



Journal of Health Disparities Research and Practice
Volume 10, Issue 3, Fall 2017, pp. 164-179

© 2017 Center for Health Disparities Research
School of Community Health Sciences
University of Nevada, Las Vegas

**Perceptions of Sexual Health Interventions among Urban,
Midwestern Female African American Youth**

Melissa Tibbits, PhD, University of Nebraska Medical Center
Marisa Rosen, MPH, University of Nebraska Medical Center
Shireen Rajaram, PhD, University of Nebraska Medical Center

**Corresponding Author: Melissa Tibbits, 984365 Nebraska Medical Center, Omaha,
NE, 68198-4365, mtibbits@unmc.edu

ABSTRACT

Pregnancy and sexually transmitted diseases (STDs) among youth ages 15-24 persist as important public health issues in spite of significant investments in the development and implementation of evidence-based preventive interventions. Further, female African American youth are disproportionately affected by teen pregnancy and STDs. The purpose of this study was to better understand female African American youth's perceptions of teen pregnancy and STDs, and the characteristics they desire in sexual and reproductive health interventions. Interviews with 19 African American females ages 13-24 were conducted. Results indicated that participants perceived teen pregnancy to be common, but STDs to be rare. Overall, participants desired more information about contraceptive methods and different types of STDs, and frequently noted youth facilitators in school and community-based programs who had experienced these issues would be more impactful than adult facilitators. Participants also suggested that parents and clinical providers should play larger roles in educating youth about teen pregnancy and STDs. Intervention developers should capitalize on the important role of peers, parents, and medical providers in female African American youths' lives by developing teen pregnancy and STD interventions that incorporate parents, peers, and medical providers in integral ways.

Keywords: teen pregnancy, STD, intervention

INTRODUCTION

Teen pregnancy and sexually transmitted diseases (STDs) among youth aged 15-24 persist as important public health issues in the United States. The teen birth rate consistently has declined over time and is at an all-time low due largely to increased contraceptive use among teens (Santelli, Lindberg, Finer, & Singh, 2007; Sedgh, Finer, Bankole, Eilers, and Singh, 2015). Despite these positive trends, the teen birth rate in the United States still is the highest of developed nations (Sedgh, Finer, Bankole, Eilers, and Singh, 2015), and there are important racial disparities. The teen birth rate for African American females is twice as high as the birth rate for White females (CDC, 2016).

African American females also are disproportionately impacted by STDs, of which rates are at an all-time high in the United States (CDC, 2015). Compared to White females aged 15-19, the chlamydia and gonorrhea rates for African American females were nearly 5 and 11 times higher, respectively (CDC, 2015). Across racial groups and genders, youth aged 15-24 account for half of all STDs cases (Satterwhite et al., 2013; CDC, 2015) and approximately one-quarter of new HIV infections (CDC, 2012). The incongruence between birth rates and STD rates can be partially explained by that fact that female youth who use highly effective pregnancy prevention methods such as long-acting reversible contraceptives are less likely to also use condoms (Bearinger & Resnick, 2003; Williams & Fortenberry, 2013).

In response to these persistent disparities, numerous evidence-based interventions focused on sexual and reproductive health have been developed to meet the needs of African American youth (Chin et al., 2012; Goesling, Coman, Trenhold, Terzian, & Moore 2014; NCPTUP, 2011; Robin et al., 2004). Currently, the U.S. Department of Health and Human Services Office of Adolescent Health has identified 35 evidence-based prevention programs that are effective at preventing sexual risk behaviors, teen pregnancy, and/or STDs (OAH, 2016). Of these, 11 are targeted to African Americans, and an additional 9 are targeted to African American females. Although the majority of evidence-based interventions targeted to youth of all races, ethnicities, and genders were designed to be implemented in schools or community organizations, most interventions specific to African American females were developed for use in clinical settings. The specific components and delivery methods of evidence-based interventions varies greatly by developer, but evidence-based interventions usually are delivered over several sessions and include information about abstinence as well as pregnancy and STD prevention-related knowledge (e.g., risk factors for pregnancy and STDs; contraceptive options; symptoms and consequences of STDs; STD testing and treatment), beliefs (e.g., consequences of teen pregnancy; effectiveness and desirability of condoms), intentions (e.g., pregnancy intentions in the context of other personal goals), and skills (e.g., how to use a condom; how to communicate with partners about sex; Kirby & Laris, 2009). In order to ensure that evidence-based interventions are widely used, national organizations such as the Department of Health and Human Services and the Centers for Disease Control and Prevention (CDC) have devoted significant funding to the large-scale dissemination of evidence-based interventions across the United States (Rolleri, Wilson, Paluzzi, & Sedivy, 2008; Koh, 2014).

Currently, most discussion aimed at explaining the discrepancies between evidence-based intervention availability and the ongoing racial/ethnic disparities in teen pregnancy and STD rates focuses on factors such as low intervention adoption due to insufficient community readiness and/or perceptions of community stakeholders that evidence-based programs are not locally appropriate, low implementation fidelity, and limited sustainability (Philliber & Nolte, 2008; Powers, Maley, Purington, Schantz, & Dotterweich, 2015; Rolleri, Fuller, Firpo-Triplett, Lesesne, Moore, & Leeks, 2014; Romero, Middleton, Mueller, Avellino, & Hallum-Montes, 2015). An additional explanation could be that evidence-based interventions, many of which were developed several years ago for use in specific settings, may not meet the current sexual and reproductive health needs of all female African American youth, or may be offered in settings or by individuals that do not appeal to youth. Therefore, the aims of the current study were to gain insight into female African American youths' perspectives about teen pregnancy and STDs and current and ideal intervention approaches in order to offer insight into next steps in the implementation and development of sexual and reproductive health interventions.

METHODS

We used a social constructivist paradigm in this qualitative research. In this paradigm, individuals develop subjective meaning of their experiences through their lived experiences, and therefore, researchers gather participant's view of a phenomena or event in their analysis and interpretation of the event (Creswell, 2013; Lincoln & Guba, 2000). Qualitative data for this study were collected as part of a larger initiative aimed at developing interventions to better serve youth of all genders and races/ethnicities in an urban, Midwestern city. The study was approved by the Institutional Review Board at the authors' university.

Recruitment

The research team partnered with three community agencies to recruit participants: an after school program that exclusively serves females; a non-profit focused on promoting social and economic equity; and two campuses of a community college. Select staff from partner agencies were trained about the purpose of the study and informed consent procedures, and were asked to recruit youth with diverse backgrounds from their client population to participate in the interviews. Youth who were interested in participating were provided with parent and youth consent forms and asked to sign-up for pre-arranged dates and times. Parent consent forms were collected by the partner agencies.

Upon arriving at the partner agencies on scheduled interview days, the interviewer reviewed the consent forms to ensure parental consent forms had been completed. All interviews were conducted in a private rooms at the partner agencies by the lead author or a graduate assistant with experience in qualitative research who was trained in the interview protocol by the lead author. Prior to conducting the interviews, the interviewer reviewed the informed consent form with the participant to verify understanding and consent. After completing the interview participants were asked to complete a brief survey with demographic questions, and were given a \$25 gift card for their participation. Participants were recruited until data saturation was achieved.

Participants

Nineteen African American females aged 13-24 ($M=16.74$; $SD=3.93$) participated in the study. All participants reported attending high school (58%), community college (32%), or middle school (10%). No participants were married, and most (78%) lived at home with their parent or legal guardian. A smaller percentage lived on their own (17%) or with relatives (5%).

Data Collection

The interviews lasted approximately 40 minutes. The following topics were discussed: perceptions of STDs and teen pregnancy in the community; knowledge of and opinions about local STD and teen pregnancy interventions; and ideal interventions. Participants were not asked about their own sexual behavior, pregnancies, or STIs.

Questions about perceptions of STDs and teen pregnancy in the community were designed to better understand participants' general beliefs that could guide the inclusion of specific intervention topics (e.g., activities that address the prevalence of teen pregnancy and STDs and motivations for getting pregnant). Questions included: How big of an issue is teen pregnancy in your school? How big of an issue is teen pregnancy in [name of city]? How big of an issue are STDs in your school? How big of an issue are STDs in [name of city]? What are the positive or negative consequences of pregnancy for teens? What are the consequences of STDs for teens and young adults?

Questions about knowledge of and opinions about local teen pregnancy and STD interventions included: What currently is being done to prevent teen pregnancy/STDs in your community or school? Where do most people your age go to get information about pregnancy/STD prevention? Are people your age satisfied with the information that is available? Why or why not?

Questions about ideal interventions included: What do you think should be done about teen pregnancy/STDs? What more should schools do? What more should doctors and clinics do? What more should adults do? What more should teens/young adults do? What could be done to get people your age involved in using some of the services and/or programs you've suggested?

Data Analysis

Interviews were audio recorded and professionally transcribed. We followed a thematic data analysis process (Braun and Clarke, 2006), and in the first phase, researchers read the transcripts multiple times to make sense of, interpret and better understand female African American youth's perceptions of teen pregnancy and STDs. We developed codes which are tags or labels assigned to organize segments of the data into meaningful chunks. The coding process was both deductive or theory-driven based on the three topic areas (e.g., perceptions of STDs and teen pregnancy in the community; knowledge of and opinions about local STD and teen pregnancy interventions, and ideal interventions), and inductive or data-driven based on categories or meaning that emerged from an in-depth analysis and interpretation of the data (Miles and Huberman, 1994; Creswell, 2013).

The study authors reviewed the codes and definitions for each of the codes and came to agreement on their meanings. All three separately "double-coded" three interviews with 90% coder

agreement. This exercise was done to ensure the reliability of the analysis across coders (Miles and Huberman, 1994; Creswell, 2013). The three researchers then split the remaining interviews and coded them independently for key themes. In the second phase, through further interpretation of the data, clusters of meaning were identified and codes were combined into broader categories or themes.

Interviews with 14-16 year olds (n=12; hereby referred to as “younger youth”) and 17-24 year olds (n=7; “hereby referred to as “older youth”) were analyzed separately since based on research evidence and a review of the data there was the potential for differences between these two groups in terms of knowledge of issues relating to STDs and pregnancy. Differences between groups are highlighted in the results section. Direct quotes from participants are included in italics to illustrate key themes presented below. All names used in the quotes are pseudonyms.

RESULTS

Perceptions of Teen Pregnancy and STDs

Most participants in both age groups considered teen pregnancy to be a moderate or big issue in their school and the broader community. Participants indicated that girls were becoming pregnant at younger ages, and that teen pregnancy was so common that teenagers were not surprised by it.

It's a big issue now. It's kids my age walking around pregnant. That's weird, because I'm not even close to being an adult. It's like we're just now starting high school. So it's kind of sad to see a lot of teen pregnancies around here. (14 year old)

Well there's a lot of people my age that are getting pregnant and stuff. It's like it's not a big deal anymore. “Oh, she's pregnant too?” (16 year old)

It's a big issue, and at my high school it wasn't really like – because I graduated in 2012. So at my high school, it's like if you seen somebody that was pregnant it was just like “Wow! They're young.” But now it's more accepting because it's just becoming more and more because everybody's doing it. (21 year old)

I think teen pregnancy is huge and it's getting bigger. When I graduated from high school...everybody was pregnant, like after graduation. I was like what is going on, it's like some virus going around. Everybody is just getting pregnant. Why aren't you guys using condoms or whatever? I just didn't understand that. But yeah, and even in high school there's girls, you have an eight-year-old. I didn't even know that you had a kid this old. Yeah, and they're the same age as me. Yeah, it was pretty bad. It wasn't that many people that got pregnant during high school. It was just like right after high school that it happened where everybody was having kids. (24 year old)

There were clear differences in perceptions of STDs for younger and older youth. Despite residing in a community with STD rates that were significantly higher than national rates, younger youth did not think STDs were a big issue in their school or community, in part because they never heard people talking about STDs. Several younger participants also mentioned that conversations about STDs were rare, and youth were inclined to keep their STD status private, which added to their uncertainty about the prevalence of the STD issue in the community. Older youth were knowledgeable about STDs and considered them to be a big issue.

I don't think it's really bad because I never really heard of anyone with STDs. (14 year old)

Well, I don't really hear about it. So I feel like if somebody does have an STD, they're not making it known or they keep it to themselves. (16 year old)

Yeah. So I think it's a pretty big issue. It's just I don't hear a lot about it, but from what I've heard before I've heard it's a big issue. (17 year old)

I think it's a big issue. Because I heard about it from people, you know, a lot of people having gonorrhea and a lot of people here have a lot of diseases. (24 year old)

Participants were able to describe positive and negative consequences of teen pregnancy. Nearly half of younger participants suggested that teens may benefit from pregnancy, because having a child meant the teen mother had someone to love and to love her. Additionally, younger participants suggested having a child as a teen could result in positive attention and gifts from friends and could serve to strengthen relationships with romantic partners. Older participants noted that having a child as a teen could make the teen mother more responsible.

I think maybe some girls get pregnant, maybe they think it's going to keep a boy around or something or they want love and attention they don't get from their family or something. Well, you have someone who loves you forever. (15 year old)

I would say they get spoiled. Like everybody spoils them, like they give them gifts, they're like, "Oh my God, you're so cute, you're . . ." You're like – it's really like, at our school, it's not a big problem. Like every – there are like pregnant girls, a lot of them, so it's like – it's no biggie for anybody, it's just like, "Oh, somebody's pregnant." That person's going to get like lots of things from other students, or that person is going to be treated well, or whatever. (13 year old)

Yeah, if you kind of look on Facebook and then you see how they have videos up of people posting their babies. They're like "Oh, I want a baby." It's like they feel like something kind of in a way to show off instead of it's like a responsibility. (21 year old)

...getting pregnant usually, like – having a kid usually changes their life and makes them actually realize that they need to grow up, have responsibilities, and take care of their kid. (19 year old)

Participants in both age groups acknowledged that having a child as a teen could make it difficult to reach educational goals such as graduating from high school and college, thus impacting future job prospects. Participants also commonly mentioned that teen childrearing is difficult and teen mothers often have little help, struggle financially, and do not get to engage in typical teen activities like spending time with friends.

It's a lot of money to take care of a baby and raise it and it's just a lot. It's going to affect their life and how they go to school. It's a lot of responsibility. (14 year old)

...you might not be able to finish school, and that will set you back because now you have a child to take care of. And then when you go to college, like you're not going to want to be away from your child. So you'll say well, I'll just stay here and I'll work at McDonald's or something. (17 year old)

First you have to grow up at an early age, some people have to drop out of school and get a job, some people actually get put out of their parents' home because they're pregnant. Some people have to rely on the government and assistance if they can get it, sometimes mostly if you're young it goes to the parents and it's up to the parents if they wanted to, you know, help you with your child. I think emotionally for some people it is really difficult. (23 year old)

Stigma, harsh judgement, and embarrassment were the commonly mentioned negative consequences of STDs.

Once you get STDs, that's like a really big problem, especially at school. You won't really have friends or whatever, and people are going to think you might give it to them or whatever. And some people think just because somebody touches you, they got STDs, you're going to get it or whatever. (13 year old)

They would probably be ashamed. (14 year old)

Like they looks at the other person as nasty. Like they just judge them. (16 year old)

Socially, nobody would want to have a relationship with them. (24 year old).

Perceptions of Current and Ideal Intervention Strategies

Opinions about current and ideal intervention strategies focused on school-based approaches, family-based approaches, community-based approaches, and clinical approaches.

School-Based Approaches. Overall, participants in both age groups reported receiving most of their information about teen pregnancy and STD prevention through locally-developed comprehensive sex education curricula offered in the health class at their schools. Due to perceived stigma surrounding STDs, in many cases school health class was the only context in which participants discussed STDs with others. Despite this fact, most participants suggested that schools did not provide enough information about sexual health and should provide more detailed information about teen pregnancy prevention (e.g., specifics about different methods of birth control) and STD prevention (e.g., types of STDs, symptoms).

They usually like the other subjects they think are more important and for STDS they just say one or two things about it and they just say like be careful and they just move on. (13 year old)

They just mostly talk about condom use but they don't really go into like the pill or different things you can do to prevent it...(14 year old)

They should probably like talk about it more in school. Because I don't think kids get enough of it since it's only like a few classes. (15 year old)

...I felt like when I was in middle school they talked about, you know, ways to prevent it but we didn't, like, really go into depth. We just went over the basics. But I don't feel like in high school that they really kept it going. (23 year old)

One participant stressed the need to make the environment within schools health classes more comfortable so that youth are empowered to ask questions to get the information they need.

I would think people might be afraid that if they ask questions it would make them look like they're doing something wrong... Well, at school they just make it seem like you shouldn't have sex at all. Like it's not okay to have sex. But here [at an after school program] it's okay. Like if you are having sex, they make it be okay and it's more open. The open method makes people feel more comfortable. (16 year old)

Another participant noted that the lack of sufficient information offered within the schools was tied to parental discomfort with material commonly covered in evidence-based sexual and reproductive health curricula.

Yeah, there's like a hunger out there for education but we're giving them the wrong forms of knowledge. It's about a wholesome approach. If you're going to educate somebody don't educate them on what you just want them to hear, you need to give them all the information then so they can make the decision for themselves. Because again, teaching abstinence and the way that they do it is just causing more people to go out and have unsafe sex. Literally. And breaking down the walls especially for the parents because they become – it's especially in the church, because they're just like, "Oh, I don't want my innocent baby to know about this knowledge," and I'm just like, "Look, your child already knows. Like, think about it. You thinking back to when you were a child, even when you were like seven or whatever and you're just figuring out stuff, and you're just looking at your child like they're an angel, and it's like, were you?" There's like no – "Jeffrey doesn't know." He knows. Like, Jeffrey probably knows a lot more than you think he knows. Like, so much. (21 year old)

In addition to a general desire for more information to be offered in the schools, both younger and older youth also expressed the need for peer-to-peer intervention approaches within schools. Some participants indicated that teens may be more likely to listen to youth who have experienced pregnancy and STDs than school staff, and should present information to youth during health class and in school assemblies.

I think they should just talk about it like a lot and just like have – I don't know if people do this but come and talk about like their situations. Because I know a lot of people when they have problems and like they want other people to not like be in it, they come and tell people about it. (13 year old)

They should probably have more teens talking about it or something. Because like if somebody has a friend that's pregnant or something, they could talk about it and pass the information down to other people, like to prevent it. (15 year old)

Well, if it was up to me I would probably say maybe get people that actually aren't afraid to admit that they actually have it or that they've gone through it and actually speak to people about it or just talk to them about it in their own language. You can't just say "Well, you shouldn't do this because this, this, and this." (17 year old)

I felt like when I was in middle school they talked about, you know, ways to prevent, but didn't, like, really go into depth. We didn't really go into depth, like, "Oh, so this person has a baby, little Johnny over here." (23 year old)

Family-Based Approaches. Participants were unaware of any family-based teen pregnancy or STD interventions offered in the community, although some noted that in some cases parents talk to their children about teen pregnancy and STDs on a one-on-one basis. The content of this

one-on-one education varied widely, from simply telling youth not to have sex, to threatening youth by telling them they would be kicked out of the house if they became pregnant, to providing information about contraception, to providing actual contraception. Despite the fact that participants viewed these conversations as awkward and unwelcome, nearly every participant in both age groups stated that parents should provide more information to their children about teen pregnancy and STD prevention. In order to facilitate this process, participants noted that parents themselves first need to be educated about these topics.

Yeah, parents should talk to their kids more about it. Because like I feel like these days parents just don't tell their kids about it, about pregnancy and stuff. And they don't talk about – they just don't talk about those kind of things to their kids. (13 year old)

I wish they [adults] understood how important they are and actually took the time to sit down and at least read about it [STDs]. (23 year old)

In addition to increasing parental communication of sexual and reproductive health information, a few participants from both age groups suggested that some parents would benefit from guidance relevant to general parenting skills.

Like I wish the people in our community, I wish they knew a lot about it because like I don't think the people over here think about it. Because I see a lot of people that are not good and stuff. And they don't tell their kids about it and their kids are always outside at twelve o'clock, just with boys and stuff like that. Yeah, and I think they should talk about it more and the causes and stuff. (13 year old)

Like they should probably keep their kids in the house more and keep an eye on them more. That will probably prevent it, because if the kids are with them then nothing will probably happen. (15 year old)

Community-Based Approaches. In terms of community-based approaches, participants were most aware of an STD-focused media campaign available in the community. Within this context, many participants noted the need for additional fliers, signs, and billboards with more information about the causes and consequences of STDs.

...just more advertisement. Like tell them like – this can happen and not to do it. Like more commercials and more posters. (13 year old)

They should advertise more or like put on the internet a lot, because a lot of kids are on the internet. (15 year old)

I think you should just put pictures up even though it might be a little explicit to like kids

and everything. Also because it's just like once a little kid sees an image, like ugh, it might want to just kind of understand it. Just like it a child don't eat their vegetables, the parents be like "Oh this can happen to you," so they'll start eating their vegetables. (21 year old).

Additionally, although participants were not aware of any peer-to-peer strategies being implemented in the community, a few participants suggested that they should be implemented in order to reduce STD stigma.

I think that teens can help because they can make a Twitter page. Because so many people that are on Twitter are teens. And then they could like have information and pictures...I think it would really spread the word. (15 year old)

I'm thinking having kids your – their own age. Like, having a couple teenagers out there, having a couple young adults out there putting the word out, actually helping with the testing, not just – and I don't mean like literally giving them, you know, the tests, I mean just getting the word out, helping people to register to take the tests. Because then they're gonna be like, "Okay, there are people my age who doing this." You don't feel like you're the oddball out. You know, I think that would help a lot. (23 year old)

Clinical Approaches. No participants had knowledge of organized STD or teen pregnancy interventions in clinical settings. Despite being happy with the general medical care they received, several youth suggested that discussing sexual health with doctors was uncomfortable, and that doctors did not provide enough information about teen pregnancy and STDs during general medical visits. They suggested that doctors focus on providing more information about sexual health, making conversations about sexual health more comfortable, and ensuring clinics have environments that are welcoming to youth. Participants also emphasized the need for discretion, such that sexual health services are provided in private areas and in ways that parents would not find out, and the need for clinical providers to better explain policies regarding parental consent and parental access to their medical information.

I think they should put more flyers and I think they should like talk about it more of just like – just like having checkups and then they just ask them about the body, I think they should just like talk about...I think they should talk more about STDs and teen pregnancy and stuff like that. (13 year old).

More information, condoms, and yeah, just more information. (15 year old)

I mean, yeah, doctors, I think, they should talk about it a little more. Because when you go in they don't really – they ask if you're pregnant and stuff, but I feel they should go into more depth with that, and STDs and explain that more. (24 year old)

...when I went to [an STD clinic] for the first time I felt awkward, because for the simple fact is it's just like they had their doctors' office part and they had their testing part right there. So, if you say, "Hey, I just want to come in and get tested." Everybody's gonna know your business and then they're asking you questions right there... (23 year old)

DISCUSSION

This study contributes to the literature on teen pregnancy and STD prevention by examining the perceptions of teen pregnancy and STDs and opinions about current and ideal intervention strategies among female African American youth in an urban, Midwestern city. Examining youth recommendations about ideal intervention strategies allows for reflection on how these recommendations align with current intervention practice, and offers clear insight into intervention gaps.

Overall, participants perceived teen pregnancy to be relatively common, and were able to document both positive (e.g., being loved, getting positive attention, keeping a boyfriend) and negative consequences (e.g., academic and economic difficulties) of teen pregnancy. This finding is congruent with a recent study that found that although youth generally have negative perceptions of pregnant and parenting teens, those who have friends or relatives who are teen parents perceive pregnant and parenting teens more positively (Weed & Nicholson, 2014). These findings suggest that for some female teens, teen pregnancy interventions that simply address the negative consequences of teen pregnancy will be insufficient to counterbalance the perceived benefits. Rather, interventions must also help youth achieve the perceived benefits of teen pregnancy in different ways.

In line with previous studies (Cunningham, 2009; Fortenberry et al., 2002; Hood & Freidman, 2011; Morris et al., 2014), STDs were rarely discussed by teens, likely due in part to perceived stigma and embarrassment. As a result, participants erroneously considered STDs to be a small problem in the community, thus potentially impacting the ways youth utilized preventive interventions. These results suggest a continued need for interventions that not only educate about STD prevention, testing, and treatment, but help to normalize conversations and actions relevant to STDs and other sexual health topics in order to minimize stigma and promote the utilization of available services. Further, these findings indicate that in sexual health interventions, lessons should be designed in such a way that youth are able to obtain the information they need without fear of being labeled negatively (e.g., opportunities to ask truly anonymous questions).

In terms of existing interventions in the community, participants generally were only aware of school-based interventions and an STD-focused media campaign. Participants were asked to give their opinions about existing and ideal interventions. A common theme across intervention types was that youth desire to receive more information in schools, from parents, in community-based settings, and from clinical providers. Specifically, youth requested in-depth information about different types of birth control and STDs.

Although this type of information is standard in evidence-based programs, the findings of this study indicate that who delivers the information could be as important as the information

itself. A common theme was that peers or adults who have experienced teen pregnancy or STDs may be able to most effectively influence youth. Additionally, participants frequently mentioned the important role of doctors as a trusted source of information. Therefore, to effectively provide information and influence attitude or behavior change, a combination of facilitators with different characteristics may be needed in a given intervention.

Additionally, it is important to note that although peer-to-peer strategies were repeatedly mentioned by participants, a review of evidence-based interventions databases such as Health and Human Services Teen Pregnancy Prevention guide (2016) reveal with few exceptions evidence-based sexual health intervention strategies typically do not include peer-to-peer education. Therefore, additional research is needed to determine effective strategies for incorporating peer-to-peer education in existing interventions, and creating new interventions that are completely facilitated by peers.

These results also suggest that the role of clinical providers in providing sexual and reproductive health interventions should be strengthened. A recent study suggests that one-third of annual adolescent health maintenance visits include no mention of sexual health topics by doctors, and when these conversations do occur on average they last less than one minute (Alexander et al., 2014). Therefore, although several effective clinic-based interventions have been developed for female African American youth, a cost-effective, population-focused strategy could be to provide additional training and support for pediatricians and other primary care clinical providers about how to effectively and thoroughly provide sexual and reproductive health information and counseling to youth.

Non-clinical interventions, such as those offered in schools or community settings, also should be developed to include parents when possible in order to help foster conversations between parents and youth. Currently, few evidence-based interventions include parents. Family-based interventions should focus on educating parents about sexual health issues such as pregnancy prevention and STDs, to model appropriate sexual health practices, and to help them develop skills to communicate and foster positive sexual health among their children.

The limitations of this study should be considered when interpreting the findings. First, the study was conducted with African American females in one urban, Midwestern community, and thus the findings may not be generalizable to youth in other communities, youth of other races/ethnicities, or male youth. Further, although saturation was achieved, it is possible that the information contained in this study is not exhaustive.

CONCLUSION

These findings suggest that more work is needed to implement evidence-based interventions and develop new interventions that meet the needs of female African American youth. Implementing existing interventions in different settings and with different types of facilitators is a feasible first step toward addressing this issue. New interventions also should be developed that take into consideration female African American youths' attitudes and knowledge about teen pregnancy and STDs and their preferred intervention delivery methods.

ACKNOWLEDGEMENTS

The authors would like to thank the community agencies who helped with participant recruitment, and the study participants.

REFERENCES

- Alexander, S.C., Fortenberry, J., Pollak, K.I., et al. (2014). Sexuality talk during adolescent health maintenance visits. *JAMA Pediatrics*, *168*, 163-169.
- Bearinger, L. H., & Resnick, M. D. (2003). Dual method use in adolescents: A review and framework for research on use of STD and pregnancy protection. *Journal of Adolescent Health*, *32*, 340-349.
- Braun, V., & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77-101.
- Centers for Disease Control and Prevention (CDC) (2016). About Teen Pregnancy. Retrieved from: <http://www.cdc.gov/teenpregnancy/about/>. Retrieved on: December 2, 2016.
- Centers for Disease Control and Prevention (CDC) (2015). Sexually Transmitted Disease Surveillance 2014. Atlanta: U.S. Department of Health and Human Services. Retrieved from: <http://www.cdc.gov/std/stats14/surv-2014-print.pdf>. Retrieved on: February 3, 2016.
- Centers for Disease Control and Prevention (CDC), National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (2012). CDC Fact Sheet: New HIV Infections in the United States. Retrieved from: <http://www.cdc.gov/nchhstp/newsroom/docs/2012/HIV-Infections-2007-2010.pdf>. Retrieved on: February 3, 2016.
- Chin, H.B., Sipe, T.A., Elder, R., Mercer, S.L., Chattopadhyay, S.K., Jacob, V., Santelli, J. (2012). The effectiveness of group-based comprehensive risk-reduction and abstinence education interventions to prevent or reduce the risk of adolescent pregnancy, Human Immunodeficiency Virus, and sexually transmitted infections: Two systematic reviews for the Guide to Community Preventive Services. *American Journal of Preventive Medicine*, *42*, 272 – 294.
- Creswell, J. (2013). Standards of validation and evaluation. In *Qualitative inquiry and research design. Choosing among five approaches* (pp. 243-268). Thousand Oaks, CA: Sage Publication.
- Cunningham, S.D., Kerrigan, D.L., Jennings, J.M., & Ellen, J.M. (2009). Relationships between perceived STD-related stigma, STD-related shame, and STD screening among a household sample of adolescents. *Perspectives on Sexual and Reproductive Health*, *41*, 225-230.
- Fortenberry, J.D., McFarlane, M., Bleakley, A., Bull, S., Fishbein, M., Grimley, D., Mallotte, C.K., & Stoner, B.P. (2002). Relationships of stigma and shame to gonorrhea and HIV screening. *American Journal of Public Health*, *92*, 378-381.

- Goesling, B., Coman, S., Trenhold, C., Terzian, M., and Moore, K. (2014). Programs to reduce teen pregnancy, sexually transmitted infections, and associated sexual risk behaviors: A systematic review. *Journal of Adolescent Health, 54*, 499-507.
- Hamilton, B.E., Martin, J.A., Osterman, M.J.K., Curtin, S.C., & Matthews, T. J. (2015). Births: Final Data for 2014. National Vital Statistics Reports, 64(12), 1-64. Retrieved from: http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_12.pdf.
- Hood, J.E., & Friedman, A.L. (2011). Unveiling the hidden epidemic: A review of stigma associated with sexually transmitted infections. *Sexual Health, 8*, 159-70.
- Kirby, D., & Laris, B. A. (2009). Effective curriculum-based sex and STD/HIV education programs for adolescents. *Child Development Perspectives, 3*, 21-29.
- Koh, H. (2014). The Teen Pregnancy Prevention Program: An evidence-based public health program model. *Journal of Adolescent Health, 54*, S1-S2.
- Lincoln YS and Guba EG (2000). Paradigmatic controversies, contradictions, and emerging confluences. In NK Denzin & YS Lincoln (Eds.). *Handbook of qualitative research* (2nd ed. Pp 163-188). Thousand Oaks, CA: Sage.
- Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis* (2nd edition). Thousand Oaks, CA: Sage Publication.
- Morris, J.L., Lippman, S.A., Philip, S., Bernstein, K., Neilands, T.B., & Lightfoot, M. (2014). Sexually transmitted infection related stigma and shame among African American male youth: implications for testing practices, partner notification, and treatment. *AIDS Patient Care STDs, 28*, 499-506.
- National Campaign to Prevent Teen and Unplanned Pregnancy (NCPTUP) (2011). Briefly: A Summary of Effective Interventions. Washington, DC. Retrieved from: <http://thenationalcampaign.org/resource/briefly-summary-effective-interventions>. Retrieved on: February 3, 2016.
- Office of Adolescent Health, U.S. Department of Health and Human Services (OAH) (2016). Evidence-Based Teen Pregnancy Prevention Programs at a Glance. Retrieved from: http://www.hhs.gov/ash/oah/oah-initiatives/teen_pregnancy/training/Assests/ebp-table.pdf. Retrieved on: February 3, 2016.
- Philliber, S., & Nolte, K. (2008). Implementation science: Promoting science-based approaches to prevent teen pregnancy. *Prevention Science, 9*, 166-177.
- Powers, J., Maley, M., Purington, A., Schantz, K., & Dotterweich, J. (2015). Implementing evidence-based programs: Lessons learned from the field. *Applied Developmental Science, 19*, 198-116.
- Robin, L., Dittus, P., Whitaker, D., Crosby, R., Eithier, K., Mezoff, J.,...Pappas-Deluca, K. (2004). Behavioral interventions to reduce incidence of HIV, STD, and pregnancy among adolescents: A decade in review. *Journal of Adolescent Health, 34*, 3-26.
- Rolleri, L.A., Fuller, T.R., Firpo-Triplett, R., Lesesne, C.A., Moore, C., & Leeks, K.D. (2014). Adaptation guidance for evidence-based teen pregnancy and STI/HIV prevention curricula: From development to practice. *American Journal of Sex Education, 9*, 135-154.

- Rolleri, L.A., Wilson, M.M., Paluzzi, P.A., & Sedivy, V.J. (2008). Building capacity of state adolescent pregnancy prevention coalitions to implement science-based approaches. *American Journal of Community Psychology, 41*, 225-234.
- Romero, L.M., Middleton, D., Mueller, T., Avellino, L., & Hallum-Montes, R. (2015). Improving the implementation of evidence-based clinical practices in adolescent reproductive health care services. *Journal of Adolescent Health, 57*, 488-495.
- Santelli, J. S., Lindberg, L. D., Finer, L. B., & Singh, S. (2007). Explaining recent declines in adolescent pregnancy in the United States: The contribution of abstinence and improved contraceptive use. *American Journal of Public Health, 97*, 150-156.
- Satterwhite C.L., Torrone E., Meites E., Dunne E.F., Mahajan R., Ocfemia M.C., Su, J., XU, F., and Weinstock, H. (2013). Sexually transmitted infections among US women and men: prevalence and incidence estimates, 2008. *Sexually Transmitted Diseases, 40*, 187-193.
- Sedgh, G., Finer, L.B., Bankole, A., Eilers, M.A., and Singh, S. (2015). Adolescent pregnancy, birth, and abortion rates across countries: Levels and recent trends. *Journal of Adolescent Health, 56*, 223–230.
- Weed, K., & Nicholson, J. S. (2015). Differential social evaluation of pregnant teens, teen mothers and teen fathers by university students. *International Journal of Adolescence and Youth, 20*, 1–16.
- Williams, R. L., & Fortenberry, J. D. (2013). Dual use of long-acting reversible contraceptive and condoms among adolescents. *Journal of Adolescent Health, 52*, S29-S34.