"Everything I Know I Learned from My Mother...or Not": Perspectives of African-American and White Women on Decisions About Tubal Sterilization

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BACKGROUND: African-American women have had higher rates of female sterilization compared to white women since its emergence as a contraceptive method. The reasons underlying this observed racial difference are unknown.

OBJECTIVES: The goals of this study were to (1) explore what factors shape black and white women's decisions about tubal sterilization as a contraceptive method and (2) generate hypotheses about the relationship of race to the decision-making process.

DESIGN: We conducted six focus groups stratified by tubal sterilization status and race. During each of the audio-recorded sessions, participants were asked to discuss reasons that women choose sterilization as a contraceptive method.

PARTICIPANTS: The participants of the study were 24 African-American women and 14 white women.

APPROACH: Transcripts of the sessions were qualitatively analyzed with particular attention to factors that might be unique to each of the two racial groups.

RESULTS: Personal factors shaped black and white women's decisions regarding tubal sterilization. Preference for a convenient, highly effective contraceptive method was the main reason to get a tubal sterilization for women of both racial groups. We also identified socio-cultural differences that might explain why black women are more likely than white women to choose tubal sterilization over other contraceptive methods. An unanticipated, but clinically important, finding was that women often reported feeling that their doctors and the health-care system served as barriers to obtaining the desired procedure.

CONCLUSION: Socio-cultural differences may help explain why black and white women choose different contraceptive methods.

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INTRODUCTION

In the United States (US), black women have had higher rates of female sterilization compared to white women since its emergence as a contraceptive method.[1–8] According to the most recent National Survey of Family Growth, which provides nationally representative data of women aged 15–44 years, 22% of black women have been sterilized compared to 15% of white women.[7] Tubal sterilization is the leading contraceptive method for black women, while the birth control pill is the method most often used by white women.[7] The reasons underlying this racial difference are unknown. While tubal sterilization is a highly effective method of contraception, the prevalence of regret has been reported to be as high as 26% [9,10] and is experienced more often by minority women.[2,10–14] The history of involuntary sterilization of poor and minority women in the US during the 1960s and 1970s[6,15–17] further underscores the importance of examining why differences in tubal sterilization rates exist between minority and non-minority women today. Qualitative methodology is a useful approach to begin understanding what factors influence a woman's decision-making process in an effort to ensure that the decision to undergo sterilization is a woman's own, well-informed choice.

Choosing a contraceptive method is a complex process that presumably involves the interplay among patient preferences, patient-doctor communication, and health-care system-level factors. While patient preferences have been shown to vary by race/ethnicity with regard to invasive medical procedures,[18,19] there is no literature exploring whether or why black and white women prefer different contraceptive methods. Although patient preferences may play a central role in the racial difference in tubal sterilization rates, other factors may include provider recommendations and/or a health-care system biased in favor of sterilization compared to other contraceptive methods for black women. There is no published literature that explores

the contraceptive decision-making process of women in the US and how race may affect this process.

The goals of this qualitative study were to (1) explore what factors shape African-American and white women's decisions about tubal sterilization as a contraceptive method and (2) generate hypotheses about the relationship of race to the decision-making process.

MATERIALS AND METHODS

Study Sample

Study participants were recruited using the following mechanisms: (1) posting flyers in the obstetrics and gynecology clinic of Magee-Womens Hospital and the primary care clinic of Montefiore Hospital (University of Pittsburgh Health System); (2) mailing recruitment letters using the Magee-Womens Hospital Research Registry; (3) posting advertisements on the Internet (i.e., Craig's list).

Women responding to advertisements for the study were screened for eligibility over the phone. Women were considered eligible for the study if they were between the ages of 18–50, had either undergone tubal sterilization or reported that they had considered the procedure, and self-identified as black/African-American or white. Women were ineligible if they did not speak English. Eligible women were invited to participate. A follow-up letter confirming the date, time, and location of the focus group session was sent to each participant, and a reminder telephone call was placed the night before the scheduled focus group. Dinner was provided at each of the sessions, and each participant received a $40 gift card.

Focus Group Conduct

Because there is no published medical literature about how women make decisions regarding choice of contraceptive method, a qualitative study is a particularly useful approach to gain insight about this unexplored topic area.[20,21] In qualitative studies, thematic saturation, or redundancy of ideas, is the main principle guiding sample size.[20,21] Many researchers suggest that the saturation point for focus groups is usually reached by four to six sessions. Further, focus groups should occur in non-threatening environments with a group of individuals who share certain characteristics to allow for a good group dynamic and greater self-disclosure.[20] As such, we chose to conduct six focus group sessions stratified by tubal sterilization status and race to create homogeneity within each group while allowing for potentially different perspectives across the full set of groups. Four of the sessions comprised women who had undergone sterilization (two with black and two with white women), and two sessions comprised women who had considered tubal sterilization (one with black and one with white women).

The focus group discussions were conducted from October 2007 to January 2008 at the University of Pittsburgh, and each session lasted approximately 90 min. An introductory script containing all of the elements of informed consent was read to the participants prior to the beginning of each session. The sessions were guided by a trained facilitator with experience in qualitative research methods. Six open-ended questions were developed by the principal investigator (SB) and a group of advisors to facilitate discussions about the factors that shape women's thoughts and decisions about tubal sterilization as a contraceptive method (Appendix A). All sessions were audiorecorded and transcribed verbatim except that participants' names were replaced with codes for confidentiality. At the end of each session, participants were asked to fill out a brief sociodemographic questionnaire. The study was approved by the University of Pittsburgh Institutional Review Board.

Focus Group Analysis

The focus group transcripts were coded according to concepts of grounded theory.[20,21] Two coders (SB and CN) independently read each transcript in its entirety to identify factors that shape African-American and white women's decisions about tubal sterilization as a contraceptive method. Distinct comments were assigned codes indicating emerging factors. The coders met to compare their codes and develop a coding scheme. An iterative process of rereading and recoding transcripts was used to refine the coding scheme. A co-investigator (KR) with vast experience in qualitative research methods was available to adjudicate any differences in interpretation and to review the coding scheme. By applying the final coding scheme to all transcripts, the coders were able to identify central factors that shape decisions about tubal sterilization and recognize factors that might be unique to each of the racial groups. Thematic saturation was achieved by the fifth focus group. Because clinical decision making is a product of patient-, provider-, and system-level factors,[22] we chose to organize the emergent factors under these over-arching categories. Representative quotations were selected from the transcripts to illustrate the factors identified. ATLAS.ti 5.0 (Scientific Software Development GmbH, Berlin) was used to facilitate data management throughout this process.

RESULTS

Among 59 respondents, 50 were eligible and able to attend the scheduled focus group session, and 38 participated in the 6 focus group sessions (74% response rate). Table 1 shows the sociodemographic characteristics of the 37 women who completed the questionnaire by race and tubal sterilization status. Overall, black women had lower education levels and income and were more likely to rely on public insurance compared to white women.

Although the focus groups were stratified by race and sterilization status, women who had not undergone sterilization did not present perspectives that were significantly different than women who had already undergone sterilization. Rather, these women seemed to represent an earlier stage in the process of obtaining the procedure. Therefore, we combined these two groups within each race category for our results.

We found that all the factors that shaped African-American and white women's decisions about tubal sterilization were personal (patient-level) factors. These are discussed below with representative quotations shown in Table 2. An unanticipated, but clinically important, finding was that women did not identify their provider or the health-care system as influencing factors in the sterilization decision-making process, but rather

Table 1. Sociodemographic Characteristics of the Focus Group Participants (n=37)

Characteristic	African-American participants			White participants		
	All women (n=24)	No TS (n=10)	With TS (n=14)	All women (n=13)	No TS (n=5)	With TS (n=8)
Age in years, mean (range)	36.1 (20–48)	34.5 (20–48)	37.2 (27–48)	34.5 (25–49)	31.6 (25–37)	36.4 (30–49)
Education						
< HS	1 (4.2%)	0	1	0	0	0
HS or GED	5 (20.8%)	4	1	2 (15.4%)	1	1
Some college	9 (37.5%)	2	7	4 (30.8%)	0	4
College degree or higher	9 (37.5%)	4	5	7 (53.8%)	4	3
Marital status						
Single	11 (45.8%)	6	5	1 (7.7%)	1	0
Married	6 (25.0%)	2	4	6 (46.1%)	2	4
Divorced/ separated/ widowed	3 (12.5%)	0	3	1 (7.7.%)	0	1
Cohabiting	4 (16.8%)	2	2	5 (38.5%)	2	3
Annual household income, $						
<20,000	11 (45.8%)	4	7	1 (7.8%)	1	0
20,000–50,000	10 (41.7%)	5	5	7 (53.8%)	1	6
>50,000	3 (12.5%)	1	2	5 (38.5%)	3	2
Insurance						
Public*	7 (30.4%)	1	6	1 (7.7%)	0	1
Private/ HMO	15 (65.2%)	8	7	12 (92.3%)	5	7
None	1 (4.3%)	0	1	0	0	0
Parity						
0 children	1 (4.2%)	1	0	4 (30.8%)	3	1
1–2 children	9 (37.5%)	5	4	5 (38.5%)	2	3
>3 children	14 (58.3%)	4	10	4 (30.8%)	0	4
Mean no. of children (range)	2.7 (0–6)	1.9 (0–4)	3.2 (2–6)	2.0 (0–7)	0.8 (0–2)	2.7 (0–7)
Years since sterilization, mean (range)			7.8 (1–27)			5.4 (1–13)

TS = tubal sterilization; HS= high school; GED = general education diploma; HMO = health maintenance organization
Characteristics are shown in absolute numbers except for age and years since sterilization, for which the mean value and range are shown. Percentages are also shown in parentheses for the total cohort of women in each race.
**Includes Medicaid and Medicare*

identified them as barriers to getting the procedure once their decisions had been made. These provider- and system-level barriers are also discussed below with representative quotations shown in Table 3.

FACTORS THAT SHAPE STERILIZATION DECISION MAKING

Patient-level Factors

Factor 1: ***Done with child-bearing.*** The dominant reason that both African-American and white women chose sterilization was that they were finished with child bearing and wanted a convenient contraceptive method. Because sterilization offered permanency and required a one-time effort rather than ongoing or future contraceptive management, most women felt that this was a convenient and effective method of birth control. As one African-American woman explained, "It's carefree. You don't have to worry about a pill, a shot, or an IUD every 5 years. You know what I'm saying? It's permanent. All you have to do now is protect yourself from STDs." Women said that they were done with child-bearing for a variety of reasons including:

(1) *Reached desired family size and/or gender make-up.* The majority of participants (both African American and white) stated that they had reached their desired nuclear family size as the primary reason for being done with child-bearing. African-American women also commonly spoke about having achieved the desired gender make-up of their family. Participants made statements such as, "Two boys, two girls...it's even. It's balanced and whatever. I'm done" and "I wanted my girl. I got my girl. I'm done."

(2) *Age.* A prevalent theme among African-American women was that they did not want to have children at, what they perceived to be, an older age. Some believed that an older mother was not as capable of addressing the needs of young children. Others explained that they wanted to focus on their own well-being at older ages. One 34-year-old African-American woman said, "I'm sexually active and I don't want a child at this old age. I'm already a grandma. I'm done." Few white women explicitly stated that their age was an influencing factor. White women who cited age as a possible influence expressed that having a child at an older age would be more tiring, and one woman feared having a high-risk pregnancy. On the other hand, a 30-year-old white woman who did not want to have any children said that it was her young age that was an impetus to get sterilized: "Instead of having to deal with birth control for 15–20 years...I would do something permanent so I didn't have to worry."

(3) *Difficulties associated with child-rearing.* The financial strain of child-rearing was brought up by both groups as a reason to end fertility. In addition, African-American women often spoke about the inherent difficulties of raising children, especially as single mothers. Many of

Table 2. Factors That Shape Sterilization Decision Making with Representative Quotations

Factors	African-American participants	White participants
Patient-level factors:		
Done with child-bearing		
(1) *Reached family size and/or make-up*	"I got lucky, I had a boy and a girl. What more can I have?"	"I thought, I'm getting this done. I was content with one child"
(2) *Age*	"I feel like a woman 40 and over having a child is just selfish…because you cannot put into a child's childhood at 50 what you can at 20, 25"	"You don't want to have a 4, a 5, a 3, and a 10 year old. And I'm old. Tired. And I just couldn't imagine having another baby."
(3) *Difficulties associated with child-rearing*	"I'm struggling. I'm 30. I'm struggling with three because I'm a single parent" "Kids are expensive. Just getting them everything they want. All their wants and needs. Trying to pay the bills and get them in daycare. It just got to be too much" "It's hard. And especially if the dad ain't no good. That plays another purpose. You can't raise the kids by yourself"	"I like the fact that I have two and can do things and like not have five kids…and not be able to go to this one's game or miss something… the time that you get to spend with them is just more enjoyable. And then, you know, kids do put a lot of strain on a marriage too so that factor. And then… financially…I like to take one huge trip a year. Well, you kind of can't do that with five kids"
Sense of control	"Having had your tubes tied does allow you to kind of proceed with the rest of your life" "And just to take control over your situation, you know, your vision, your goal for your life" "I got pregnant when I was 35…That can happen to me again. I don't want that. No"	"My husband was fixed, but I was going through a divorce…I wanted to be sexually liberated and not worry about birth control and having a child" "I have more independence. I know that sounds really weird being tied down with 7 kids, but I actually do feel like I have more independence having my tubes tied. I don't have to worry about something happening, you know, from one month to the next"
Family influence	"I didn't consult my other half…he didn't know that I was going to have it done…I kind of just chose it because my mother was like well, you don't want to make a bunch of babies. I mean I had already been in a relationship for like 13, 14 years. So my mother's saying we don't want to have a bunch of kids"	"I'm kind of against it because my mother wants me to do it so bad…She's in the delivery room telling me to get my tubes tied. I'm like get out…" "I don't want kids. And everyone…in my family…they say you'll change your mind. Now you're just making me not want them more now"
Addictions	"My twins were born like at 2 pounds…My son had all kinds of breathing problems…They were products of addictions. And then I had the audacity to get pregnant again…she had to be a C-section…they couldn't get me clean long enough to put me under anesthetic because you can't be on cocaine and be anesthetized" "I didn't feel that I had a good life and I felt like I shouldn't bring children into the world I was living in"	

the women alluded to the fact that they had children outside of marriage and often spoke about the biological father being unsupportive or even negligent. One African-American participant stated, "You can't leave the kids in the house with their dad. He's shaking them up. Leave them dope dealing. I mean honestly. You have to be worried…You don't know what the dad and the girlfriend is doing." Another African-American woman said, "My two older children's father is dead and the two youngest is an idiot…So that also factored into my decision."

Factor 2: ***Sense of control.*** Both African-American and white women expressed a desire to control their own fertility and felt that sterilization would give them ultimate control in preventing future unwanted pregnancies. Many of the African-American women alluded to having had one or more unplanned pregnancies, and one woman said that this directly influenced her decision to get sterilized: "So that's why I chose to make it permanent. Because I didn't even want it to accidentally happen anymore." Another African-American woman said that she felt "relieved" after getting her tubes tied, "A peace within myself…I started having babies at 16…my mother had her first at 16. My daughter had her first at 16. And it was like a cycle…And now I have to deal with life and I have to prepare life for her…I see all these things popping up in life, you know, and not being able to maintain control because—not only because of me, but the world that we live in, it doesn't make it easy for us to enjoy life. And so when we're busy trying to survive, you can't really enjoy what life is really all about." Many of the African-American women spoke about a sense of heightened fertility among women in their family and even of their race: "usually in our community…we'll end up with babies like our grandma did in our 50s."

While white women often had discussions with their partner about the decision to sterilize, African-American women frequently spoke about making the decision unilaterally even if they were in a relationship at the time. One African-American participant described her conversation with her

Table 3. Barriers to Undergoing Tubal Sterilization and Representative Quotations

Barriers	African-American participants	White participants
Provider-level barriers	"I prefer to get my tubes tied. No. I'm like what do you mean no…like I've been waiting all this time. I had my girl. I'm getting my tubes tied. I don't want to have no more kids. And it's like he was trying to get me on the shot. Everything else but my tubes tied" "And still to this day they need to do it. I mean they just like keep giving me the run around about doing it. They're not tied now and I'm like 30" "They really tried to talk me out of it…And I said this is what I want to do and you should honor my wishes" "I don't want any kids…I'm 39 now. I was asking since I was 34—it's going to be 5 years now…I figure for my 40th they might say yes…then I know what I'll probably hear is well, you know, after 40 your chance of conceiving goes down"	"I said I know I'm done…and he suggested—not talking me out of it, but he said, 'you didn't even have this baby yet. Let's see how it goes."…on the 6-month check-up and said, 'okay. I'm still wanting them done.'…and at that point, he's like that's fine. So he did give me suggestions on not to have it. But he finally—like the decision was mine" "Because of my age, he tried to talk me out of it. And I said look…you've been along for this journey all through…do you really want to deal with me pregnant again? And he said your paper is right here "I was in there for about 45 min trying to convince her that I knew what I was doing. That I didn't want children. And it just really bothers me because all of you who have children in the room, did they ask you the same things when you got pregnant?"
System-level barriers	"She never gave me the papers to sign. So when I went into my scheduled C-section for the second time, they're like we can't…complete this procedure because we need signatures and so many days"	"And [the hospital] apparently had guidelines that didn't fit my guidelines. So I ended up having a few more children and had to change hospitals"

husband prior to her procedure: "[He said] 'I'm not going there with you.' I didn't even ask you to. This is my decision I made." One white woman whose husband offered to get a vasectomy chose instead to get her tubes tied saying, "My husband…wanted to get it done just because it's an easier procedure for a man than it is a woman… But I knew I wanted it done just so I knew there was nothing else growing in me. I was done."

Factor 3: ***Addictions.*** One factor that emerged only in the African-American groups was that of personal drug, alcohol, and/or sex addictions that directly influenced the decision to get sterilized. One woman described her former drug addiction as follows: "I was pregnant with my son and didn't want him at the time because I was using. So I made the decision to get my tubes tied because I wasn't ready to give up my life at that particular time. So when it was time for me to go get my tubes tied, I missed it because I was too busy out there in the streets. Then I ended up getting pregnant with my daughter and using with her." She further explained that she ultimately underwent the procedure because "I know I'm not stable to take care of three and they can get on my nerves for me to go back out there." Another recovering drug addict explained, "Getting my tubes tied allowed me to focus on changing my life. Because I would probably still be out there finger popping…. at least I didn't have to worry about overcoming that hurdle once I had made it through that point in my life."

Factor 4: ***Family influences.*** African-American women were largely influenced by their family members (other than their spouse) when making the decision to undergo tubal sterilization. Many women spoke about their mother's specific advice. One woman who had three children while in the throes of drug addiction spoke about her family making the decision for her: "My dad said 'Look, I'm old. I raised you and I have to raise them, tie it up.' My grandmother came to the hospital and…[she] just made the decision and in our family we respect the hierarchy." In addition, many African-American women mentioned that family members had already been sterilized. "Everybody in my family had their tubes tied. That's the in thing…when you're done, that's what you do." In contrast, white women rarely spoke about getting specific advice from their mother or other family members, and when mentioned at all, it was usually to remark that "there was no discussing it with my mother" or that such input was unwanted.

BARRIERS TO UNDERGOING TUBAL STERILIZATION

Provider-level Barriers

None of the women reported that their doctors influenced their decisions regarding tubal sterilization as a contraceptive method. However, many of the women, especially African-American participants, expressed frustration that their doctor dissuaded them from getting the procedure once their decision had been made. On the extreme end of the spectrum were African-American women who had not had a sterilization procedure. Half of the women in this group said they wanted the procedure, but that their physicians had refused. As one participant described, "I asked again and they were like you're too young. She just said if you want it, you got to go to another doctor. It was just point blank…I'm 34. They will not tie my tubes." Many felt they were being pressured into using other contraceptive methods: "I'm 48…the doctor did say I'll be starting menopause soon so…it would be unnecessary for me to get my tubes tied…and she did try to force the IUD on me." Even among the women who had undergone a tubal sterilization, African-American women expressed a greater degree of

frustration with their doctors compared to white women. At one point, after listening to several women describing their physicians' reluctance to perform the procedure, one African-American woman said, "I need to start a research study...like okay, she couldn't get hers tied and she couldn't get hers tied—but now to tear into all us African-American women for having babies."

In response to these discussions about provider reluctance or refusal to perform the sterilization procedure, women in both the African-American and white groups demanded autonomy with regards to contraceptive decision making. One African-American woman summed up her feelings at the end of the focus group session, stating, "That was something that they kept saying to me. You know, if I did it, it would be something permanent. I always said back, yeah, but having a child is permanent too...It still comes down to...there has to be that respect for somebody making a decision for themselves."

System-level Barriers

None of the women reported that system-level factors (e.g, insurance issues, access) influenced their decisions. Most women reported that their insurance covered sterilization as well as other reversible methods. One African-American woman said that even if her insurance would not cover her sterilization procedure, this would not affect her decision: "Paying for the operation is a lot cheaper than paying for a kid. I mean children are highly expensive...even if insurance won't cover it, even if the operation costs like $5,000...you max out a credit card and you go for it."

However, several women reported system-level barriers once they had decided they wanted to undergo sterilization. These women complained about the difficulty of getting their consent papers signed in a timely manner, and one woman reported that her Catholic hospital's pro-life stance precluded her from getting the procedure done there.

DISCUSSION

The goals of this qualitative study were to (1) explore what factors shape black and white women's decisions about tubal sterilization as a contraceptive method and (2) generate hypotheses about the relationship of race to that decision-making process. We found that the dominant reason that women of both races chose tubal sterilization is that it offered a convenient and permanent contraceptive method once a woman had decided to end fertility. Participants of both races maintained that they had sought out sterilization of their own accord and reported that neither their physicians nor their insurance policies steered them towards this method of birth control. In fact, many of the women, particularly African-American women, voiced that their doctors and the system served as barriers to obtaining the procedure. This finding is consistent with prior studies that have examined barriers to obtaining postpartum sterilization.[23,24]

Because our study suggests that patient-level factors dominate the decision-making process, further exploration of differences in socio-cultural variables that might lead African-American women to choose sterilization over contraceptive methods is warranted. While it is tempting to disregard racial differences in health-care utilization that stem from patient preferences, it is important to understand the reasons for a given preference to ensure that it is not based on unequal access to information or culturally based health myths. As Kilbourne et al. argue, patient preferences should not necessarily be regarded as inviolable; some preferences may be appropriately amenable to intervention.[25]

One interesting finding of our study is the strong influence that family members have on African-American women's decisions regarding sterilization. Many African-American women explained that family members had the procedure and that they had, therefore, been familiar with it since an early age. Familiarity with a procedure is known to shape preferences[25] and, in this case, may perpetuate higher rates of tubal sterilization within the African-American community. A corollary is that there may be less familiarity with other, equally effective methods of contraception. Overall, there were a striking number of medically incorrect statements made during the focus group sessions about various forms of contraception. It remains unclear if African-American women have a higher degree of unawareness or misinformation about newer, reversible methods of long-term contraception that would lead them to continue to choose sterilization, a method with which they (and their family members) are familiar.

Other socio-cultural differences may stem from patterns of pregnancy. African-American women have higher rates of unintended pregnancy and more out-of-wedlock births compared to white women.[22,23] It is possible that prior unwanted pregnancies and/or unstable relationships motivated women to seek out a highly effective birth control method. Another factor may be that African-American women have children at younger ages.[26] Because these women presumably attain their desired family size at an earlier age, they may choose sterilization as a convenient method to get through their remaining reproductive years.

While patient-level factors were certainly the driving force in sterilization decisions, we should not ignore the prevalent and potentially concerning comments that women made about their encounters with their doctor regarding the procedure. African-American women in our study frequently expressed frustration that their doctors did not seem to respect their preferences and, in some cases, refused to perform the procedure. While intensive counseling is certainly appropriate for this procedure that permanently terminates a woman's child-bearing potential, many of the African-American women felt that their reproductive autonomy had been violated. Although a few Caucasian women also expressed similar frustration, it seemed to be of a lesser degree. It is unclear if this discrepancy was the result of actual differences in provider communication with black versus white women or differences in patient perception of standard counseling. Although no studies have specifically examined racial differences in patient-doctor interactions regarding contraceptive counseling, patient-doctor communication has been shown to vary by race in other areas of health care.[22,27–30] Because sterilization is an elective procedure, providers might be especially attune to potential negative outcomes (i.e, regret) and to patient characteristics that have been shown to predict regret (e.g., young age, black race).[9–14] Although we did not interview providers about what factors shape sterilization counseling, it is plausible that for some providers, patient characteristics may carry more weight than stated patient preferences.

LIMITATIONS

Although qualitative studies can provide in-depth insight about a particular subject matter, there are important limitations to consider. First, we studied women in the greater Pittsburgh area, and our findings may not be generalizable to women in other regions of the country. Second, although focus groups are an ideal methodology to examine sensitive subjects such as contraception, small sample size and data that are dependent on the interactions between participants and the interviewer pose challenges in interpreting the findings. Third, black participants typically reported lower income and education levels and were more likely to have public insurance compared to white participants, making socioeconomic status a potential confounder in our results. However, a prior study that examined interactions of race with socioeconomic factors on sterilization rates found that, among women in the more "advantaged" socioeconomic strata (i.e., women with private insurance, higher income, and education), black women were significantly more likely to undergo sterilization compared to white women.[8] These results suggest that sterilization decisions may be more influenced by cultural rather than socioeconomic factors since these women presumably have access to a wide range of contraceptive options yet still chose sterilization.[8] Lastly, it is possible that women may not have accurately recalled the influences surrounding a decision that, in some instances, had occurred several years ago.

CONCLUSION

These focus groups provided detailed descriptions of sterilization decision making, an area in which there is little published literature. Among African-American and white women who had either considered getting a tubal sterilization or had already undergone the procedure, we found that preference for a convenient, highly effective method of contraception was the dominant reason to get a tubal sterilization. We identified socio-cultural differences that might potentially explain why African-American women are more likely than white women to choose tubal sterilization over other effective methods of birth control. Future research is needed to explore the associations between these socio-cultural factors and a woman's contraceptive self-efficacy (i.e., her sense of control, decision making, and personal beliefs about the ability to effectively use contraception).[31] Direct observation studies to assess for racial variation in content or quality patient- provider communication about contraception are also needed. Such information can help to ensure that women make informed and satisfactory contraceptive decisions.

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APPENDIX A

Focus Group Interview Guide

Opening question:

(1) Tell me where you usually get information about contraception or birth control.

Key questions:

(2) Tell me how you first heard about tubal ligation.

Probes:

- What did you hear about it?

(3) What do you think are some reasons that a woman might get a tubal ligation?

(4) Tell me about how you came to the decision to get (or not get) your tubes tied.

Probes:

- When you were thinking about getting the tubal, what other birth control methods were you thinking about?
- What kinds of things were important to you when thinking about a birth control method?
- How did your experiences with other types of birth control influence your decision?
- Who, if anyone, influenced your decision? (e.g., partner, friends/family, health-care provider)
- How did your health-care provider influence your decision?
- What other things influenced your decision to undergo (or not undergo) tubal ligation? (e.g., insurance issues, availability)

(5) What advice would you give to doctors and nurses about how to advise or counsel a woman about getting their tubes tied?

Concluding question:

(6) Okay, going around the room one last time, is there anything you want to add that we have not discussed?