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'My Body, My Boundaries': The Impact of a New Sexual Health Program on Elementary Age Children and Parents in Mississippi

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Understanding how to form healthy, romantic relationships is a key developmental milestone for all children and adolescents. To accomplish this, children should learn how to value their own body and personal health, interact with both sexes in respectful and appropriate ways, and express affection, love, and intimacy in ways developmentally consistent with their own values, sexual preferences, and abilities.[1] In an increasingly technology-filled world, young people are more likely to receive information about romantic relationships multiple times throughout the day from outside sources such as the media and peers.[2,3] The lack of clear and accurate communication from these sources could result in misunderstandings and undesirable consequences. For example, the United States continues to rank first among countries in the industrialized world for pregnancies of adolescents aged 15 to 19 years. This has been attributed to a lack of clear communication to children about sexual health.[4] The highest rates of sexually transmitted infections and unintended pregnancies have also been found in the southern states, where sexual health education is more likely to be absent and inadequate.[5-8]

Children and adolescents should be given accurate information about how to develop a safe and positive view of sexuality through age-appropriate education.[1] It is important to share sexual health information with children prior to puberty and before they become sexually active so that they can better understand what is happening to their bodies and learn how to protect themselves should they choose to become sexually active. Due to state policies that limit the ability to teach in schools—especially with elementary-age children and in the southern states—information about sexuality is more likely to occur in community-based settings; however, only a handful of studies have been conducted on the content and delivery of sexuality education in community-based settings with elementary-age children.[9]

Creating access to accurate and developmentally appropriate sexuality education by using an evidence-based curriculum remains a primary goal for improving the well-being of children and adolescents.[10] Although collaborative partnerships have played a role in a wide range of community health programs,[11] their ability to conduct sexuality education programs are unique. This study reviews a program being conducted in the state of Mississippi with elementary-age children and their parents to further understand the effect community programs have on sexual health education and, specifically, teaching skills to prevent sexual abuse. The results have the potential to both improve and disseminate information about this unique community-based program.

Literature Review

Sexual health education in schools has changed significantly over the years due to changes in federal legislation and funding. In 1966, the U.S. Department of Education addressed the growing issue of teen pregnancy by funding 645 agencies throughout the United States to develop sexual health education programs.[12] Twenty years later, President Reagan signed the Adolescent Family Life program into law, which promoted chastity and self-discipline by encouraging states to discard comprehensive sexuality education and focus on abstinence only.[12-14] In 1996, Congress passed the Welfare Reform Act to provide funding for abstinence-only sexual health education programs.[15, 16] This was further promoted a few years later when the federal government enacted a

community-based abstinence education project, giving funding to community- and faith-based organizations that taught abstinence-only education.[17]

It is estimated that the United States has spent over $2 billion on abstinence-only education.[18] This trend began to change when, in 2010, President Obama reduced funding to abstinence-based programs and redirected it to programs that supported comprehensive health.[19, 20] This occurred during a time when strong statements were being made by both national and international organizations focused on promoting family health. For example, governments, intergovernmental organizations (including the United Nations and the World Bank), and civil society groups made an international declaration stressing the importance of comprehensive sex education.[21] Soon after, the Future of Sex Initiative[22] in the United States formed the first-ever national standards for sexuality education, promoting evidence-informed comprehensive school-based sexuality education appropriate to students' age, developmental abilities, and cultural background (ie, National Sexuality Education Standards). Regardless of these changes, children in the United States receive only an average of 2.7 hours in middle school and 4.2 teaching hours in high school on how to prevent a pregnancy.[23] Given the breadth of topics considered minimally necessary for inclusion in sexuality education by the National Sexuality Education Standards, it is evident that the amount of time dedicated to sexuality education in schools is insufficient for addressing them.[24]

Additional factors and obstacles can shape the content and delivery of sexuality education, such as restrictions imposed by state and school district policies. Fewer than half of states require public schools to teach sexuality education, and even fewer states require that, if offered, sexuality education be medically, factually, or technically accurate.[25] Two-thirds of states allow parents to remove their children from participation or opt out of sexuality education. Other states have specific content requirements, including focusing solely on abstinence or censoring discussion of same-sex relationships or abortion.[26] There is also little to no information available on how parochial or private scholastic institutions are meeting the standards for sexuality education.[1]

Mississippi was one of the few states that did not require education on sexuality. That changed in 2011 when the Mississippi State Legislature passed House Bill 999 (HB 999) requiring all local school boards to adopt a sex-related education policy by June 2012.[27,28] Although it did provide support for schools to teach sexual health, it came with additional stipulations. Specifically, schools were required to implement abstinence-only or abstinence-plus curricula, teach gender-separate classrooms, could not perform condom demonstrations or discuss abortion, and required explicit parental permission for students to participate, an opt-in provision required by only 3 states in the U.S.[29,30] As of 2015, slightly more than half of the school districts in Mississippi have chosen an abstinence-only policy.[31]

The passage of HB 999 occurred during a time when Mississippi was in dire need of reducing sexual health concerns. For example, Mississippi consistently ranked high among the states in teen birth rate, ranking first in 2009 and second in 2011 and 2015, costing the state an estimated $150 million per year.[32-37] Sexually transmitted infections were also found to be relatively common among adolescents in Mississippi. In 2011, Mississippi had the highest gonorrhea rate and the second highest chlamydia rate in the nation and remained among the top 5 states over the next 4 years.[32,38,39]

More than half the schools teach abstinence-only programs in Mississippi when statistics show adolescents engaging in relatively high levels of negative sexual health practices. That might help explain why parents in the southeast region of the United States are becoming more supportive of teaching comprehensive sexuality education in the school systems.[40] A study by Barr et al[41] found that a majority (79.3%) of parents would allow their children to participate in age-appropriate sexuality education and 40.4% supported comprehensive sexuality education. When asked whether they would be in favor of their children learning about specific sexual health topics in elementary school, a majority were in favor of teaching communication techniques (88.7%), reproductive anatomy (64.7%), and gender and sexual orientation issues (51.7%). Similar results have been found in other studies conducted in southern states.[42-44]

Thus, advocates for comprehensive sexuality education in the school system must use a number of creative mechanisms to teach these programs while not contradicting state and federal policies. Some districts teach sexuality education-related topics in family consumer science and thus avoid gender-separated classrooms, as the law applies only to sexuality education specific classes.[29] Juanita Davis, an educator who has given presentations at schools and elsewhere around the state, uses candy as a metaphor to talk about the risks, and means of protection against, sexually transmitted infections.[29] Sanford Johnson[45] published a video that describes how to put on a condom with reference only to shoes and socks.

Community programs have a unique opportunity to teach children and parents about sexual health by providing resources, understanding, and encouragement to families without the restrictions placed on school systems. For example, a community-based program titled "Talking Parents, Healthy Teens" has been shown to increase parents' skills, such as how to talk about sex, monitor and stay involved, and understand environmental barriers and facilitators that influence sexual views.[46] However, can and should sexuality education really begin in kindergarten? Slow steps have been taken in the United States to begin sexuality education at a younger level. Chicago Public Schools and Florida's Broward County — 2 of the largest school districts in the country — have recently mandated sex education for elementary school students.[47]

Program Description

The primary investigator was contacted by the Mississippi Campaign for Teen Pregnancy Prevention (www.growingupknowing.org) to assist them in analyzing data for a program they were conducting across the state. The evidence-based program is titled "My Body, My Boundaries" and is currently being presented in the community with parents/children who are interested in learning more about how to teach children to say no to unwanted touch, learn which adults to trust, and engage in behaviors that will help prevent and/or report sexual abuse. At the time this paper was written, the program had been conducted 10 times at summer camps, churches, schools (after school hours), and community centers between November 2017 and June 2018. The researcher did not receive any financial compensation for this study.

The nonprofit currently conducts 3 programs that share the following goals: increase communication between youth and parents/caregivers, impart accurate

information to families, and create a culture of consent.[48] The programs are currently being taught in afterschool programs, early childhood centers, elementary schools, and faith-based settings for free. The facilitators of the programs went through an interview process that involved passing a background check, demonstrating an interest and connection to the nonprofit's mission, and an evaluation of interpersonal and presentation skills. Once hired, the facilitators received professional training by the nonprofit's staff, observed the teaching of the program by another facilitator, were evaluated on their own teaching of the program, and required to continue participation in professional development sessions.

The program lasted about 1 hour each time it was taught and included both the parent/guardian and their child or children. Overall, the families were taught the correct names of body parts, how and when to say *no*, and tools for sharing with a trusted adult concerns about being touched inappropriately. The first half of the program focused on "my body" while the second half focused on "my boundaries." For the "my body" section, the educator first welcomed the families to the program and conducted an icebreaker. Next, the students looked at the physical similarities and differences between the male and female gender; this included reviewing what portions of the bodies are similar and what are different (ie, genitalia). The section focused on genitalia also taught the "bathing suit rule" of covering up private parts or genitals. Activities and handouts were also provided to parents about how to communicate clearly with their child about sexual health. The "my boundaries" section of the program began with defining the word "boundary" and what the children do and do not like. The largest portion of this half of the program was focused on saying *no*; this included activities, handouts, and open discussion. The program ended with a summary and an opportunity for questions. Additional resources were made available for the parents. Further information about the program can be received by contacting the lead author.

Methods

A total of 101 parents/guardians and 127 children attended the program. The average age of the parent/guardian was 41.33 years with a range of 17-83 years (*SD* = 11.04). The average age of the child who participated in the program was 7.91 years with a range of 4-14 years (*SD* = 2.11). A majority of the parents self-identified as African American (68.32%) followed by Caucasian (26.74%) and other (4.94%). The parent/guardian was also more likely to be female (62.2%) than male; the same was true with the child in the program (63.8% female, 36.2% male). Most of the parents/guardians identified themselves as the mother of the child in the program (65.6%). An additional 16.7% identified as the father, 11.1% identified as the grandmother, 4.4% as another family member (eg, cousin, sister), and 2.2% as the grandfather. The average household income of the participants was mostly over $50,000 (51.6%), followed by $25,000-49,999 (28.4%), and less than $25,000 (15.0%). Finally, the most popular choice for the highest level of education obtained was a college degree (32.3%). An additional 25.3% had a post-bachelorette degree and 18.2% had *some college* education. There were 11.1% who had their high school diploma while 5.1% stated that they did not; the remaining 8.1% had a 2-year community college degree. Compared to the demographics of the entire state, the

students who attended the program were similar in age, but were more likely to be African Americans, females, and with a higher education and income.[49]

Measurements

Participants were given a pre- and post-test at the beginning and immediately following the program, respectively. A random ID number was assigned to each participant so that the pre/post tests could anonymously be matched. In addition to questions assessing the demographics of the participants and their children, the parents/guardians were asked to answer 6 questions on a 6-point Likert scale: (1) I know how to teach my child(ren) about identifying and understanding their body parts; (2) I know how to teach my child(ren) about safe touch; (3) I know how to teach my child(ren) about which adults to trust; (4) I have all the sexual health resources I need; (5) I know how to communicate with my child about sexual health topics; and (6) I know how to report any suspicion of abuse/neglect. Potential responses ranged from *strongly agree* to *strongly disagree,* and the participants responded to the same questions before and after the program was conducted. The post-evaluation also included questions that allowed participants to give direct feedback about their impression of the program. Specifically, 2 open-ended questions were provided asking "what [they] enjoyed the most about the program" and "what recommendations [they] had to improve the program." Thirteen additional questions using the same 6-point Likert scale were provided in the post-test to gain specific feedback. Procedures were approved by the University of Southern Mississippi Institutional Review Board.

Results

A Wilcoxon signed rank test was conducted to evaluate the impact of the program on the participants (Table 1). In response to their ability to "teach [their] children about identifiying and understanding their body parts," a significant increase was found prior (M = 4.55 , SD = .67) and after (M = 4.83, SD = .44) participating in the program, z = 4.81, p = .001, with a medium effect size (r = .31). For the responses to the question about their ability to "teach [their] children about safe touch," a significant increase was found prior (M = 4.38, SD = .79) and after (M = 4.87, SD = .37) participating in the program, z = 5.24, p = .001, with a medium effect size (r = .34). In response to their ability to "teach [their] children about which adults to trust," a significant increase was found prior (M = 4.55, SD = .57) and after (M = 4.87, SD = .34) participating in the program, z = 4.58, p = .001, with a medium effect size (r = .30). For the responses to the question of whether or not they have all the sexual health resources they needed, a significant increase was found prior (M = 3.54, SD = 1.13) and after (M = 4.38, SD = .79) participating in the program, z = 6.27, p = .001, with a medium effect size (r = .41). In response to their ability to "communicate with [their] child about sexual health topics," a significant increase was found prior (M = 4.07, SD = .97) and after (M = 4.71, SD = .56) participating in the program, z = 6.31, p = .001, with a medium effect size (r = .41). Finally, the responses to the question about knowing how to "communicate with [their] child about sexual health topics" showed a significant increase prior (M = 4.55 , SD =

.69) and after (M = 4.90, SD = .34) participating in the program, z = 4.67, p = .001, with a medium effect size (r = .30).

Table 1. Group Differences Before and After Being in Program

Variable	Before Program		After Program					
	M	*SD*	*M*	*SD*	*z*	*p*	95% CI	*r*
I know how to teach my child(ren) about identifying and understanding their body parts.	4.55	.67	4.83	.44	4.81	.001	[.41, .14]	.31
I know how to teach my child(ren) about safe touch.	4.38	.79	4.87	.37	5.24	.001	[.67, .31]	.34
I know how to teach my child(ren) about which adults to trust.	4.55	.57	4.87	.34	4.58	.001	[.44, .20]	.30
I have all the sexual health resources I need.	3.54	1.13	4.38	.79	6.27	.001	[1.09, .60]	.41
I know how to communicate with my child about sexual health topics.	4.07	.97	4.71	.56	6.31	.001	[.84, .43]	.41
I know how to report any suspicion of abuse/neglect.	4.55	.69	4.90	.34	4.67	.03	[.50, .20]	.30

Thirteen questions were asked in the post-evaluation survey. These questions provided the participants an opportunity to provide an overall opinion of the program. Table 2 displays the frequencies of participant responses.

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Table 1. Number(%) of Participants Who Agreed/Disagreed with Experience of Program

	Strongly Disagree	Somewhat Disagree	Neither Agree or Disagree	Somewhat Agree	Strongly Agree
I learned new content from this program.	0 (0)	5 (5.7)	6 (6.9)	22 (25.3)	54 (62.1)
I will be able to use what I learned in everyday family life.	0 (0)	0 (0)	2 (2.3)	12 (13.8)	73 (83.9)
I have gained new skills or improved existing skills in communicating about sensitive health topics with my child(ren).	0 (0)	0 (0)	5 (5.7)	16 (18.4)	66 (75.9)
I have more confidence in my abilities to discuss sensitive health topics with my child(ren).	0 (0)	0 (0)	1 (1.1)	15 (17.2)	71 (81.6)
I would recommend this program to others.	0 (0)	0 (0)	3 (3.5)	10 (11.6)	73 (84.9)
The program was well structured with clear activities and goals.	0 (0)	0 (0)	0 (0)	7 (8.0)	80 (92.0)
The program content was useful to me and my family.	0 (0)	0 (0)	1 (1.1)	9 (10.3)	77 (88.5)
The length of the program was just right.	0 (0)	3 (3.4)	2 (2.3)	3 (3.4)	79 (90.8)
The course was interesting.	0 (0)	0 (0)	1 (1.1)	9 (10.3)	77 (88.5)
The course information was up to date.	0 (0)	0 (0)	0 (0)	7 (8.0)	80 (92.0)
The take-home materials are useful to me and my family.	0 (0)	0 (0)	1 (1.2)	12 (14.0)	73 (84.9)
My goals for the program were met.	0 (0)	0 (0)	6 (6.9)	4 (4.6)	77 (88.5)
Overall, I was satisfied with this program.	0 (0)	1 (1.2)	0 (0)	9 (10.5)	76 (88.4)

Two qualitative questions were also asked in the questionnaire given after the program: “what [they] enjoyed the most about the program” and “what recommendations [they] had to improve the program.” The comments were analyzed for content via a multistage inductive thematic analysis with the first reading forming initial concepts and the second reading looking for resulting themes.[50] All questions were voluntary so participants were not required to answer them. Fifty-nine chose to respond to what they most enjoyed about the program while 24 provided feedback on needed improvements.

The most common feedback provided on the strengths of the program was characteristics of the leader (27.69%). Descriptions of the instructors included “great energy” and “enthusiasm of the speaker.” Other responses recognized how the instructor was able to build a learning environment of trust and comfort for the participants. There was a tie for the second most common theme: one focused on specific aspects of the program while the other was general positive feedback about the program (21.53%). Participants stated that they enjoyed the activities, the explanation of body parts, and resources provided. General positive feedback included words like “everything” and “it was great.” Incorporating children was the next most common theme revealed (18.46%) with participants’ appreciating the ability to take the program with their children and the interactions that occurred because of it. The final theme was about the “bluntness” of the program (10.77%)--specifically that the lessons communicated were “straightforward” and “not sugar coated.”

With regard to what should be done to improve the program, most participants (41.67%) desired more examples or reinforcement of the lessons being taught. Suggestions provided were adding a quick video or providing a book as a resource. Participants also stated a need to increase comfort about the discussion (20.83%), both for them and their children. This included separating the children by gender and eliminating all visuals. It should be noted, though, that one participant requested a more detailed visual (ie, “include a 3D replica of the body parts for demonstration”). Two additional themes encompassed 12.5% of the responses: increasing the length of the program and giving overall positive feedback about the program (ie, not constructive feedback). Finally, 8.3% asked that the children be engaged more in the session to increase their attention.

Discussion

Many parents think children are too young for information about sex and have difficulty acknowledging their children’s sexuality, yet there is ample evidence that speaking with the child about sexual health at a developmentally appropriate age is a significant predictor of healthy sexual communication.[51-55] In Mississippi—where over 50% of local school boards are teaching abstinence-only education—parents desire further information about sexual health for their children.[43] This is particularly challenging for teaching elementary school-aged children about sexual health due to restrictive policies and various opinions; however, a national study of 5th- and 6th-grade elementary teachers found that 43% of the teachers surveyed currently taught sexuality education but that only 34% of those teachers had formal training in sexuality education.[56] Robinson and colleagues[29] found that many advocates in Mississippi have reached out

to religious leaders, school boards, and principals to increase comprehensive sexuality education and wish to support those that desire to teach the programs. Community organizations are in a unique position in helping fulfill this need. This study, in particular, revealed a potential program that could help educate children in an appropriate setting and with facilitators dedicated to teaching sexual health.

The potential impact that the program may have had on the community cannot be completely discerned due to a number of limitations. The program is being conducted in one state with a majority being in the Jackson metropolitan area. The characteristics of these students is not comparable to all communities. Response bias could have occurred due to mitigating components such as the participant reviewing the facilitator rather than the content and/or knowing that the responses would be seen by the researcher, sponsoring organization, and educator (even though no name was collected). Occasionally participants would also bring their entire family to the program, including middle school siblings. Responses provided about the impact of the program on the children could have been a reflection of the fact that not all the children were developmentally appropriate for the content being presented (ie, too old). Finally, feedback from participants days or months after they have completed the program would be particularly beneficial for understanding long-term impact. Further research should be done to understand the longevity of the program's impact and its ability to be replicated.

Ultimately, the adoption of a new program is only half the battle, as implementation of new curricula is expensive and difficult. There is a clear need for technical assistance for any programs being taught that might help schools and community-based organizations build capacity. Resources need to be provided so that programs can produce the most significant changes. Specifically, organizations wishing to implement new programs should be given the resources they need to conduct a thorough needs assessment, form appropriate curriculum adaptations, and select evaluation designs that will effectively measure program outcomes.

Although shifting policy environments and funding priorities that are outside the control of program developers can have profound effects on program sustainability, investing in organizational capacity can help sexuality education programs weather these changes by further aligning programs with best practices for program planning, implementation, and evaluation. Many program directors lack the expertise to conduct thorough needs assessments, monitor program fidelity, carry out rigorous outcome evaluations, and find funding to provide those services. Dedicated funding streams—for longer than 1 year—are necessary to ensure program sustainability. Only then will sexuality education interventions have the longevity necessary to achieve measurable impacts on young people's health and well-being.

Where resources exist, schools and public health professionals wishing to implement strong programs in their communities need to know about programs such as "My Body, My Boundaries". Legislation provides symbolic power to advocates and the dissemination of such information. Even though Mississippi has increased the number of adolescents receiving sexuality education, that education is seemingly not as comprehensive as parents would like it.[29, 43] The existence of legislation to promote comprehensive sexuality educators in the community would significantly help those who

are willing and able to serve as resources to students with questions that need answering.

Several effective interventions can be done via community-based components that extend beyond school-based sex education. Resources and activities outside the school environment--such as healthcare staff that offer youth-friendly services, distribute condoms, and involve parents, teachers, and community members in intervention development--can provide accurate information to children. Supporters should assist the nonprofit organizations that are striving to identify advocates who are passionate about these issues and support the connections to gatekeepers in their communities. By incorporating programs that teach age-appropriate information in community settings, a positive impact can be made on families and the community in general.

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