

## Research Article

# Perceived Control in Past Contraceptive Experiences as a Lasting Influence on Contraceptive Behavior: A Focus Group Exploration in Urban African American Women

**Ricco JA<sup>1\*</sup>, Attanasio L<sup>2</sup>, Bergeson K<sup>1</sup> and Prasad S<sup>1</sup>**<sup>1</sup>Department of Family Medicine and Community Health, University of Minnesota, USA<sup>2</sup>Division of Health Policy and Management, University of Minnesota, USA

**\*Corresponding author:** Ricco JA, Department of Family Medicine and Community Health, University of Minnesota, 1020 West Broadway, Minneapolis, MN 55411, USA, Tel: 6123028209; Fax: 6123028275; Email: ricco004@umn.edu

**Received:** July 24, 2014; **Accepted:** Aug 04, 2014;**Published:** Aug 08, 2014**Abstract**

**Introduction:** Marked racial disparities persist in the United States in both unintended pregnancy rates and contraceptive use despite widespread availability and efficacy of hormonal contraception. We explored barriers to contraceptive use among African American women using the Integrative Model of Behavioral Prediction as a framework for assessing the impact of past contraceptive experiences, including provider interactions, on behavior.

**Materials and Methods:** We conducted four focus groups consisting of 20 African American women between the ages of 18 and 50 years at an urban, underserved Family Medicine residency clinic. The Integrative Model of Behavioral Prediction was used as a theoretical framework to construct focus group questions. Using a deductive approach, we performed thematic analysis using QSR NVivo 10 to identify major themes.

**Results:** The major themes during focus groups were 1) a lack of perceived control at contraception initiation as an adolescent, 2) negative perceptions of provider encounters based on past experiences, and 3) contraceptive side effects as the most important factor influencing contraceptive choice.

**Conclusion:** Our findings suggest that a lack of perceived control in contraceptive decision-making during past clinical encounters may have a lasting influence on contraceptive behavior. Further research is needed to identify strategies to improve patient-provider communication in this population, particularly related to the first contraceptive encounter.

**Keywords:** Contraception, Health Disparities, African American, Self-Efficacy, Perceived Control, Women's Health

**Abbreviations**

PCMH: Patient-Centered Medical Home

**Introduction**

Despite widespread availability and efficacy of hormonal contraception, as many as 49% of all pregnancies in the United States are unintended [1,2]. Racial and socioeconomic disparities add to the burden of unintended pregnancy, with rates among African American adolescents at three times that of non-Hispanic White teens [3]. Racial disparities in contraceptive nonuse and high-risk usage gaps are consistent with the higher rates of unintended pregnancy among African American and Hispanic women, and persist even after adjustment for income and insurance coverage [4]. This suggests that factors other than cost and access drive contraceptive racial disparities- such as the perception of provider support and beliefs regarding safety and side effects [3-5].

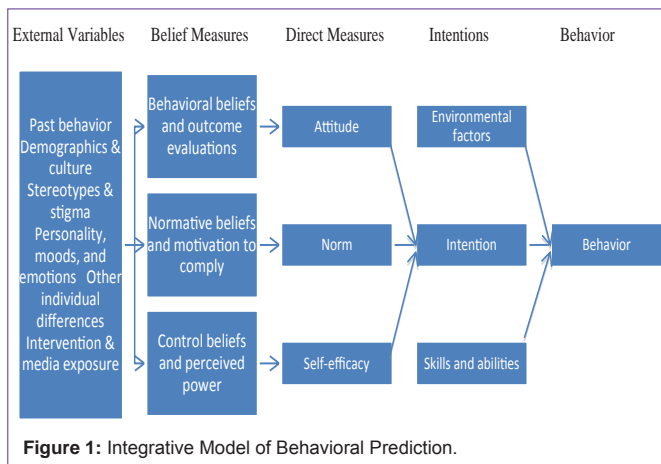
Previous research with African American women focused primarily on specific barriers to contraceptive use such as access, concern about the side effects and safety, or has explored the influence that social networks have as sources of contraceptive information [5-9]. Less is known about how perceived control and outcome

valuations in past contraceptive experiences affect contraceptive use behaviors in adult African American women. Furthermore, the role of the clinical encounter as a pivotal site for contraceptive decision-making that is influenced by interactions with the provider is relatively unexplored.

Studies that apply theoretical frameworks have been more successful in predicting contraceptive behavior [10-12]. The Integrative Model of Behavioral Prediction incorporates the concepts of perceived behavioral control and self-efficacy that have proven useful as predictors of both contraceptive intention and behavior in some populations (Figure1) (10,13,14). The purpose of this study is to explore barriers to contraceptive use among African American women using the Integrative Model of Behavioral Prediction as a framework for assessing the impact of past contraceptive experiences, including provider interactions, and attitudes on current behavior.

**Methods****Subjects and setting**

We conducted four focus groups over three months at an urban, underserved Family Medicine residency clinic in a large city in the upper Midwest. The clinic is a certified Patient-Centered Medical Home (PCMH) with a 30-year relationship with the community,



and serves a predominantly African American patient population (approximately 90%). The 40 providers, including 30 residents, see about 28,000 patient visits per year. We identified non-pregnant African American women between the ages of 18 and 50 years who receive their primary care from clinic as our target population for this study. Adolescents were not included as the goal was to assess the impact of past contraceptive experiences on current behavior.

**Instruments**

The Integrative Model of Behavioral Prediction (Figure 1) was used as a theoretical framework to guide focus group question design and organization. This model specifies that a behavior is likely to occur when one has a strong intention to perform the behavior, if a person has the required skills, and when there are no environmental barriers to performing the behavior. Intention is influenced by (a) a person’s attitude toward performing the behavior and is based on beliefs of positive and negative consequences; (b) the perceived norms within the community and among social supports; and (c) self-efficacy, a person’s perception that they can perform the behavior under challenging circumstances (13,15-17). We applied the model’s three intention domains (attitudes, norms, and self-efficacy) along with the concepts of perceived control over external barriers and skills (i.e. knowledge) to contraceptive behavior and decision-making, ultimately developing twelve open-ended focus group questions.

**Procedures**

Potential participants were approached by trained research assistants as they waited for clinic services and invited to participate in the study. All study aspects were reviewed and approved by the affiliated academic health center’s Institutional Review Board. After obtaining written informed consent, participants took part in a 90-minute focus group led by a trained moderator and held in a private meeting room in the clinic. The four focus groups ranged in size from 4-6 participants per session, and each session was first introduced by explaining the purpose and confidentiality of the setting to encourage the participants to speak freely. The groups were moderated by a female community health worker familiar with the clinic population. Open-ended questions were followed up as needed by prompts for clarification. Participants were encouraged to respond to and expand upon the other group members’ comments, and the moderators provided only occasional redirection as needed. Participants received \$25 gift cards to compensate for time and

transportation expenditures. Each session was audio taped, and investigators listened to these recordings after each group to identify emerging topics to be explored in greater detail at the later sessions through an updated interview script. The audio recordings were then transcribed verbatim and reviewed for accuracy against the recordings.

**Data analysis**

We performed thematic analysis using QSR NVivo 10 software [18] to facilitate data organization. We used a deductive approach to our analysis using a predetermined codebook [19,20]. An initial code list was developed based on subject areas of the focus group questions, which were based on domains of the Integrative Model. The predetermined codes were subsequently expanded for organizational clarity to account for subcategories (e.g. “concern about side effects” as a subcategory of “attitudes”). The expanded code list was then applied to all of the transcript data in a final review during which no new subcategories were identified. The principal investigator (JR) and a co-investigator (LA) independently reviewed and coded the four transcripts, and discrepancies were resolved through discussion. We aggregated the coded data based on the domains of the Integrative Model of Behavioral Prediction. Through coder consensus, major themes were identified in each domain based on frequency of mention and strength of enthusiasm by participants. We created operational definitions of themes, and identified representative quotes from the coded data to illustrate each theme.

**Results**

Twenty African American women age 18 to 42 participated in four focus groups during the summer of 2012. All participants received their regular primary care at the study location and resided in the surrounding community. The major themes that arose during focus group discussions were 1) a lack of perceived control at contraception initiation as an adolescent, 2) negative perceptions of provider encounters based on past experiences, and 3) Contraceptive side effects as the most important factor influencing contraceptive choice. The major themes and subthemes are presented along with illustrative quotations in (Table 1).

**Perceived control at contraceptive initiation**

In contraceptive behavior, self-efficacy is the perceived control over making contraceptive decisions and initiating the intervention. Participants who identified current self-efficacy still had overall negative views of contraceptive use, and many mentioned experiences about lack of perceived control at contraceptive initiation. Stories about the first encounter in a health care setting to discuss contraception as an adolescent merged into a common theme of insufficient input in the decision-making process. Several participants recalled being pressured by their family members to start contraception while they were teenagers, and felt like they lacked a voice in the decision-making process. Some women stated that their choice of a specific method was limited based on receiving insufficient information from their provider or due to receiving specific directions from family members on what to request.

In two of the focus groups, women spoke about a perceived gender differential in adolescent autonomy, seeing teenage males as more likely to visit a provider independently and teenage females

**Table 1:** Themes, Subthemes and illustrative quotations.

Theme	Subtheme	Illustrative Quotation
Perceived control at contraceptive initiation	Pressure from a family member	My mom put me on Depo when I was 14, I wasn't even having sex. But it was like forced on me, even if I didn't know about the other methods, it was "you go and get that" and that's it, 'cause I couldn't even consent if I wanted it or not.
		My mom [...] I feel like my mom pushed it on me as an embarrassment. Or not even an embarrassment, but she didn't approve of it, but she was like if you're going to keep doing it, I want you to go to the doctor's...
	Gender difference in autonomy	And I think it's different between boys and girls. I still brought my mom, when I was that age. And then, like, but my brother, he never had my mom and stuff in the room.
	Influence on daughter's decision-making	And that's what I got my daughter, my oldest two kids on now. Because my daughter just had a set of twins. It was her first pregnancy, so I think Depo is the best one.
Prior encounters with health care providers	Lack of knowledge among providers	I don't think they know much about birth control.
	Necessity for openness	I want all the facts. Don't sugar coat, I need to know every possibility of everything. 'Cause when I got this Implanon, the only thing she told me was "Oh you're gonna have irregular periods," whatever, whatever, but she didn't tell me all this other stuff that could go wrong.
		I'm letting you know everything, because I want you to feel like you're there, so you know what's going on. So I want you to speak to me openly.
	Providers dismissive of side effects	I talked to the doctor recently about birth control, like how I think Depo made it not easy for me to have kids, and so she's telling me, "well you only been married for like six months, so you shouldn't worry about not having kids, like, you just started trying." I been having sex since I was 16! And I ain't got pregnant ever! So she thinks she doesn't want to talk about the whole conversation. So she just brushed me off like, "well you don't need to go to another doctor, you don't need to see an OB/GYN so he can check you down there." 'Cause I'm like, there might be something wrong down there! You don't know.
	Provider willingness to assist with return to fertility	I don't have control over family planning, because, like I said, even though I did take the birth control pill and the shot, when I was ready to get off of it, and I've been off of it, it was like, they were there to help me get the birth control, but they're not here to help me figure out how I can have a baby.
Attitude regarding safety and side effects	Side effects as the primary contraceptive concern	That would be the most important thing that you wanna tell the patient is the side effects.
	Negative perceptions of Depo Provera	Well I tried the Depo shot and I gained a lot of weight and my hair fell out. And I didn't have a menstrual for like two or three months, and then it came back again and then I just completely stopped having them. So I don't like the Depo.
	Safety concerns about new methods	Well they had that commercial on TV about the Yaz one, and I was just thinking about how maybe they came out with it too fast and now it's being recalled.
	Concern about lasting effects on fertility	And after you start it, you can't get pregnant for a long time. I didn't get pregnant for years after I got one shot. I think you could take it only like once a year and not get pregnant.

as more likely to be accompanied by their mother or other family member. Participants viewed this as a barrier to open discussion about contraceptive options for some adolescent females. A few participants also confirmed the strong influence they exert on their adolescent daughters' contraceptive decision-making, providing examples of how they instructed their daughters to request a specific method from their provider based on their personal experiences and attitudes about the different options. Several mothers in the groups also questioned the necessity of privacy protection for contraception and sexual health counseling among their teenagers, expressing their preference to be present in the exam room throughout their adolescent's visit.

Overall, younger participants had negative perceptions of encounters to initiate contraception as a teen, mostly reflecting a feeling that they were not fully engaged in the decision-making process for a sensitive issue involving their own bodies. This was seen as a result of both unwanted parental involvement and provider paternalism. Older participants with experience as mothers or grandmothers expressed a feeling of responsibility to obtain contraception for their adolescents as a way to prevent unintended pregnancy.

**Prior encounters with health care providers**

Participants recalled past experiences with health care providers for contraceptive counseling, and while some had positive memories of these interactions, the majority responded critically about their experiences. In general, participants felt that providers were somewhat unreliable sources of contraceptive information, noting that their provider did not seem completely comfortable with

explaining the potential side effects of a contraceptive method. This was partly viewed as a lack of knowledge.

Participating women also expressed concern that providers are not completely forthright when it comes to explaining all of the potential side effects for a particular method, either due to a lack of time during the visit or to convince patients to follow recommendations. Several women mentioned "openness" when discussing what they wanted out of the discussion with their provider. Many participants felt that providers were dismissive of their complaints or concerns about contraception side effects when these were voiced during encounters. Attempts to provide reassurance about duration and severity of side effects on the part of providers were not well received by many women in the groups.

Several participants raised concern that, in general, while health care providers were open to discussing initiation of contraception, they did not seem to be as concerned about or willing to help women return to fertility and conceive. This perceived lack of self-efficacy for returning to fertility after contraceptive use combined with concerns about the lasting effects of some contraceptives on fertility served as a usage barrier for several women.

**Attitude regarding safety and side effects**

There was clear consensus among all focus group participants that the single most important factor influencing contraceptive method choice was the potential side effect profile of particular method. Depot medroxyprogesterone acetate (Depo Provera) was perceived as having the most side effects of all the hormonal contraceptive methods, and it was viewed most negatively across the four groups.

These views were based on personal experiences and from experiences shared within the social networks of the participants.

Participants frequently voiced safety concerns, with many reporting having seen commercials on television for lawsuits specific to hormonal contraceptive use. The group members expressed significant concern about the long-term effects of hormonal contraception on their bodies, and seemed wary of using a particular method for a long period of time as a result. Discussions in three out of the four groups revolved around the perception that new contraceptive methods are possibly rushed to the market before being fully tested in a broadly diverse population.

Overall, there was strong consensus among participants that contraceptive choice is a matter of personal best fit, and a contraceptive method needs to be tailored to individual physical and emotional factors. To this extent, most participants described a trial and error approach to finding the method that works best for them after considering input from their social networks.

## Discussion

The major themes identified throughout the four focus groups were a lack of perceived control at the first contraceptive encounter, an overall negative perception of past encounters with health care providers, and the importance of side effects and safety concerns in influencing contraceptive choice. We chose to use the Integrative Model of Behavioral Prediction as a framework for focus group exploration based on prior research demonstrating the utility of health behavioral models that include the concepts of perceived control or self-efficacy to predict contraceptive behavior [6,10,21,22].

However, our results reveal a more complex relationship involving the effect of perceived control and self-efficacy on contraceptive behavior than has previously been described. Despite acknowledging current self-efficacy and perceived control over contraceptive decision-making, several women in the focus groups described a lack of intention to use contraception. These same participants were also among the most vocal in describing overall negative experiences with their first contraceptive encounter with a healthcare provider. Perceived lack of control at contraceptive initiation seemed to have a lasting influence on their contraceptive intention despite current self-efficacy. To the best of our knowledge, this phenomenon has not been described before in contraceptive decision-making literature. While perceived control likely evolves over time, the lasting impact of a situation in which perceived control was lacking may continue to influence future decision-making. Our finding that current self-efficacy did not necessarily translate to contraceptive intention suggests the possibility of a more complex interaction between self-efficacy and past experiences in influencing behavior.

There was an overall negative perception of previous encounters with providers for contraceptive counseling among focus group participants. This was particularly concerning given the pivotal role of the clinical encounter in contraceptive decision-making. Providers were viewed as unreliable sources of contraceptive information due to a combined lack of knowledge and an unwillingness to openly discuss potential side effects. This concern about insufficient provider understanding of contraception is consistent with recent research showing a lack of contraceptive proficiency among U.S. medical

students and residents [23,24].

Providers were also seen as unwilling to openly discuss potential side effects and safety issues regarding contraceptive options, and were perceived as dismissive of concerns about experienced side effects. Potential explanations for not addressing side effect concerns ahead of time include not wanting to overwhelm patients with side effect information that could discourage contraceptive use, as well as unfamiliarity with the side effect and safety profiles of individual contraceptive methods [24-26]. By not addressing potential side effects in advance, there is the potential for discontinuation of contraceptive methods, likely increasing the risk for unintended pregnancy [25,26].

Perception that providers were dismissive of complaints regarding experienced side effects suggests an incongruity in how providers attempt to provide reassurance about common but transient side effects and how this is interpreted by women receiving the counseling. Again, this could potentially be avoided by improved prospective counseling at contraceptive initiation that frames the majority of possible side effects as self-limited and nonthreatening. Further research is required to assess the potential perceptions and biases that health care providers bring to contraceptive encounters in different populations as possible barriers to effective and sensitive contraceptive counseling [27,28]. Additional studies should also attempt to expand upon prior research on perceived racism and discrimination in health care to specifically explore negative first encounters in the health care setting among African Americans [29-31].

Focus group participants reached a clear consensus that the single most important factor influencing contraceptive choice was the side effect and safety profile of a given method. Personal experiences with side effects were associated with negative perceptions of contraception, particularly related to bleeding, weight gain, and hair loss. Participants viewed Depomedroxyprogesterone acetate (Depo-Provera) particularly negatively. Consistent with previous studies, stories about negative experiences with side effects circulate widely within our participants' social networks, and this had a strong influence on their perceptions of the various contraceptive methods [1,8]. Specific contraceptive myths and misperceptions also circulate widely within social networks, a phenomenon that has also been previously documented in similar populations [1]. Several participants had concerns about the long-term effects of hormonal contraception on their health, and specifically on future fertility. Given the primacy of contraceptive side effect and safety concerns in decision-making among the participants, we are particularly alarmed by our findings of distrust in provider counseling specific to side effects and perceived provider dismissal of safety concerns. The interactive effect of these two major themes has the potential to act as a significant barrier to contraceptive use in this population.

Our study has several limitations. First, given the qualitative design, the intent was not to measure an association between the opinions and attitudes expressed in the focus groups and actual contraceptive behaviors. We included only African American women in the groups, and as such our results may not be generalizable to the U.S. population. Furthermore, although our findings do somewhat parallel results from other studies of low-income, African American



women living in urban communities, the specific attitudes and perceptions that circulate in these women's social networks may be inherently community and culturally specific. However, we believe that we reached thematic saturation among women in this specific community, and our results are an important contribution to developing a framework to more fully understand contraceptive barriers. As we limited our sample to adults, we did not investigate barriers directly in an adolescent population that would be considered at high risk for unintended pregnancy. However, our finding of lasting deficits in contraceptive intention based on negative experiences as an adolescent is not impacted by this sampling limitation.

## Conclusion

The concept of perceived control in past formative contraceptive experiences as a lasting predictor for intention and behavior has several potential implications for practice and future research. Given the magnitude of the emotional and physical impact on a woman's life, the first encounter with a health care provider for contraceptive counseling should be approached with sensitivity on the part of the provider. Familiarity with hormonal contraceptive options and effects should be carefully assessed before delving into details regarding a specific choice. Counseling efforts should focus on identifying the personal best fit for an individual by finding the contraceptive method most suited to their physical and emotional needs. Future exploration of inter professional team models for delivery of contraceptive information in women new to a particular method may be useful. Clinical pharmacists and behavioral health practitioners may be able to play an expanded role in preemptively discussing potential side effects and safety issues prior to contraceptive initiation.

Confidential access and autonomy are also major concerns as evident by the shared focus group stories of parental pressure to choose a particular method and women being accompanied by family members to encounters despite feeling uncomfortable in that situation. Currently 25 states have restricted access to contraceptive services for minors based on certain criteria, and some states still require parental notification [26]. Based on our focus group findings, these measures likely serve as major barriers to establishing contraceptive self-efficacy early in the process, and limited evidence suggests that this may lead to increased adolescent pregnancy rates [32]. To this end, we agree with Jaccard and Levitz that research on evidence-based contraceptive counseling protocols in the primary care setting is sorely needed, especially focusing on self-efficacy, confidentiality and autonomy at contraceptive initiation [26].

Lastly, further research is needed to assess the effects of formal contraceptive and family planning training in medical school and residency to improve provider contraceptive knowledge and service delivery in different populations and settings. Our focus group participants perceived shortcomings in past provider interactions revolving around contraception knowledge that are consistent with recent literature. Our findings also suggest a role for expanding educational interventions beyond the individual seeking contraception to include their parents, peers, and other members of their social networks through cross-sectional community campaigns. Given our participants' descriptions of the close-knit relationships that many younger African American women have with their mothers and other women in this community, further research should focus

on potential interventions utilizing this strong relational structure to positively impact contraceptive self-efficacy among African American women.

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