynecologic problems; frequently,

however, colorectal conditions are at play as well and should be addressed concurrently. For instance, a high incidence of anorectal dysfunction occurs in women who present with pelvic organ prolapse.⁵ Furthermore, outlet defecation disorders are not always a result of a straightforward rectocele that can be fixed vaginally. Sometimes, a more thorough evaluation is warranted depending on the patient's concurrent symptoms and history. Outlet symptoms may be attributed to large enteroceles, sigmoidoceles, perineal descent, rectal intussusception, and rectal prolapse.⁶

As a result, a combined approach to caring for patients with complex pelvic floor disorders is optimal. Several studies describe this type of combined and coordinated patient care. 7,8 Ideally, patients are seen by both surgeons in the office so that the surgeons may make a combined plan for their care, especially if the decision is made to proceed with surgery. Urogynecology specialists and colorectal surgeons must decide together whether to approach combined prolapse procedures via a perineal and vaginal approach versus an abdominal approach. Several factors can determine this, including surgeon experience and preference, which is why it is important for surgeons working together to have either well-designed care paths or simply open communication and experience working together for the conditions they are treating.

In an ideal coordinated care approach, both surgeons review the patient records in advance. Any needed imaging or testing is done before the official patient consult; the patient is then seen by both clinicians in the same visit and counseled about the options. This is the most efficient and effective way to see patients, and we have had significant success using this approach.

Complications of combined surgery

The safety of combining procedures such as laparoscopic sacrocolpopexy and concurrent rectopexy has been studied, and intraoperative complications have been reported to be low. 9,10 In a cohort study, Wallace and colleagues looked at postoperative outcomes and complications following combined surgery and reported that reoperation for the rectal prolapse component of the surgery was more common than the pelvic organ prolapse component, and that 1 in 5 of their patients experienced a surgical complication within 30 days of

their surgery.¹¹ This incidence is higher than that seen with isolated pelvic organ prolapse surgery. These data help us understand that a combined approach requires good patient counseling in the office about both the need for repeat surgery in certain circumstances and the increased risk of complications. Further, combined perineal and vaginal approaches have been compared with abdominal approaches and also have shown no age-adjusted differences in outcomes and complications.¹²

These data point to the need for surgeons to choose the approach to surgery that best fits their own experiences and to discuss this together before counseling the patient in the office, thus streamlining the effort so that the patient feels comfortable under the care of 2 surgeons.

Patients presenting with urogynecologic and gynecologic conditions also report symptomatic hemorrhoids, and colorectal referral is often made by the gynecologist. Sparse data are available regarding combined approaches to managing hemorrhoids and gynecologic conditions. Our group was the first to publish on outcomes and complications in patients undergoing concurrent hemorrhoidectomy at the time of urogynecologic surgery.¹³ In that retrospective cohort, we found that minor complications, such as postoperative urinary tract infection and transient voiding dysfunction, was more common in patients who underwent combined surgery. From this, we gathered that there is a need to counsel patients appropriately about the risk of combined surgery. That said, for some patients, coordinated care is desirable, and surgeons should make the effort to work together in combining their procedures.

Integrating plastic and reconstructive surgery in gynecology

Reconstructive gynecologic procedures often require a multidisciplinary approach to what can be very complex reconstructive surgery. The intended goal usually is to achieve a good cosmetic result in the genital area, as well as to restore sexual, defectory, and/or genitourinary functionality. As a result, surgeons must work together to develop a feasible reconstructive plan for these patients.

Women experience vaginal stenosis or foreshortening for a number of reasons. Women with congenital anomalies often are cared for by specialists in pediatric and adolescent gynecology. Other women, such as those who have undergone vaginectomy and/or pelvic or vaginal radiation for cancer treatment, complications from vaginal mesh placement, and severe vaginal scarring from dermatologic conditions like lichen planus, are cared for by other gynecologic specialists, often general gynecologists or urogynecologists. In some of these cases, a gynecologic surgeon can perform vaginal adhesiolysis followed by vaginal estrogen treatment (when appropriate) and aggressive postoperative vaginal dilation with adjunctive pelvic floor physical therapy as well as sex therapy or counseling. A simple reconstructive approach may be necessary if lysis of adhesions alone is not sufficient. Sometimes, the vaginal apex must be opened vaginally or abdominally, or releasing incisions need to be made to improve the caliber of the vagina in addition to its length. Under these circumstances, the use of additional local skin grafts, local peritoneal flaps, or biologic grafts or xenografts can help achieve a satisfying result. While not all gynecologists are trained to perform these procedures, some are, and certainly gynecologic subspecialists have the skill sets to care for these patients.

Under other circumstances, when the vagina is truly foreshortened, more aggressive reconstructive surgery is necessary and consultation and collaboration with plastic surgery specialists often is helpful. At our center, these patients' care is initially managed by gynecologists and, when simple approaches to their reconstructive needs are exhausted, collaboration is warranted. As with the other team approaches discussed in this article, the recommendation is for a consistent referral team that has established care paths for patients. Not all plastic surgeons are familiar with neovaginal reconstruction and understand the functional aspects that gynecologists are hoping to achieve for their patients. Therefore, it is important to form cohesive teams that have the same goals for the patient.

The literature on neovaginal reconstruction is sparse. There are no true agreed on approaches or techniques for vaginal reconstruction because there is no "one size fits all" for these repairs. Defects also vary depending on whether they are due to resections or radiation for oncologic treatment, reconstruction as part of the repair of a genitourinary or rectovaginal fistula, or stenosis from other etiologies.

In 2002, Cordeiro and colleagues published a classification system and reconstructive algorithm for acquired vaginal defects.¹⁴ Not all reconstructive surgeons subscribe to this algorithm, but it is the only rubric that currently exists. The authors differentiate between "partial" and "circumferential" defects and recommend different types of fasciocutaneous and myocutaneous flaps for reconstruction.

In our experience at our center, we believe that the choice of flap should also depend on whether or not perineal reconstruction is needed. This decision is made by both the gynecologic specialist and the plastic surgeon. Common flap choices include the Singapore flap, a fasciocutaneous flap based on perforators from the pudendal vessels; the gracilis flap, a myocutaneous flap based off the medial circumflex femoral vessels; and the rectus abdominis flap (transverse or vertical), which is also a myocutaneous flap that relies on the blood supply from the deep inferior epigastric vessels.

One of the most important parts of the coordinated effort of neovaginal surgery is postoperative care. Plastic surgeons play a key role in ensuring that the flap survives in the immediate postoperative period. The gynecology team should be responsible for postoperative vaginal dilation teaching and follow-up to ensure that the patient dilates properly and upsizes her dilator appropriately over the postoperative period. In our practice, our advanced practice clinicians often care for these patients and are responsible for continuity and dilation teaching. Patients have easy access to these clinicians, and this enhances the postoperative experience. Referral to a pelvic floor physical therapist knowledgeable about neovaginal surgery also helps to ensure that the dilation process goes successfully. It also helps to have office days on the same days as the plastic surgery team that is following the patient. This way, the patient may be seen by both teams on the same day. This allows for good patient communication with regard to aftercare, as well as a combined approach to teaching the trainees involved in the case. Coordination with pelvic floor physical therapists on those days also enhances the patient experience and is highly recommended.

Combining gyn and urogyn procedures with plastic surgery

While there are no data on combining gynecologic and urogynecologic procedures with plastic

reconstructive surgeries, a team approach to combining surgeries is possible. At our center, we have performed tubal ligation, ovarian surgery, hysterectomy, and sling and prolapse surgery in patients who were undergoing cosmetic procedures, such as breast augmentation and abdominoplasty.

Gender affirmation surgery also can be performed through a combined approach between gynecologists and plastic surgeons. Our gynecologists perform hysterectomy for transmasculine men, and this procedure is sometimes safely and effectively performed in combination with masculinizing chest surgery (mastectomy) performed by our plastic surgeons. Vaginoplasty surgery (feminizing genital surgery) also is performed by urogynecology specialists at our center, and it is sometimes done concurrently at the time of breast augmentation and/or facial feminization surgery. Case order. Some plastic surgeons vocalize concerns about combining clean procedures with clean contaminated cases, especially in situations in which implants are being placed in the body. During these cases, communication and organization between surgeons is important. For instance, there should be a discussion about case order. In general, the clean procedures should be performed first. In addition, separate operating tables and instruments should be used. Simultaneous operating also should be avoided. Fresh incisions should be dressed and covered before subsequent procedures are performed.

Incision placement. Last, planning around incision placement should be discussed before each case. Laparoscopic and abdominal incisions may interfere with plastic surgery procedures and alter the end cosmesis. These incisions often can be incorporated into the reconstructive procedure. The most important part of the coordinated surgical effort is ensuring that both surgical teams understand each other's respective surgeries and the approach needed to complete them. When this is achieved, the cases are usually very successful.

Creating collaboration between obstetricians and gynecologic specialists

The impacts of pregnancy and vaginal delivery on the pelvic floor are well established. Urinary and fecal incontinence, pelvic organ prolapse, perineal

pain, and dyspareunia are not uncommon in the postpartum period and may persist long term. The effects of obstetric anal sphincter injury (OASI) are significant, with up to 25% of women experiencing wound complications and 17% experiencing fecal incontinence at 6 months postpartum. ^{15,16} Care of women with peripartum pelvic floor disorders and OASIs present an ideal opportunity for collaboration between urogynecologists and obstetricians. The Cleveland Clinic has a multidisciplinary Postpartum Care Clinic (PPCC) where we provide specialized, collaborative care for women with peripartum pelvic floor disorders and complex obstetric lacerations.

Our PPCC accepts referrals up to 1 year postpartum for women who experience OASI, urinary or fecal incontinence, perineal pain or dyspareunia, voiding dysfunction or urinary retention, and wound healing complications. When a woman is diagnosed with an OASI at the time of delivery, a "best practice alert" is released in the medical record recommending a referral to the PPCC to encourage referral of all women with OASI. We strive to see all referrals within 2 weeks of delivery.

At the time of the initial consultation, we collect validated questionnaires on bowel and bladder function, assess pain and healing, and discuss future delivery planning. The success of the PPCC is rooted in communication. When the clinic first opened, we provided education to our obstetrics

colleagues on the purpose of the clinic, when and how to refer, and what to expect from our consultations. Open communication between referring obstetric clinicians and the urogynecologists that run the PPCC is key in providing collaborative care where patients know that their clinicians are working as a team. All recommendations are communicated to referring clinicians, and all women are ultimately referred back to their primary clinician for long-term care. Evidence demonstrates that this type of clinic leads to high obstetric clinician satisfaction and increased awareness of OASIs and their impact on maternal health.¹⁷

Combined team approach fosters innovation in patient care

A combined approach to the care of the patient who presents with gynecologic conditions is optimal. In this article, we presented examples of care that integrates gynecology, urogynecology, gynecologic oncology, colorectal surgery, plastic surgery, and obstetrics. There are, however, many more existing examples as well as opportunities to create teams that really make a difference in the way patients receive—and perceive—their care. This is a good starting point, and we should strive to use this model to continue to innovate our approach to patient care.

References

- Ramaseshan AS, Felton J, Roque D, et al. Pelvic floor disorders in women with gynecologic malignancies: a systematic review. *Int Urogynecol J.* 2018;29:459-476.
- Nakayama N, Tsuji T, Aoyama M, et al. Quality of life and the prevalence of urinary incontinence after surgical treatment for gynecologic cancer: a questionnaire survey. BMC Womens Health. 2020;20:148-157.
- Cascales-Campos PA, Gonzalez-Gil A, Fernandez-Luna E, et al. Urinary and fecal incontinence in patients with advanced ovarian cancer treated with CRS + HIPEC. Surg Oncol. 2021;36:115-119.
- Davidson ER, Woodburn K, AlHilli M, et al. Perioperative adverse events in women undergoing concurrent urogynecologic and gynecologic oncology surgeries for suspected malignancy. *Int Urogynecol J.* 2019;30:1195-1201.
- Spence-Jones C, Kamm MA, Henry MM, et al. Bowel dysfunction: a pathogenic factor in uterovaginal prolapse and stress urinary incontinence. Br J Obstet Gynaecol. 1994;101:147-152.
- Thompson JR, Chen AH, Pettit PD, et al. Incidence of occult rectal prolapse in patients with clinical rectoceles and defecatory dysfunction. Am J Obstet Gynecol. 2002;187:1494-1500.
- Jallad K, Gurland B. Multidisciplinary approach to the treatment of concomitant rectal and vaginal prolapse. Clin Colon Rectal Surg. 2016;29:101-105.
- Kapoor DS, Sultan AH, Thakar R, et al. Management of complex pelvic floor disorders in a multidisciplinary pelvic floor clinic. Colorectal Dis. 2008;10:118-123.
- 9. Weinberg D, Qeadan F, McKee R, et al. Safety of laparoscopic

- sacrocolpopexy with concurrent rectopexy: peri-operative morbidity in a nationwide cohort. *Int Urogynecol J.* 2019;30:385-392.
- Geltzeiler CB, Birnbaum EH, Silviera ML, et al. Combined rectopexy and sacrocolpopexy is safe for correction of pelvic organ prolapse. *Int* J Colorectal Dis. 2018;33:1453-1459.
- Wallace SL, Syan R, Enemchukwu EA, et al. Surgical approach, complications, and reoperation rates of combined rectal and pelvic organ prolapse surgery. *Int Urogynecol J.* 2020;31:2101-2108.
- Smith PE, Hade EM, Pandya LK, et al. Perioperative outcomes for combined ventral rectopexy with sacrocolpopexy compared to perineal rectopexy with vaginal apical suspension. Female Pelvic Med Reconstr Surg. 2020;26:376-381.
- Casas-Puig V, Bretschneider CE, Ferrando CA. Perioperative adverse events in women undergoing concurrent hemorrhoidectomy at the time of urogynecologic surgery. Female Pelvic Med Reconstr Surg. 2019:25:88-92.
- Cordeiro PG, Pusic AL, Disa JJ. A classification system and reconstructive algorithm for acquired vaginal defects. *Plast Reconstr* Surg. 2002;110:1058-1065.
- Lewicky-Gaupp C, Leader-Cramer A, Johnson LL, et al. Wound complications after obstetric anal sphincter injuries. Obstet Gynecol. 2015;125:1088-1093.
- Borello-France D, Burgio KL, Richter HE, et al; Pelvic Floor Disorders Network. Fecal and urinary incontinence in primiparous women. Obstet Gynecol. 2006;108:863-872.
- Propst K, Hickman LC. Peripartum pelvic floor disorder clinics inform obstetric provider practices. Int Urogynecol J. 2021;32:1793-1799.

Dismantling racism in your personal and professional spheres

The death of George Floyd and its aftermath has forced a reckoning in this country, with many reexamining the historical underpinnings of racism and why we have not moved further along in addressing major racial inequities, like health. We challenge you to continue to address anti-Black racism in your practice and surroundings.

Cassandra Carberry, MD, MS; Annetta Madsen, MD; Olivia Cardenas-Trowers, MD; Oluwateniola Brown, MD; Moiuri Siddique, MD; and Blair Washington, MD, MHA

n May 25, 2020, George Floyd was murdered by a White police officer who held his knee on Floyd's neck for nine and a half minutes. Nine and a half minutes. George Floyd was not the first Black person killed by law enforcement. He has not been the last. Much has been written about why Floyd's murder sparked unprecedented worldwide outrage despite being far from unprecedented itself. We cannot be so

naive as to think what happened was new, and we should not ignore the tireless work that so many have been doing to fight racism up to this point. But for many who have been stirred to do something for the first time, especially White people, the question has been,

"What do I do?" The answer is, do the work.

This article is centered on anti-Black racism with a focus on medicine. We recognize that there is racism against other minoritized groups. Each group deserves attention and to have their stories told. We recognize intersectionality and that an individual has multiple identities and that these may compound the marginalization they experience. This too deserves attention.

However, we cannot satisfactorily explore any of these concepts within the confines of a single article. Our intention is to use this forum to promote further conversation, specifically about anti-Black racism in medicine. We hope it compels you to begin learning to recognize and dismantle racism in yourself and your surroundings, both at home and at work.

Being a health care provider requires lifelong learning. If we practiced only what we learned in training, our patients could suffer. So we continually seek out updated research and guidelines to best treat our patients. Understanding how racism impacts your patients, colleagues, family, and friends is your responsibility as much as understanding guidelines for standards of care. We must resist the urge to feel this is someone else's duty. It

Dr. Carberry is Associate Professor, Clinician Educator, of Ob/Gyn, Alpert Medical School of Brown University. She completed the Brown Advocates for Social Change and Equity Fellowship and is a Member, Brown task force to redesign medical school core competency to focus on racial justice; Brown task force for sex and gender inclusivity; Diversity, Equity, and Inclusion Committee, Department of Ob/Gyn; and AUGS Diversity and Inclusion Task Force.

Dr. Madsen is a global women's health advocate engaged in international medicine and service.

Dr. Cardenas-Trowers is involved in several local and national organizations that mentor underrepresented minoritized (URM) individuals, particularly those interested in careers in medicine. She served as an invited speaker and panelist for the 2019 Student National Medical Association Region 10 Medical Education Conference.

Dr. Brown is Member, AUGS Disparities Special Interest Group and Diversity and Inclusion Task Force.

Dr. Siddique is Member, AUGS Disparities Special Interest Group.

Dr. Washington is Clinical Associate Professor, Elson S. Floyd College of Medicine at Washington State University; Chair, Inclusion, Diversity, Equity, Accessibility, and Sensitivity Committee at MCG Health; Collaborator in an award-winning STEAM program for URM middle and high school girls; and a global women's health advocate engaged in international medicine and service.

The authors report no financial relationships relevant to this article.

doi: 10.12788/obgm.0123

is the job of each and every one of us. We must do the work.

Race is real but it's not biologic

It is imperative to understand that race is not a biologic category. Phenotypic differences between humans do not reliably map to racial categories. Racial categories themselves have morphed over the centuries, and interpretation of race has been litigated in this country since its founding.1 People who identify as a given race do not have inherent biology that is different from those who identify as another race. It may then be tempting to try to erase race from our thinking, and, indeed, the idea of being "color blind" was long worn as a badge of honor signifying a commitment to equality. So this is the tension: if race exists, it must be a biologic trait and with it must go other inherent traits. But if race is not a biologic entity, perhaps it is not real and, therefore, should be ignored. In fact, neither is true. Race is not based on genetic or biologic inheritance, but it is a social and political categorization that is real and has very real ramifications. As we will discuss further, race does have a biologic impact on individuals. The mechanism by which that happens is racism.

What is racism, and who is racist?

Various definitions of racism have been offered:

- prejudice, discrimination, or antagonism directed against a person or people on the basis of their membership in a particular racial or ethnic group, typically one that is minoritized or marginalized²
- a belief that race is a fundamental determinant of human traits and capacities and that racial differences produce an inherent superiority of a particular race³
- the systemic oppression of a racial group to the social, economic, and political advantage of another; a political or social system founded on racism and designed to execute its principles.³

The common themes in these definitions are power, hierarchy, and oppression. Racism is a fabricated system to justify and reinforce power for some and disenfranchisement for others based on race. The system is pervasive and beneficial to the group that it serves.

Ibram X. Kendi posits that all racism is structural racism: "'Institutional racism' and 'structural racism' and 'systemic racism' are redundant. Racism itself is institutional, structural, and systemic."⁴ This is not saying that individuals don't enact racism, but it emphasizes that racism is not the action of a "few bad apples." Furthermore, it underscores that race was created to bolster power structures ensuring White dominance. The racism that has followed, in all of its forms, is both because these ideas were created in the first place and to perpetuate that ongoing power structure.⁴

Dorothy Roberts, JD, writes in her book *Fatal Invention* that, while grouping people and creating hierarchy has always happened amongst humans, there is a specific history in our country of using race to create and perpetuate the dominance of White people and the subjugation of Black people.

Kendi also asserts that there is no neutrality with regard to racism—there is racist and antiracist: "A racist: one who is supporting a racist policy through their actions or inaction or expressing a racist idea. An antiracist: one who is supporting an antiracist policy through their actions or expressing an antiracist idea." He describes all people as moving in and out of being racist and antiracist, and states "being an antiracist requires persistent self-awareness, constant self-criticism, and regular self-examination." In thinking about race and racism in this way, we all must grapple with our own racism, but in so doing are taking a step toward antiracism.

History is important

Among the most important things one can do in a journey to dismantle racism is learn the history of racism.

The infrastructure and institutions of our nation were created on a foundation of slavery, including the origins of American medicine and gynecology. Physicians in the antebellum South performed inspections of enslaved people's bodies to certify them for sale.⁵ The ability to assign market value to a Black person's body was published as an essential physician competency.⁵

Gynecology has a particularly painful history with regard to slavery. By 1808, transatlantic slave trade was banned in the United States and, as Dr. Cooper Owens describes in her book *Medical*

Bondage: Race, Gender, and the Origins of American Gynecology, this made reproduction of enslaved people within the United States a priority for slave owners and those invested in an economy that depended on slavery.6 Gynecologists were permitted unrestricted access to enslaved women for experiments to optimize reproduction. Many of these physicians became prominent voices adding to the canon of racialized medicine. Medical journals themselves gained reverence because of heightened interest in keeping enslaved people alive and just well enough to work and reproduce.6 Today, we hold sacred the relationship between a patient and their physician. We must understand that there was no such relationship between a doctor and an enslaved person. The relationship was between the doctor and slave owner. 6,7 Slavery does not allow for the autonomy of the enslaved. This is the context in which we must understand the discoveries of gynecologists during that time.

Despite the abolition of slavery with the passage of the 13th amendment, racist policies remained ubiquitous in the United States. Segregation of Black people was codified not only in the Jim Crow South but also in the North. Interracial marriage was outlawed by all but 9 states.

While there are numerous federal policies that led to cumulative and egregious disadvantage for Black Americans, one powerful example is redlining. In 1934 the Federal Housing Administration was created, and by insuring private mortgages, the FHA made it easier for eligible home buyers to obtain financing. The FHA used a system of maps that graded neighborhoods. Racial composition of neighborhoods was overtly used as a component of grading, and the presence of Black people led a neighborhood to be downgraded or redlined.8,9 This meant Black people were largely ineligible for FHA-backed loans. In The Color of Law, Richard Rothstein writes, "Today's residential segregation in the North, South, Midwest, and West is not the unintended consequence of individual choices and of otherwise well-meaning law or regulation but of unhidden public policy that explicitly segregated every metropolitan area in the United States. The policy was so systematic and forceful that its effects endure to the present time."9

Though these specific policies are no longer in place, many correlations have been found between historically redlined neighborhoods and higher rates of diseases today, including diabetes, hypertension, asthma, and preterm deliveries. ¹⁰ These policies also have played a role in creating the wealth gap—directly by limiting the opportunity for home ownership, which translates to intergenerational wealth, and indirectly by the disinvestment in neighborhoods where Black people live, leading to reduced access to quality education, decreased employment opportunities, and increased environmental hazards.^{8,11}

Health disparities

The numerous health disparities, more accurately termed health inequities, suffered by racial minority groups is well documented.¹²

COVID-19 death and vaccination-rate inequities. Early in the COVID-19 pandemic, data emerged that racial minorities were being disparately affected. 13 In December 2020, the Centers for Disease Control and Prevention (CDC) reported that Hispanic or Latino, non-Hispanic Black, and non-Hispanic American Indian or Alaska Native people had all died at higher rates than White Americans.14 These racial groups had higher hospitalization rates across age groups and, after adjusting for age, rates of hospitalization were 2.8 to 3.4 times higher. 15 We are continuing to learn what factors contribute to these inequities, but it has highlighted how racist policies have led to disparate access to health care, or even clean air, clean water, and nutritious food, and left communities of color more vulnerable to severe illness and death from COVID-19. With the advent of vaccines for COVID-19, we continue to see racial disparities as Black Americans have the lowest rates of vaccination. 16 All of these inequities have to be understood in the context of the racist structures that exist in our society. As medical providers, we must understand and help to dismantle these structures.

Pregnancy-related mortality (PRM) inequities. A powerful example of a persistent health inequity in our field is the well-known disparity in pregnancy-related mortality when examining this outcome by race. Per CDC analysis of data on PRM from 2007–2016, Black women died at a rate 3.2 times higher than White women. This disparity was even greater in patients older than 30 years of age. When they compared rates while controlling for the highest level of education, the disparity is

even more pronounced: PRM rate for those with a college degree or higher was 5.2 times greater for Black people compared with White people. ¹⁶ The CDC also reported that, in 2018, the infant mortality for non-Hispanic Black infants was 10.8 per 1,000 live births, compared with 4.6 per 1,000 live births for White infants. This is a rate 2.4-times higher for Black infants. ¹⁷ Dr. Cooper Owens and Dr. Fett note in their article, "Black maternal and infant health: Historical legacies of slavery," that in 1850 this rate was 1.6-times higher for Black infants, which means the inequity was worse in 2018 America than in the antebellum South. ⁵

The role of patient experience

As discussed, governmental policies have created persistent inequities in wealth, access to health care, and exposure to environmental toxins, among many other disparities. However, the data finding that highly educated Black pregnant patients suffer markedly increased risk of maternal death, indicate that inequities cannot be attributed only to education or lack of access to health care. This is where some will once again lean on the idea that there is something inherently different about Black people. But if we know that race was created and is not an empiric category, we must consider the social variables impacting Black patients' experience.

As Linda Blount, President and CEO of the Black Women's Health Imperative, put it, "Race is not a risk factor. It is the lived experience of being a Black woman in this society that is the risk factor."18 So how much of these inequities can be accounted for by differential treatment of Black patients? There is, for example, data on the disproportionately lower rates of Black renal transplant recipients and inordinately higher rates of amputations among Black patients. 19,20 None of us wants to think we are treating our Black patients differently, but the data demand that we ask ourselves if we are. Some of this is built into the system. For example, in their article "Hidden in plain sight-Reconsidering the use of race correction in clinical algorithms," Vyas and colleagues outline a list of calculators and algorithms that include race.²¹ This means we may be using these calculators and changing outcomes for our patients based on their race. This is only one example of racism hidden within guidelines and standards of care.

The existence of racism on an interpersonal level also cannot be denied. This could lead to differential care specifically, but also can manifest by way of the toll it takes on a patient generally. This is the concept of allostatic load or weathering: the chronic stress of experiencing racism creates detrimental physiologic change. There is ongoing research into epigenetic modifications from stress that could be impacting health outcomes in Black populations.

What is the work we need to do?

Become educated. We have discussed taking the initiative to learn about the history of racism, including the legacies of slavery and the ongoing impact of racism on health. This knowledge is foundational and sometimes transformative. It allows us to see opportunities for antiracism and gives us the knowledge to begin meaningful conversations.

Take action. We must take inventory within our lives. What are our spheres of influence? What are our resources? Where can we make an impact? Right now, you can take out a pen and paper and write down all the roles you play. Look for opportunities in personal interactions and daily routines. Unfortunately, there will be many opportunities to speak up against racism—although this is rarely easy. Find articles, podcasts, and workshops on upstander training. One framework to respond to microaggressions has been proposed by faculty at Boston University Medical Center using the acronym LIFT (Lights on, Impact vs Intent, Full stop, Teach).22 It advises highlighting, clarifying, and directly addressing problematic comments with such statements as "I heard you say..." or "What did you mean by that comment?", or a more direct "Statements like that are not OK with me," or a teaching statement of "I read an article that made me think differently about comments like the one you made..."22 How and when to employ these strategies takes deliberate practice and will be uncomfortable. But we must do the work.

Practice empathetic listening. In a podcast discussion with Brené Brown on creating transformative cultures, Aiko Bethea, a leader in diversity and equity innovation, implores listeners to believe people of color.^{23,24} Draw on the history you've learned and understand the context in which Black people live in our society. Don't brush

off your Black friend who is upset about being stopped by security. That wasn't the first time she was in that situation. Take seriously your patient's concern that they are not being treated appropriately because of being Black. At the same time, do not think of Black people as a monolith or a stereotype. Respect people's individuality.

Teach our kids all of this. We must also find ways to make change on a larger scale—within our practices, hospitals, medical schools, places of worship, town councils, school boards, state legislatures, and so on. If you are in a faculty position, you can reach out to leadership to scrutinize the curriculum while also ensuring that what and how you are teaching aligns with your antiracist principles. Question the theories, calculators, and algorithms being used and taught. Inquire about policies around recruitment of trainees and faculty as well as promotion, and implement strategies to make this inclusive and equitable. If you run a practice, you can ensure hiring and compensation policies are equitable. Examine patient access and

barriers that your minoritized patients are facing, and address those barriers. Share resources and tools that you find helpful and develop a community of colleagues to develop with and hold one another accountable.

In her June 2020 article, *An Open Letter to Corporate America, Philanthropy, Academia, etc: What now?*, Bethea lays out an extensive framework for approaching antiracism at a high level.²⁵ Among the principles she emphasizes is that the work of diversity, equity, and inclusion should not be siloed and cannot continue to be undervalued. It must be viewed as leadership and engaged in by leadership. The work of diversity, equity, and inclusion for any given institution must be explicit, intentional, measured, and transparent. Within that work, antiracism deserves individual attention. This work must center the people of color for whom you are pursuing equity. White people must resist the urge to make this about them.²⁵

Drs. Esther Choo and J. Nwando Olayiwola present their proposals for combating racism in two

2020 Lancet articles.^{26,27} They discuss anticipating failure and backlash and learning from them but not being derailed by them. They emphasize the need for ongoing, serious financial investment and transformation in leadership. They also point out the need for data, discouraging more research on well-established inequities while recommending investigating interventions.^{26,27} If you are in leadership positions, read these articles and many more. Enact these principles. Make the investment. If you are not in such a position, find ways to hold your

organization's leadership accountable. Find ways to get a seat at the table and steer the conversation. In medicine, we have to make change at every level of our organizations. That will include the very difficult work of changing climate and culture. In addition, we have to look not only within our organizations but also to the communities we serve. Those voices must be valued in this conversation.

Will this take time? Yes. Will this be hard? Yes. Can you do everything? No. Can you do your part? Yes! Do the work. ■

References

- Roberts D. Fatal Invention: How Science, Politics and Big Business Re-create Race in the Twenty-First Century. The New Press: New York, New York: 2012.
- Definition of racism in English. Lexico web site. https://www.lexico.com/en/definition/racism. Accessed July 30, 2021.
- Definition of racism. Merriam-Webster web site. https://www .merriam-webster.com/dictionary/racism. Accessed July 30, 2021.
- 4. Kendi IX. *How To Be an Antiracist*. One World: New York, NY; 2019.
- Cooper Owens D, Fett SM. Black maternal and infant health: historical legacies of slavery. *Am J Public Health*. 2019;109:1342-1345. doi: 10.2105/AJPH.2019.305243.
- Cooper Owens D. Medical Bondage: Race, Gender, and the Origins of American Gynecology. University of Georgia Press: Athens, GA; 2017.
- 7. Washington H. Medical Apartheid: The Dark History of Medical

- Experimentation on Black Americans from Colonial Times to the Present. Anchor Books: New York, NY; 2006.
- 8. Coates T. The case for reparations. *The Atlantic*. 2014;313.5:54-71.
- Rothstein R. The Color of the Law: A Forgotten History of How our Government Segregated America. Liveright Publishing Corporation: New York, NY; 2017.
- Nelson RK, Ayers EL; The Digital Scholarship Lab and the National Community Reinvestment Coalition. American Panorama, ed. Not Even Past: Social Vulnerability and the Legacy of Redlining. https://dsl.richmond.edu/socialvulnerability. Accessed July 30, 2021.
- Williams DR, Lawrence JA, Davis BA. Racism and health: evidence and neededresearch. Annu Rev Public Health. 2019;40:105-125. doi:10.1146/annurev-publhealth-040218-043750.
- 12. Institute of Medicine (US) Committee on Understanding and

- Eliminating Racial and Ethnic Disparities in Health Care. Smedley BD, Stith AY, Nelson AR, eds. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care.* National Academies Press: Washington, DC; 2003.
- Artiga S, Corallo B, Pham O. Racial disparities in COVID-19: key findings from available data and analysis. KFF web site. August 17, 2020. https://www.kff.org/racial-equity-and-health-policy/issue-brief/racial-disparities-covid-19-key-findings-available-data-analysis/. Accessed July 30, 2021.
- Disparities in deaths from COVID-19. Centers for Disease Control and Prevention web site. https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/racial-ethnic-disparities/disparities-deaths.html. Updated December 10, 2020. Accessed July 30, 2021.
- Disparities in COVID-19 hospitalizations. Centers for Disease Control and Prevention web site. https://www.cdc.gov/coronavirus/2019 -ncov/community/health-equity/racial-ethnic-disparities/disparities -hospitalization.html. Updated July 28, 2021. Accessed July 30, 2021.
- COVID data tracker. Centers for Disease Control and Prevention web site. https://covid.cdc.gov/covid-data-tracker/#vaccination -demographics-trends. Accessed July 30, 2021.
- Infant mortality. Centers for Disease Control and Prevention web site. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm. Last reviewed September 2020. Accessed July 30, 2021.
- Roeder A. America is failing its Black mothers. Harvard Public Health. Winter 2019. https://www.hsph.harvard.edu/magazine/magazine article/america-is-failing-its-black-mothers/. Accessed July 30, 2021.
- Ku E, Lee BK, McCulloch CE, et al. Racial and ethnic disparities in kidney transplant access within a theoretical context of medical

- eligibility. *Transplantation*. 2020;104:1437-1444. doi: 10.1097/TP .0000000000002962.
- Arya S, Binney Z, Khakharia A, et al. Race and socioeconomic status independently affect risk of major amputation in peripheral artery disease. J Am Heart Assoc. 2018;7:e007425. doi: 10.1161 //IAHA.117.007425.
- Vyas DA, Eisenstein LG, Jones DS, et al. Hidden in plain sight reconsidering the use of race correction in clinical algorithms. N Engl J Med. 2020;383:874-882. doi: 10.1056/NEJMms2004740.
- A Curriculum to Increase Faculty Engagement in the CLER Program.
 Boston University Medical Center web site. https://www.bumc.bu.edu/facdev-medicine/files/2020/05/Bystander-Training-for-Microaggressions-Executive-Summary.pdf. Accessed July 30, 2021.
- Brenè with Aiko Bethea on inclusivity at work: the heart of hard conversations. Spotify web site. https://open.spotify.com/episod e/3IODQ37EurkFf0zMNhazqI?si=wJIZgzpWTDCF1QVhwAdhiw. Accessed July 30, 2021.
- Brenè with Aiko Bethea on creating transformative cultures. Spotify web site. https://open.spotify.com/episode/7K47gQF5Ruc7MAXxEN q6jl?si=X0pzd2NnRAGwMD-bkyg-VQ. Accessed July 30, 2021.
- Bethea A. An open letter to corporate America, philanthropy, academia, etc.: What now? June 1, 2020. https://aikobethea.medium. com/an-open-letter-to-corporate-america-philanthropy-academiaetc-what-now-8b2d3a310f22. Accessed July 30, 2021.
- Choo E. Seven things organisations should be doing to combat racism. *Lancet*. 2020;396:157. doi:10.1016/S0140-6736(20)31565-8.
- Olayiwola JN, Choo E. Seven more things organisations should be doing to combat racism. *Lancet*. 2020;396:593. doi: 10.1016/S0140 -6736(20)31718-9.

SS16