

# Obstetrician–gynecologists' counseling regarding postpartum sterilization

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**Introduction:** Obstetrician–gynecologists (ob-gyns) play a prominent role in counseling patients regarding sterilization, offering alternative contraception, fulfilling sterilization requests, and referring patients if unable to provide the service due to a personal moral belief. Therefore, we sought to better characterize the counseling practices of ob-gyns with respect to postpartum sterilization.

**Materials and methods:** This is a prospective, electronic survey-based study of 1,000 ob-gyn members of the American College of Obstetricians and Gynecologists, half of whom are members of the Collaborative Ambulatory Research Network.

**Results:** A total of 188 of 957 surveyed physicians (19.6%) opened and responded to the survey, after accounting for exclusions. Age (31.9%), body mass index (28.7%), and medical history (27.1%) were the three most frequent reasons for an ob-gyn reported declining to perform sterilization in a patient requesting sterilization. Medical history (36.2%), parity (31.9%), and availability of alternative contraception (27.7%) were the three most frequent reasons that an ob-gyn reported recommending postpartum sterilization in a patient not requesting sterilization.

**Conclusion:** Our study has identified both medical and nonmedical factors that impact ob-gyns likelihood to recommend either toward or against postpartum sterilization. Nonmedical factors included clinical logistical issues such as availability of the operating room as well as considerations of a patient's age, parity, gestational age at delivery, and whether the husband was in agreement. Physicians should be cautious of inappropriately blending medical decision-making with paternalistic counseling.

**Keywords:** postpartum sterilization, contraception, counseling, patient–physician relationship, bias

## Introduction

In the United States, ~14.3% of females utilize sterilization as their primary method of contraception.<sup>1</sup> Many of these sterilizations are performed in the postpartum state by obstetrician–gynecologists (ob-gyns). However, disparities exist in accessing postpartum sterilization. For example, there is a greater variation across hospitals in the frequency of postpartum sterilization for women eligible for Medicaid than for those covered by private insurance.<sup>2</sup> In addition, women of color (WOC) of low socioeconomic status (SES) are less likely to undergo postpartum sterilization than white women of low SES or women with private insurance.<sup>3</sup> Policy-level barriers for women with Medicaid insurance to obtain postpartum sterilization have been reported.<sup>4,5</sup>

However, what has been less well studied is the role of the ob-gyn in counseling and providing access to postpartum sterilization. WOC and low SES report that their providers are the barriers to obtain sterilization and may perceive contraceptive counseling by ob-gyns as disrespectful and paternalistic.<sup>3,6</sup> Furthermore, a national

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survey of obstetricians found that physicians often attempted to dissuade patients from undergoing sterilization, though nearly all obstetricians would help the patient to obtain the procedure if she persisted in her request.<sup>7</sup>

Therefore, given the prominent role that ob-gyns play in counseling patients regarding sterilization, offering alternative contraception, fulfilling sterilization requests, and referring patients if unable to provide the service due to a personal moral belief, we sought to better characterize the counseling practices of ob-gyns with respect to postpartum sterilization.<sup>4</sup> We hypothesized that there would be an inverse relationship between those factors that impacted the likelihood of an ob-gyn to recommend toward or against sterilization.

## Materials and methods

This was a prospective, electronic survey-based study of 1,000 ob-gyn members of the American College of Obstetricians and Gynecologists (ACOG), half of whom are members of the Collaborative Ambulatory Research Network (CARN). CARN members are a demographically representative group of practicing ACOG members and were randomly selected. Non-CARN members were selected by utilizing proportionate random sampling by ACOG district. Sample size and sampling were determined given past experience with CARN studies. Initial questions were modeled after past surveys regarding sterilization and contraceptive practices. The instrument was pilot-tested by four ob-gyns of varying demographic and practice characteristics.

A unique survey link was sent electronically to all participants along with an introductory email message. The email message included a brief, explanatory material as well as a notification that completing the survey was deemed as consent to participate. Five reminder emails and links were sent on a weekly basis when a participant had not completed the survey previously. Responses were anonymous. Incomplete responses were excluded.

The survey asked questions about physicians' training, demographic and practice characteristics, and patient population. Respondents were asked regarding their contraceptive counseling practices. Respondents were also asked questions regarding barriers for postpartum sterilization specific to the Medicaid population as presented previously.<sup>8</sup> Descriptive analyses were performed using R Version 3.3.0 with Wilcoxon rank sum tests for continuous and  $\chi^2$  for categorical variables, respectively.<sup>9</sup> This study was approved by the institutional review board of MetroHealth Medical Center.

## Results

Of the 1,000 ob-gyns surveyed, 34 opted out and nine did not have valid email addresses; 165 of 468 (35.3%) CARN members and 53 of 489 (10.8%) of non-CARN members opened the survey. Thirty respondents opened the survey but did not complete any questions, leaving a final study sample of 188 respondents (19.6% response rate) (Table 1). Given the lack of significant difference in individual or practice demographic characteristics between CARN and non-CARN members in this survey, the survey responses were analyzed collectively. Women (median age 44.0 years)

**Table 1** Cohort characteristics: demographic and clinical characteristics of the respondents

	CARN member	Non-CARN members	p-value
Number of subjects	143	45	
Age (years)	50.3 (11.8)	49.0 (11.3)	0.553
Female sex	89 (65.0)	27 (65.9)	1.000
Years in practice	20.3 (12.9)	19.4 (12.6)	0.674
Race			0.525
White	115 (80.4)	34 (75.6)	
Black	4 (2.8)	1 (2.2)	
Hispanic	5 (3.5)	0 (0.0)	
Asian	10 (7.0)	5 (11.1)	
Other	9 (6.3)	5 (1.1)	
Practice			0.599
General ob-gyn	97 (67.8)	35 (77.8)	
Gynecology only	13 (9.1)	2 (4.4)	
Obstetrics only	6 (4.2)	1 (2.2)	
Maternal-fetal medicine	14 (9.8)	2 (4.4)	
Other	1 (2.2)	5 (3.5)	
Practice type			0.498
Solo	8 (5.8)	3 (7.3)	
Group	47 (34.3)	18 (43.9)	
Multispecialty	25 (18.2)	10 (24.4)	
Hospital	20 (14.6)	5 (12.2)	
University	29 (21.2)	5 (12.2)	
Other	8 (5.9)	0 (0.0)	
Practice location			0.608
Urban	64 (47.1)	16 (39.1)	
Suburban	39 (38.7)	17 (41.5)	
Rural	32 (23.6)	8 (19.6)	
Deliveries per month	14.4 (20.1)	16.2 (30.4)	0.663
Patients with federal insurance	38.5 (24.9)	33.8 (27.1)	0.312
Region practicing			0.486
Midwest	34 (23.8)	12 (26.7)	
Northeast	34 (23.8)	12 (26.7)	
South	36 (25.3)	8 (17.8)	
West	32 (22.4)	8 (17.8)	

**Note:** Data are presented as n (%) or mean (SD).

were significantly younger than men (median age 58.0 years) in our study ( $p < 0.001$ ).

Respondents were prompted to weigh factors impacting their decision not to perform sterilization in patients requesting sterilization (Table 2). Age (31.9%), body mass index (BMI, 28.7%), and medical history (27.1%) were the three most frequent reasons an ob-gyns reported declining to perform sterilization in patients requesting sterilization. Availability of the operating room (15.4%) and competing clinical demands (9.6%) were also reasons for ob-gyns reported declining postpartum sterilization requests. Patients' race or income were not reported as reasons an ob-gyn would decline a request, though 8.5% would decline if the patients' husbands were not in agreement, 5.3% due to a patients' insurance, and 1.6% due to the educational level of the patients; 2.7% of surveyed ob-gyns reported their personal religion as a reason for declining a patient's postpartum sterilization request.

Respondents were also asked how often those same factors impact their decision to perform sterilization in a patient not initially requesting sterilization. Medical history (36.2%), parity (31.9%), and availability of alternative contraception (27.7%) were the three most frequent reasons an ob-gyn reported recommending postpartum sterilization in a patient not initially requesting sterilization. Patients' race (1.1%), education level (1.1%), income (0.5%), and insurance

(2.1%) were reported as reasons to recommend sterilization. About 4.3% of surveyed ob-gyns reported that their personal religion influenced their decision to recommend postpartum sterilization for a patient who was not initially requesting sterilization.

## Discussion

Our study has identified factors that impact ob-gyns likelihood to either recommend toward or against postpartum sterilization. Physicians reported recommending sterilization or declining to perform sterilization most often for medical reasons such as patients' medical history, BMI, and surgical history. Such factors may alter either the risk of surgery (recommend against sterilization) or subsequent pregnancy (recommend toward sterilization). While counseling and shared decision-making regarding future pregnancy planning should involve an evidence-based discussion of risks, care should be taken to counsel in a manner that is empathetic, does not resort to scare tactics, and is non-stigmatizing of medical diseases such as obesity or patients' specific desire for more children.

However, recommendations were also based on non-medical but clinical logistical issues such as physicians' competing clinical responsibilities or lack of operating room availability. The ACOG recommends that postpartum sterilization be viewed as an urgent rather than routine procedure given the time-sensitive nature of the surgery and the clinical and public health ramifications of unintended short interval pregnancies after non-fulfilled postpartum sterilization requests.<sup>10</sup> Thus, physicians should attempt to prioritize sterilization requests among non-urgent clinical duties, and hospitals should create guidelines to ensure access to operating rooms and staff to complete sterilization requests. In our study, 27.7% of surveyed ob-gyns reported recommending sterilization due to the availability of alternative contraception. Physicians and health systems also have a responsibility to ensure access to comprehensive contraceptive options, including long-acting reversible contraception (LARC).

Furthermore, concerns regarding patients' age, availability of alternative contraceptive methods, parity, risk of regret, and the patients' husbands' viewpoint may reflect a paternalistic overriding of patient autonomy, though difficult to assess completely in a survey-based study.<sup>11</sup> This finding is corroborated in a prior survey of ob-gyns regarding sterilization practices.<sup>7</sup> While increasing maternal age may prompt concern for medical readiness of subsequent pregnancy, almost one third of ob-gyns surveyed would

**Table 2** Reasons for declining to perform sterilization in a woman requesting sterilization and reasons for recommending sterilization in a woman not initially requesting sterilization

Reason	Declining to perform (%)	Recommending sterilization (%)
Age	31.9	22.3
Body mass index	28.7	18.1
Medical history	27.1	36.2
Availability of alternative contraception	22.4	27.7
Parity	21.8	31.9
Risk of regret	18.6	10.1
Surgical history	17.0	20.7
Operating room availability	15.4	3.2
Preterm birth	13.3	6.4
Competing clinical demands	9.6	2.7
Husband not in agreement	8.5	7.4
Insurance	5.3	2.1
Respondents' religion	2.7	4.3
Education	1.6	1.1
Race	0.0	1.1
Income	0.0	0.5

**Note:** Proportion of respondents who often or always decline to perform sterilization when requested by a patient and proportion of respondents who often or always recommend sterilization for a patient not initially requesting sterilization.

decline to perform sterilization due to patients' young age. Though the risk of regret after sterilization does have an inverse relationship to age at sterilization, physicians should avoid imposing paternalistic cut-offs in age requirements.<sup>11</sup> Similarly, imposing arbitrary threshold values for a patient's parity, BMI, or gestational age of delivery over or under which sterilization is recommended is not appropriate. Rather, shared decision-making involves educating patients regarding statistics of risk of regret based on maternal age or preterm birth, for example, but respecting well-informed patients' wishes regarding their procreative liberty.

A minority of ob-gyns responded that the insurance status, education level, race, and income of the patients impacted their counseling for sterilization. This finding adds to the literature that WOC and low SES both have limited knowledge regarding alternatives to sterilization such as LARC as well as noting provider-level barriers in obtaining sterilization.<sup>3,6,12</sup> Though our results differ from a study of audio recorded contraceptive counseling visits in which differences by patients' race or education level were largely not found, the impact of audio recording on providers' counseling was unclear and some differences were noticed (such as less likely to mention LARC based on parental education level).<sup>13</sup> While whether the insurance limitations of the respondents were due to the federal policy on sterilization for those patients with Medicaid insurance is unclear from the survey, patients' non-clinical characteristics such as education level and income or presumptions based on race and fertility should not impact physician counseling. Finally, while individual ob-gyns may decline to perform postpartum sterilization due to their conscientious beliefs, it is their obligation to prospectively discuss their limitation with their patients during antenatal care and provide a timely referral to an ob-gyn able to perform the surgery.

Despite the limitations of a low response rate, the presence of possible response bias in survey-based research, the possible skewing of results given the high proportion of CARN members as respondents, as well as limitations in understanding complex decision-making via survey methodology, this study builds on results from previously reported studies by assessing the factors that motivate physician counseling regarding postpartum sterilization.

## Implications of practice and/or policy

This study provides the first characterization of factors that impact the ob-gyns counseling of patients either toward or against postpartum sterilization. Given the demonstrated lack of access to postpartum sterilization, especially for WOC

and/or low SES, it is important to address the physician-level barriers. While the majority of factors that influenced counseling in our study were medical in nature such as patients' medical history or surgical history, non-medical factors were also included. Clinical logistical issues point to a necessity for ob-gyns to treat postpartum sterilization as an urgent, rather than a routine procedure as well as for hospitals to investigate routes to improve access to operating rooms and staff. Finally, ob-gyns must be conscious when social considerations (such as whether the husband was in agreement, education level, race, income, among others) supplant medical decision-making with potentially paternalistic counseling.

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