

## RESEARCH ARTICLE

# New Evidence: Data Documenting Parental Support for Earlier Sexuality Education

ELISSA M. BARR, PhD<sup>a</sup> MICHELE J. MOORE, PhD<sup>b</sup> TAMMIE JOHNSON, PhD<sup>c</sup> JAMIE FORREST, PhD<sup>d</sup> MELISSA JORDAN, MS<sup>e</sup>

---

**ABSTRACT**

---

**BACKGROUND:** Numerous studies document support for sexuality education to be taught in high school, and often, in middle school. However, little research has been conducted addressing support for sexuality education in elementary schools.

**METHODS:** As part of the state Behavioral Risk Factor Surveillance System (BRFSS) Survey administration, the Florida Department of Health conducted the Florida Child Health Survey (FCHS) by calling back parents who had children in their home and who agreed to participate (N = 1715).

**RESULTS:** Most parents supported the following sexuality education topics being taught specifically in elementary school: communication skills (89%), human anatomy/reproductive information (65%), abstinence (61%), human immunodeficiency virus (HIV)/sexually transmitted infections (STIs) (53%), and gender/sexual orientation issues (52%). Support was even greater in middle school (62-91%) and high school (72-91%) for these topics and for birth control and condom education. Most parents supported comprehensive sexuality education (40.4%), followed by abstinence-plus (36.4%) and abstinence-only (23.2%). Chi-square results showed significant differences in the type of sexuality education supported by almost all parent demographic variables analyzed including sex, race, marital status, and education.

**CONCLUSIONS:** Results add substantial support for age-appropriate school-based sexuality education starting at the elementary school level, the new National Sexuality Education Standards, and funding to support evidence-based abstinence-plus or comprehensive sexuality education.

**Keywords:** sexuality education; adolescents; public support; abstinence-only sexuality education; abstinence-based sexuality education; comprehensive sexuality education.

**Citation:** Barr EM, Moore MJ, Johnson T, Forrest J, Jordan M. New evidence: data documenting parental support for earlier sexuality education. *J Sch Health.* 2014; 84: 10-17.

Received on December 11, 2012

Accepted on May 5, 2013

---

Sexuality education in US schools has long been considered a controversial topic. This debate typically centers on which type of sexuality education program to offer.<sup>1-4</sup> Such programs generally fall within 1 of 3 categories: (1) abstinence-only, which emphasizes abstinence from all sexual behavior outside marriage and may only include contraception in terms of failure rates; (2) abstinence-based, which emphasizes the benefits of abstinence yet includes information about contraception as a disease prevention method (sometimes referred to as abstinence-plus); and (3) comprehensive, which is age-appropriate, sequenced K-12 sexuality education that includes information on

a broad set of topics related to sexuality and sexual health including abstinence and contraception as disease prevention methods.<sup>5-7</sup> As this debate continues, so does the need for quality sexuality education to address risky sexual behaviors of youth and associated negative health outcomes.

Risky sexual behaviors among youth remain high. According to the 2011 national Youth Risk Behavior Survey (YRBS) data, almost half (47.4 %) of high school students in grades 9-12 reported ever having had sex.<sup>8</sup> When looking at high school seniors specifically, 63.1% reported ever having had sex with 24.1% of seniors having had 4 or more partners.<sup>8</sup> Data

---

<sup>a</sup>Associate Professor, (ebarr@unf.edu), Department of Public Health, University of North Florida, 1 UNF Drive, Jacksonville, FL 32224.

<sup>b</sup>Professor, (mmoore@unf.edu), Department of Public Health, University of North Florida, 1 UNF Drive, Jacksonville, FL 32224.

<sup>c</sup>Associate Professor, (tammie.johnson@unf.edu), Department of Public Health, University of North Florida, 1 UNF Drive, Jacksonville, FL 32224.

<sup>d</sup>Asthma Epidemiologist, (Jamie\_Forrest@doh.state.fl.us), Florida Asthma Program, Florida Department of Health, 4052 Bald Cypress Way, Bin A-12, Tallahassee, FL 32399.

<sup>e</sup>Senior Epidemiologist, (Melissa\_Jordan@doh.state.fl.us), Bureau of Epidemiology, Florida Department of Health, 4052 Bald Cypress Way, Bin A-12, Tallahassee, FL 32399.

Address correspondence to: Elissa M. Barr, Associate Professor, (ebarr@unf.edu), Department of Public Health, University of North Florida, 1 UNF Drive, Jacksonville, FL 32224.

for high school freshmen, generally 14 to 15 years old, showed that 32.9% reported having had sex (ranging from 24.2% for White females to 60.3% for Black males) and 8.7% reported having had 4 or more partners (ranging from 4.2% for Hispanic females to 25.9% for Black males).<sup>8</sup> In another study, Lindberg et al<sup>9</sup> found that 50% of teens surveyed had engaged in vaginal intercourse, 55% in oral sex, and 11% in anal sex.<sup>9</sup> In a review of available 2009 middle school YRBS results (16 areas/states), data documented that as many as 20% of 6th graders and 42% of 8th graders reported having engaged in sexual intercourse.<sup>10</sup>

Although sexual activity is high, the use of protection is not. According to Kirby<sup>3</sup> careful and consistent contraceptive use among many teens is lacking with only 70% of teen girls who rely on oral contraceptives actually taking them every day. YRBS data also document that only 56.3% of sexually active high school seniors reported condom use at last sexual intercourse.<sup>8</sup> Among freshmen, reported condom use at last sexual intercourse (62.2%) ranges from 51% among Hispanics to 76.2% among Blacks.<sup>8</sup> When reviewing prevention education, approximately 16% of high school students in 2011 reported never being taught about acquired immunodeficiency syndrome (AIDS) or human immunodeficiency virus (HIV) infection in school, a significant increase from 13% in 2009.<sup>8</sup> In a review of 2009 YRBS middle school data from 16 US locations, as many as 34.7% of 8th grade students also reported never receiving HIV/AIDS education in school.<sup>10</sup>

These risky sexual behaviors have numerous negative health and social outcomes. Adolescents are faced with epidemic rates of sexually transmitted diseases (STDs)/HIV and unintended pregnancy. In the United States, nearly half of the 19 million new STD infections each year occur in individuals under age 25, and one fourth of sexually active teens have an STD.<sup>3,11</sup> Of the new HIV infections in 2009 in the United States, young people aged 13-29 made up the largest group (39%).<sup>12</sup> Additionally, the United States continues to lead other developed countries in teen pregnancy, birth, and abortion rates.<sup>13,14</sup> The pregnancy rate for US teens aged 15-19 is approximately 68 per 1000, while the birth rate is 40 per 1000.<sup>15</sup> With 1 in 10 new mothers in the United States being a teen, more than 400,000 babies are born to teen girls each year, almost 1100 every day.<sup>16,17</sup> Only half of these teen mothers obtain a high school diploma by age 22 (vs 90% of those who do not give birth), almost 33% of girls born to teens become teen parents themselves, and US taxpayers pay more than \$9 billion annually for teen childbearing costs.<sup>17</sup>

Fortunately, numerous studies have documented the effectiveness of various sexuality education programs in preventing adolescent STDs, HIV, and

pregnancy.<sup>3,18-20</sup> These programs, often referred to as “evidence-based” programs, teach both abstinence and contraception and have been found to delay the initiation of sexual intercourse, decrease the frequency of sexual intercourse, decrease the number of sexual partners, and/or increase the use of condoms and contraception.<sup>3</sup> Unfortunately, implementation of evidence-based sexuality programs including both abstinence and contraception in US schools is lacking. Of the mere 22 states and the District of Columbia (DC) that require schools to teach sexuality education, only 17 and DC require that programs provide information on contraception.<sup>21</sup>

However, a growing body of literature documents strong support for such sexuality education. Years of national and state level research has shown repeatedly the majority of the public overwhelmingly supports teaching both abstinence and contraception, which is typical of an abstinence-based or comprehensive program.<sup>1,3,5,22-28</sup> Such studies typically focus on support for teaching sexuality education to middle school and high school aged youth, and not elementary students specifically. This article presents results of a statewide assessment of Florida parents’ attitudes toward sexuality education in schools. This study is unique in that it documents separate support for various sexuality education topics at the elementary, middle, and high school levels.

## METHODS

### Procedures and Participants

The data used for this analysis are from the 2008 and 2009 Florida Behavioral Risk Factor Surveillance System (BRFSS) and Florida Child Health Survey (FCHS). The BRFSS is an ongoing, cross-sectional, population-based telephone survey of noninstitutionalized adults aged 18 years and older in randomly selected households. It is conducted in every state, the District of Columbia, and 3 US territories. Within each randomly selected household, 1 adult is randomly selected to complete the survey. The BRFSS elicits information from respondents pertaining to a variety of disease states, risk factors, preventive health practices, and emerging health issues. Demographic and socioeconomic data are also collected. BRFSS data are collected throughout the calendar year by telephone interviews, and then aggregated and weighted annually by the Centers for Disease Control and Prevention (CDC) Behavioral Sciences Branch.

During 2008 and 2009, the Florida BRFSS had nearly 23,000 respondents. These respondents were asked (1) if they had children younger than 18 years living in the household and (2) if they did, if they would be willing to be called back at a future date for participation in an additional survey, the FCHS. Of the 3675 households who met these criteria for the 2 years

combined, 2008 and 2009, a total of 1715 BRFSS participants participated in the FCHS, comprising the sample for the current study.

The FCHS callbacks to the eligible BRFSS participants were made between January 2009 and January 2010. Approximately 15 call attempts were made at varying times throughout the day, both on weekdays and weekends, to increase response rates. At the beginning of the survey, the interviewer asked respondents to complete the survey as it pertains to 1 identified child younger than 18 years living in the household. This child was randomly selected by a computer program prior to the call, based on previous BRFSS responses.

### Instrument

The FCHS was developed using existing instruments including the BRFSS child health callback surveys in North Carolina and Colorado, National Health and Nutrition Examination Survey (NHANES), National Health Interview Survey, and the National Child Health Survey. Several additional questions were prepared for topic areas not covered in the existing instruments, following the standard telephone interviewing format used for the other questions. Florida Department of Health (FDOH) and Florida Department of Education (FDOE) program staff reviewed the survey and provided feedback for content validity and readability. The final draft of the instrument was then reviewed by the BRFSS contractor, Abt SRBI, and additional language was added on the basis of their recommendations to clarify specific question topics.

The FCHS collects information on the health and health practices of the respondent's children, as well as their support for various health education programs and practices. A total of 123 questions take approximately 15 minutes to complete. The survey is available in both English and Spanish. The FCHS questionnaire contains several demographic items and items specific to support for sexuality education.

One question asked whether respondents would allow their children to participate in grade level-appropriate human sexuality education at his or her school. Response options included "Yes" or "No." The second question asked which kind of human sexuality education or prevention the respondent would be most likely to support in his/her child's school. The phone interviewer listed the 3 types of sexuality education programs and provided a definition for each: abstinence-only (emphasizes abstinence from all sexual behaviors—may not include information regarding contraception, except in terms of failure rates, or disease prevention methods); abstinence-plus (emphasizes the benefit of abstinence—includes information about contraception and disease prevention methods); and comprehensive (age-appropriate K-12

sexuality education programs that address various health and reproductive issues).

The interviewer then read a list of sexuality topics and asked the respondent if he/she would be in favor of his/her child learning about each topic in elementary school (grades K-5). The 5 topics at the elementary level included communication skills, human anatomy and reproductive information, HIV and sexually transmitted infections information, abstinence from sexual activity, and gender and sexual orientation issues. The same was included for middle school (grades 6-8) and high school (grades 9-12) with the addition of 2 topics, birth control methods and condom use, for a total of 7 topics. Communication skills included a 1-sentence description read aloud to each participant defining the topic for clarity: "Communication skills are the ability to clearly express your feelings and/or desires with a family member, friend or partner." For purposes of this study, parental "support" is defined as affirmative responses to these items.

### Data Analysis

The FCHS data were merged by participant sequential number with the 2008-2009 BRFSS data. As a result, the data collected for the BRFSS were available for each FCHS participant. The data were re-weighted to account for nonresponse. SAS version 9.2 (SAS Institute Inc., Cary, NC) was used to manage the data and create variables, while SUDAAN version 10.0 (RTI International, Research Triangle Park, NC) was used to calculate point estimates and 95% confidence intervals. Frequencies were calculated for parent demographics, support for sexuality education in general, and support for each specific topic. Chi-square analyses were conducted to test significant associations between 2 variables to include parent demographics and each type of sexuality education supported, and parent demographics and support for all topics at each grade level. Statistical significance was set at  $p \leq .05$ .

## RESULTS

### Demographics

More than half (59.4%) of respondents were female, and the majority (80%) were either married or cohabitating. Most of the sample was non-Hispanic White (62.2%), followed by Hispanic (22.1%) and non-Hispanic Black (15.7%). The majority was in the 30-39 age range (40.7%), followed by 40-49 (32.6%), 29 and younger (14.4%), and 50 or older (12.4%). Respondents were likely to have at least graduated from high school (20.2%) or received more education with 71.6% reporting 4 or more years of college. Only 8.2% did not finish high school. The sex of the child for whom respondents answered was male in 51.3% of cases and female in 48.8% of cases.

### Support for Sexuality Education

Overall, participants expressed supportive views about including sexuality education in school instruction. The majority (79.3%) of parents would allow their children to participate in age-appropriate sexuality education. When asked which type of sexuality education program they preferred, 40.4% supported comprehensive sexuality education, 36.4% supported abstinence-plus sexuality education, and 23.3% supported abstinence-only sexuality education (Table 1).

### Support for Sexuality Topics in Elementary School

Respondents held supportive views toward the 5 topics listed as potential topics to include when teaching sexuality education in elementary schools, grades K-5. When asked whether they would be in favor of their children learning about the specific topics in elementary school, 88.7% were in favor of communication, 64.7% in favor of anatomy, 61.3% in favor of abstinence, 53% in favor of HIV and 51.7% in favor of gender and sexual orientation issues. More than half of the participants supported teaching all 5 topics at this level (Table 2).

### Support for Sexuality Topics in Middle School

Most respondents were supportive of the 7 areas listed as potential topics to include when teaching sexuality education in middle schools, grades 6-8. When asked whether they would be in favor of their children learning about the specific topics in middle school, 90.7% were in favor of communication, 88.4% in favor of anatomy, 86% in favor of HIV, 86.4% in favor of abstinence, 71.1% in favor of birth control, 68.9% in favor of condoms, and 62.1% in favor of gender and sexual orientation issues. More than 60% of the participants supported teaching all 7 topics at this level (Table 3).

### Support for Sexuality Topics in High School

Finally, most respondents were also supportive of the 7 topics listed as potential topics to include when teaching sexuality education in high schools, grades 9-12. When asked whether they would be in favor of their child learning about the specific topics in high school, 90.8% were in favor of communication, 91.5% in favor of anatomy, 90.8% in favor of HIV, 89.6% in favor of abstinence, 72% in favor of gender and sexual orientation issues, 85.8% in favor of birth control, and 82.6% in favor of condoms. More than 70% of the participants supported teaching all 7 topics at this level (Table 4).

### Relationships Between Demographics and Support for Sexuality Education Topics

**Significant differences by sex.** Male respondents were significantly more likely than females to support abstinence-only sexuality education (30% vs 20%,  $p = .04$ ). Females were significantly more likely than males to support teaching various topics in both middle school and high school. These include anatomy and HIV in middle school, and birth control and condoms in both middle school and high school.

**Significant differences by race/ethnicity and marital status.** Although respondents of all races were supportive of teaching most sexuality education topics in general, non-Hispanic Blacks and Hispanics were statistically more likely than non-Hispanic Whites to support both HIV (63%, 61%, vs 48%,  $p = .01$ ) and gender and sexual orientation issues (61%, 59%, vs 47%,  $p = .02$ ) in elementary school. Additionally, single respondents were statistically more likely than married or cohabitating respondents to support teaching birth control in middle school (81% vs 68%,  $p = .00$ ) and gender and sexual orientation issues in

Table 1. Parent Support for Sexuality Education and Sex Education Types, by Parent Characteristics, Florida BRFSS-CHS 2008-2009

Parent Characteristics		Sex Education		Abstinence-Plus		Abstinence-Only		Comprehensive	
		%	p	%	p	%	p	%	p
All		79.3		36.4		23.2		40.4	
Sex	Male	72.2	0.01	34.3	0.52	29.6	0.04	36.1	0.18
	Female	82.6		37.4		20.2		42.4	
Race/ethnicity	NH White	83.5	0.26	40.3	0.16	20.4	0.14	39.3	0.33
	NH Black	77.8		30.5		32.2		37.3	
	Hispanic	76.5		32.0		19.6		48.4	
Age group	18-29	74.1	0.16	35.1	0.93	16.2	0.40	48.6	0.49
	30-39	75.6		37.0		25.9		37.1	
	40-49	83.6		35.2		22.9		41.9	
	50+	82.9		38.8		21.2		40.0	
Education	<HS	75.9	0.45	23.7	0.14	27.8	0.62	48.5	0.49
	HS/some college	75.9		42.7		20.4		36.9	
	4+ years college	80.8		36.1		23.5		40.4	
Married/cohabitate	Yes	80.1	0.68	36.3	0.95	24.5	0.18	39.1	0.32
	No	78.1		36.7		19.0		44.4	

**Table 2. Parent Support for Specific Sex Education Topics for Elementary School Students, by Parent Characteristics, Florida BRFSS-CHS 2008-2009**

Parent Characteristics		Communication		Anatomy		HIV		Abstinence		Gender and Sexual Orientation Issues	
		%	p	%	p	%	p	%	p	%	p
All		88.7		64.7		53.0		61.3		51.7	
Sex	Male	86.0	0.19	60.5	0.18	55.7	0.40	61.3	0.99	50.0	0.59
	Female	90.0		66.6		51.8		61.2		52.5	
Race/ethnicity	NH White	89.9	0.51	69.4	0.09	47.9	0.01	57.9	0.10	46.8	0.02
	NH Black	84.4		57.1		62.8		70.2		61.4	
	Hispanic	89.3		61.4		60.9		63.6		58.7	
Age group	18-29	86.0	0.40	57.2	0.56	42.0	0.29	61.2	0.90	49.3	0.47
	30-39	91.1		67.0		55.2		63.1		52.4	
	40-49	88.2		65.3		52.4		59.9		54.5	
	50+	85.2		61.9		55.7		59.4		45.8	
Education	<HS	89.2	0.21	60.2	0.28	72.6	0.02	65.6	0.36	67.0	0.05
	HS/some college	83.4		59.2		55.2		65.8		55.6	
	4+ years college	90.1		66.8		49.8		59.5		48.7	
Married/cohabitate	Yes	89.2	0.77	66.2	0.35	50.8	0.08	60.8	0.63	49.1	0.03
	No	88.2		61.1		60.0		63.3		60.2	

**Table 3. Parent Support for Specific Sex Education Topics for Middle School Students, by Parent Characteristics, Florida BRFSS-CHS 2008-2009**

Middle School Parent Characteristics		Communication		Anatomy		HIV		Abstinence		Birth Control		Condom		Gender and Sexual Orientation Issues	
		%	p	%	p	%	p	%	p	%	p	%	p	%	p
All		90.7		88.4		86.0		86.4		71.1		68.5		62.1	
Sex	Male	87.9	0.14	82.6	0.01	79.2	<0.01	83.4	0.17	61.0	0.00	60.7	0.01	59.5	0.39
	Female	92.1		91.1		89.2		87.8		75.7		72.0		63.3	
Race/ethnicity	NH White	91.9	0.47	90.4	0.19	87.5	0.37	88.4	0.13	71.7	0.32	67.5	0.58	59.8	0.16
	NH Black	91.1		84.2		85.2		88.4		74.0		71.9		71.1	
	Hispanic	86.9		84.5		81.0		78.7		63.4		63.8		62.8	
Age group	18-29	86.2	0.54	87.7	0.53	75.6	0.17	78.7	0.15	62.9	0.61	66.9	0.35	68.2	0.76
	30-39	91.8		89.3		85.8		89.5		72.3		72.1		62.0	
	40-49	92.0		89.7		89.5		87.2		72.2		67.2		60.6	
	50+	87.9		83.6		84.9		80.9		70.3		62.6		62.0	
Education	<HS	81.9	0.18	82.1	0.31	82.8	0.76	76.0	0.21	74.3	0.70	73.1	0.47	72.8	0.05
	HS/some college	93.8		86.3		87.8		89.2		73.3		71.8		68.1	
	4+ years college	91.1		89.8		86.0		87.0		70.1		67.0		59.1	
Married/cohabitate	Yes	91.1	0.90	87.9	0.34	85.5	0.35	86.6	1.00	67.9	0.00	64.9	0.00	59.0	0.01
	No	90.7		90.9		88.7		86.6		81.4		80.0		72.2	

both elementary school (60% vs 49%,  $p = .03$ ) and middle school (72% vs 59%,  $p = .01$ ).

**Significant differences by education.** Respondents with less than a high school education were significantly more likely than those with a high school or college degree to support teaching HIV education in elementary school (73% vs 55%, 50%,  $p = .02$ ) and gender and sexual orientation issues in both elementary school (67% vs 56%, 49%,  $p = .05$ ) and high school (73% vs. 68%, 59%,  $p = .05$ ).

## DISCUSSION

This study adds to the research documenting public support for sexuality education and specific

sexuality topics because it includes information on support at the elementary level for the first time. Results also add substantial support for age-appropriate school-based sexuality education. These findings are in agreement with the newly established National Sexuality Education Standards that recommend age-appropriate sexuality education beginning as early as kindergarten.<sup>29</sup>

In general, the respondents were supportive of age-appropriate sexuality education with almost 80% stating that they would allow their children to participate in such education. The majority supported all 5 topics listed being taught starting in elementary school. It was not surprising that almost 90% supported teaching communication and more than

**Table 4. Parent Support for Specific Sex Education Topics for High School Students, by Parent Characteristics, Florida BRFSS-CHS 2008-2009**

Parent Characteristics		Communication		Anatomy		HIV		Abstinence		Birth Control		Condom		Gender and Sexual Orientation Issues	
		%	p	%	p	%	p	%	p	%	p	%	p	%	p
All		90.8		91.5		90.8		89.6		85.8		82.6		72.0	
Sex	Male	87.6	0.11	89.2	0.23	87.7	0.11	87.2	0.24	79.4	0.01	73.2	0.00	67.4	0.13
	Female	92.3		92.5		92.3		90.7		88.8		87.0		74.0	
Race/ethnicity	NH White	91.8	0.62	92.3	0.50	91.9	0.61	91.1	0.27	85.4	0.60	83.1	0.32	71.5	0.24
	NH Black	89.4		90.5		88.8		88.3		88.6		85.8		79.5	
	Hispanic	88.5		87.6		89.1		84.2		82.7		75.4		68.4	
Age group	18-29	86.6	0.43	86.8	0.14	91.6	0.45	87.1	0.54	84.0	0.97	85.3	0.86	77.0	0.78
	30-39	92.1		91.1		90.9		90.2		86.5		81.0		70.0	
	40-49	92.3		94.5		92.6		91.1		85.9		83.9		72.6	
	50+	86.7		88.5		86.3		85.7		85.0		82.3		72.6	
Education	<HS	83.8	0.45	86.1	0.43	87.5	0.51	78.9	0.15	81.2	0.30	69.6	0.14	62.9	0.43
	HS/some college	92.7		93.6		93.1		92.8		89.8		87.5		75.3	
	4+ years college	91.2		91.6		90.7		90.1		85.4		83.0		72.3	
Married/cohabitate	Yes	91.3	0.79	92.3	0.49	91.1	1.00	90.1	0.76	85.1	0.29	82.1	0.50	71.3	0.45
	No	90.4		90.0		91.1		89.0		88.9		85.0		74.8	

half teaching abstinence. It is interesting to note that more than half of them also supported teaching HIV and gender and sexual orientation issues. In middle and high school, there is overwhelming support for these same 5 topics, and additional support for teaching both birth control (71% and 86%, respectively) and condoms (69% and 83%, respectively). These findings suggest parents are more supportive of an abstinence-based program than an abstinence-only program, consistent with previous research.<sup>1,3,5,22-28</sup>

There were a few differences in support levels across demographic variables. Males were more supportive of teaching abstinence-only than females, similar to a previous study.<sup>25</sup> This is consistent with females being more supportive of teaching both birth control and condoms in the current study. Additionally, non-Hispanic Blacks and Hispanics were more supportive of teaching HIV than non-Hispanic Whites. This may be owing to their knowledge of the increased risk of HIV for minorities. Single respondents were more likely to support birth control than were married or cohabiting respondents. An unexpected pregnancy for a single person is likely viewed much differently than for someone in a committed relationship. Individuals who are single with a child may have personal experiences of an unexpected pregnancy making them more likely to support contraception education. Finally, those with less than a high school degree were more supportive of teaching HIV. These findings were unique as previous studies suggest those with more education are typically more supportive of sexuality education in general.<sup>24</sup>

Although this study documents that parents are in favor of teaching most sexuality topics including both contraception and abstinence in Florida schools, local practice is not reflective. Florida mandates that schools teach sexuality education including abstinence, but

local school boards may determine whether to include contraception.<sup>21</sup> In 2005, the Florida Department of Education's Coordinated School Health Program office surveyed the 67 county District Health Education Curriculum Coordinators. One of the 38 health education-related questions was about the type of sexuality education being taught in the district. Of the 62 responding districts, 33 (53%) reported teaching abstinence-only in the middle schools, compared with 29 (47%) teaching abstinence-based. Among high schools, 26 districts (42%) reported teaching abstinence-only compared with 36 (58%) teaching abstinence-based.<sup>30</sup> These practices are inconsistent with the survey results of parents in Florida showing that only 23.3% prefer abstinence-only education.

A study of Florida school teachers found that many students receive no sexuality education as the majority of Florida schools do not require sexuality education for all students.<sup>31</sup> Additionally, there is little uniformity in what content is taught as sexuality education is often included as part of another course. Contrary to parental support for sexuality education starting in elementary school documented in the current study, teachers reported that sexuality education often occurs late in one's high school career.<sup>31</sup>

There is great irony in that both the need for sexuality education and the widespread support for sexuality education are well documented; yet, policy and practice are not reflective. This incompatibility is evident with the "vocal minority" often influencing school decisions regarding sexuality education.<sup>1</sup> Hopefully, district and school personnel can counter minority opposition with the evidence found in this study.<sup>24,32</sup> As school districts look to improve sexuality education, more data to document what parents are truly in

favor of may help decision makers consider the preferences of the majority when changing existing policy or creating new policy.

### Limitations

This study had several limitations. One concern is the restriction placed on data collection through a random-digit dial telephone survey. Approximately 25% of US households do not have landline telephones in their home.<sup>33</sup> Thus, individuals with no phones, or those with only cell phones, were not included in this study. Second, this study used a brief description to imply the content of sexuality education topics to be taught. Therefore, support for the nature and depth of each topic is not known. Another limitation of this study is that parents were asked to describe how they might feel about their children participating in age-appropriate sexuality education, regardless of the age of the child. Parents may have answered more supportively if they had a child of appropriate age to receive sexuality education.

### Conclusions

Most parents surveyed were in favor of teaching sexuality education at all 3 levels of instruction: elementary, middle, and high school. Additionally, research has identified evidence-based sexuality education programs that address both abstinence and contraception, and such programs are consistent with actual sexual behavior among teens and parental opinions/support. Such findings clearly address 2 of Kirby's characteristics of implementing effective sexuality education programs: (1) secure at least minimal support for appropriate authorities and (2) employ behavioral messages appropriate to teen's sexual experience.<sup>3</sup>

### IMPLICATIONS FOR SCHOOL HEALTH

Our findings have implications for future efforts to increase the implementation of evidence-based sexuality programs for youth, *before* risky sexual behaviors begin. Such programs could be offered as part of the current school health curriculum or through a coordinated school health program. Offering sexuality education in grades K-12 and replacing abstinence-only curricula with abstinence-based programs are both consistent with the new National Sexuality Education Standards and with the preferences of the majority of parents. The National Sexuality Education Standards recommend teaching a variety of age-appropriate sexuality topics in grades K-12, including the 7 topics assessed in this study. Use of these data could help to initiate change in adopting a healthier approach to quality sexuality education that is age-appropriate, consistent with student needs, and supported by a majority of parents.

Other communities might consider replicating a similar assessment to document support for sexuality education in their own state or community. To conduct a similar state level study, interested communities or groups of a particular state may partner with their state Department of Health or a university or college with personnel who could assist with the development of a similar instrument, data collection, and data analysis. To conduct a similar study at the local level, interested individuals may partner with a local community group or the county health department in addition to working with a local university/college. Results of such efforts could improve the current sexuality policies or content in their school health curriculum or be used to develop this content area if it is lacking in the curriculum.

Residents, and particularly parents, should be encouraged to share their views on sexuality education as this is a public health issue. Educating decision makers, including school board members, about real support for sexuality education coupled with information on effective programs is an important strategy in successfully adopting evidence-based programs.<sup>25</sup> This in turn may broaden support of programs that provide medically accurate information and can reduce risky sexual behaviors among youth. Future research should further investigate the relationship between local support for sexuality education and the sexuality education implemented in the schools.

### Human Subjects Approval Statement

This article reports the results of secondary data analyses. Therefore institutional human subjects' approval was not required.

### REFERENCES

1. Eisenberg ME, Bernat DH, Bearinger LH, Resnick MD. Support for comprehensive sexuality education: perspectives from parents of school-age youth. *J Adolesc Health*. 2008;42:352-359.
2. Jones T. A sexuality education discourses framework: conservative, liberal, critical, and postmodern. *Am J Sex Educ*. 2011;6(2):133-175.
3. Kirby D. *Emerging Answers: Research Findings on Programs to Reduce Teen Pregnancy and Sexually Transmitted Diseases*. Washington, DC: National Campaign to Prevent Teen Pregnancy; 2007.
4. Wiley DC. Using science to improve the sexual health of America's youth. *Am J Prev Med*. 2012;42(3):308-310.
5. Bleakley A, Hennessy M, Fishbein M. Public opinion on sexuality education in US schools. *Arch Pediatr Adolesc Med*. 2006;160:1151-1156.
6. Constantine NA. Converging evidence leaves policy behind: sex education in the United States. *J Adolesc Health*. 2008;42:324-326.
7. Sexuality Information and Education Council of the United States (SIECUS). *Guidelines for Comprehensive Sexuality Education Kindergarten through 12<sup>th</sup> Grade*. National Guidelines Task Force. 3 ed. Washington, DC: SIECUS; 2004.
8. Centers for Disease Control and Prevention. *YRBSS: Youth Risk Behavior Surveillance System*; 2011. Available at:

- <http://www.cdc.gov/healthyyouth/yrbs/index.htm>. Accessed October 2, 2012.
9. Lindberg LD, Jones R, Santelli JS. Non-coital sexual activities among adolescents. *J Adolesc Health*. 2008;42(2-1):44-45.
  10. Moore MJ, Barr EM, Johnson TM. Sexual behaviors of middle school students: 2009 Youth Risk Behavior Survey results from 16 locations. *J Sch Health*. 2013;83:61-68.
  11. Centers for Disease Control and Prevention. *STD Trends in the United States: 2010 National Data for Gonorrhea, Chlamydia, and Syphilis*; 2010. Available at: <http://www.cdc.gov/std/stats10/trends.htm>. Accessed November 15, 2012.
  12. Centers for Disease Control and Prevention. *HIV Among Youth*; 2011. Available at: <http://www.cdc.gov/hiv/youth/index.htm>. Accessed November 2, 2012.
  13. The Alan Guttmacher Institute. *U.S. Teenage Pregnancy Statistics. Overall Trends, Trends by Race and Ethnicity and State-by-State Information*; 2006. Available at: [www.guttmacher.org/pubs/state-pregnancy-trends.pdf](http://www.guttmacher.org/pubs/state-pregnancy-trends.pdf). Accessed November 7, 2012.
  14. McKay A, Barrett M. Trends in teen pregnancy rates from 1996 to 2006: a comparison of Canada, Sweden, USA and England/Wales. *Can J Hum Sex*. 2010;19(1-2):43-52.
  15. Kost K, Henshaw S. *U.S. Teenage Pregnancies, Births and Abortions, 2008: National Trends by Age, Race and Ethnicity*. New York: Guttmacher Institute; 2012. Available at: <http://www.guttmacher.org/pubs/USTPTrends08.pdf>. Accessed October 28, 2012.
  16. The National Campaign to Prevent Teen Pregnancy. *Fact Sheet: By the Numbers: The Public Costs of Teen Childbearing in Florida*; 2006. Available at: <http://www.thenationalcampaign.org/costs/pdf/states/florida/fact-sheet.pdf>. Accessed October 23, 2012.
  17. Centers for Disease Control and Prevention. *CDC Vital Signs: Preventing Teen Pregnancy in the US*; 2011. Available at: <http://www.cdc.gov/VitalSigns/pdf/2011-04-vitalsigns.pdf>. Accessed November 1, 2012.
  18. Alford S. *Science and Success, Second Edition: Programs That Work to Prevent Teen Pregnancy, HIV & Sexually Transmitted Infections*. Washington, DC: Advocates for Youth; 2008.
  19. Kohler PK, Manhart LE, Lafferty WE. Abstinence-only and comprehensive sexuality education and the initiation of sexual activity and teen pregnancy. *J Adolesc Health*. 2008;42:344-351.
  20. Sullentrop K. *What Works 2011-2012: Curriculum-Based Programs That Help Prevent Teen Pregnancy*. Washington, DC: The National Campaign to Prevent Teen and Unplanned Pregnancy; 2011.
  21. The Guttmacher Institute. *State Policies in Brief. Sex and STI/HIV Education*. New York: The Guttmacher Institute; 2012. Available at: [http://www.guttmacher.org/statecenter/spibs/spib\\_SE.pdf](http://www.guttmacher.org/statecenter/spibs/spib_SE.pdf). Accessed November 2, 2012.
  22. Constantine NA, Jerman P, Huang A. California parents' preferences and beliefs regarding school-based sexuality education policy. *Perspect Sex Reprod Health*. 2007;39(3):167-175.
  23. Eisenberg ME, Bernat DH, Bearinger LH, Resnick MD. Condom provision and education in Minnesota public schools: a telephone survey of parents. *J Sch Health*. 2009;79(9):416-424.
  24. Howard-Barr E, Moore MJ. Florida residents' preferred approach to sexuality education. *Am J Sex Educ*. 2007;2(3):27-37.
  25. Howard-Barr E, Moore MJ, Weiss JA, Jobli E. Public opinion toward sexuality education: findings among one south Florida county. *Am J Sex Educ*. 2011;6(2):176-191.
  26. Ito KE, Gizlice Z, Owen-O'Dowd J, Foust E, Leone PA, Miller WC. Parent opinion of sexuality education in a state with mandated abstinence education: does policy match parental preference? *J Adolesc Health*. 2006;39:634-641.
  27. National Public Radio, Kaiser Family Foundation & Kennedy School of Government. *Sexuality Education in America. General Public/Parents Survey, and Sexuality Education in America. Principals Survey*. Menlo Park, CA: The Henry J. Kaiser Family Foundation; 2004.
  28. Yarber WL, Milhausen RR, Crosby RA, Torabi R. Public opinion about condoms for HIV and STD prevention: a Midwestern state telephone survey. *Perspect Sex Reprod Health*. 2005;37(3):148-154.
  29. The Future of Sex Education. National sexuality education standards: core content and skills, K-12 (special report). *J Sch Health*. 2012;82:1-42.
  30. Florida Department of Education. *Health Education Survey 2004-2005*. Tallahassee, FL: Florida Department of Education; 2006.
  31. Dodge B, Zachry K, Reece M, et al. Sexuality education in Florida: content, context, and controversy. *Am J Sex Educ*. 2008;3(2):183-209.
  32. Vincent ML, Berne LA, Lammers JW, Strack R. Pregnancy prevention, sexuality education, and coping with opposing views. *Am J Sex Educ*. 1999;30(3):142-149.
  33. Christian L, Keeter S, Purcell K, Smith A. *Pew Internet and American Life Project: Assessing the Phone Call Challenge to Survey Research in 2010*. Washington, DC: The Pew Research Center; 2010 Available at: [www.pewinternet.org](http://www.pewinternet.org). Accessed October 18, 2012.