Published in final edited form as:

Am J Health Educ. 2012 ; 43(2): 83–92. doi:10.1080/19325037.2012.10599223.

Family Sources of Sexual Health Information, Primary Messages, and Sexual Behavior of At-Risk, Urban Adolescents

Cynthia Rosengard [associate professor],
Obstetrics & Gynecology and Medicine at the Women & Infants Hospital Division of Research, Providence, RI; crosengard@wihri.org

Candace Tannis [MD/MPH Candidate 2013],
New York University School of Medicine, New York, NY.

David C. Dove [clinical psychologist],
Independent Practice, Providence, RI.

Jacob J. van den Berg [assistant research professor],
Department of Medicine, The Warren Alpert Medical School of Brown University and The Miriam Hospital, Providence, RI.

Rosalie Lopez [research associatein],
Butler Hospital, Providence, RI.

L. A. R. Stein [professor of Psychology], and
URI, Kingston, RI.

Kathleen M. Morrow [associate professor]
Department of Psychiatry and Human Behavior, The Miriam Hospital and Alpert Medical School of Brown University, Providence, RI.

Abstract

Background—Sources of sexual health information exert strong influence on adolescents' sexual behavior.

Purpose—The current study was undertaken to understand how family serve as sexual information sources, the messages adolescents recall from family, and how family learning experiences affect sexual behavior among at-risk adolescents.

Methods—Individual interviews were conducted with 69 teens, ages 15–18 years, from an alternative high school and a juvenile correctional facility to capture adolescents' early sexual health learning experiences involving family and evaluate their association with teens' recent sexual behavior. Sexual learning narratives were compared among gender and sexual experience groups.

Results—Many participants identified family as sexual health information sources. Primary messages recalled: risks of sex, protection, and relationship advice. Many adolescents portrayed learning experiences as negative, cautionary, lacking detail and not always balanced with positive messages. Participants who reported four or more sexual risks were the only group to identify pornography as a sexual health information source. Participants who reported fewer than four sexual risks were most likely to identify family sexual health information sources.

Discussion—Participants identified family members as sources of sexual health information, with variations by gender. Negative/cautionary messages require teens to seek additional sexual information elsewhere (primarily friends/media). Males, in particular, appear to often lack familial guidance/education.

Translation to Health Education Practice—Sexual health messages should be tailored to adolescents' needs for practical and sex-positive guidance regarding mechanics of sex and formation of healthy relationships, and balanced with cautions regarding negative consequences.

BACKGROUND

Rates of sexually transmitted diseases (STDs) and unplanned pregnancies are high among adolescents in the U.S. Though rates of teen pregnancy have declined in recent years, the U.S. has the highest rates of any industrialized country.[1] Annually, more than 9 million young people contract a STD – nearly half of incident STD cases, despite adolescents constituting a quarter of the sexually active population.[2] Certain sub-populations of teenagers are at increased risks due to sexual behaviors/networks, particularly those from high-risk, urban environments. Adolescents who attend alternative high schools[3–5] and those involved in the juvenile justice system[6–9] report disproportionate sexual risk behavior (early sexual debut, high numbers of lifetime sexual partners, condom inconsistency) and, therefore, consequences of sexual risk behavior (STDs and unplanned pregnancy). The most recent data on health behaviors of alternative school students come from the Alternative Youth Risk Behavior Survey (ALT-YRBS), conducted in 1998 and parallel to the YRBS.[3, 4] This survey found that a majority of participants reported having had sexual intercourse and more than half reported four or more lifetime sexual partners, while just under half of sexually active students reported using condoms for their last episode of sex. Adolescents involved in the juvenile justice system also report early sexual debut (<13 years old), multiple sexual partners, and condom inconsistency.[8] A recent study of STD rates, including Chlamydia, Gonorrhea and Syphilis, among newly-arrested youth found positivity rates between 10% and 20%.[6, 10] High rates of pregnancy and having fathered a child are also found among incarcerated/detained adolescents.[9, 12]

Influence of Family (Sources, Messages and Associations with Later Behavior)

Parents and other family members are often cited as important sources of sexual health information for adolescents. Much of the literature examining the role of family members has demonstrated that communication regarding sexual health results in positive sexual decisions and behavior,[13–15] though some studies have found negative associations.[16] Some of the variability in findings can be attributed to the timing of the communication (e.g., before or after sex has been initiated) and what the nature of the messages are (e.g., "don't have sex," "use condoms," or more details) from parents/family members.[16]

A 1999 national study of children found that the top five sources of information about "sex, AIDS, alcohol and drugs, and violence" identified by 13 – 15 year olds were (in order of decreasing frequency): friends, TV/movies/entertainment, school/teachers, the Internet, and mothers. Among 10 – 12 year olds, the order was: mothers, TV/movies/entertainment, school/teachers, fathers and friends.[17] Studies of male adolescents, in particular, have found

less parental communication and more media and peers identified as sources of sexual health information.[18]

A number of studies have indicated that topic-specific conversations (i.e., sexual initiation, condoms, STDs, abstinence) between parent-child pairs are more effective than global communication (e.g., "just don't do it") in reducing sexual risk behavior.[15, 19, 20] A study of parent-child sex communication among urban minority adolescent girls found that mother-daughter communication regarding delaying sexual debut and perceptions of mothers' gender norms were associated with daughters' reports of HIV/AIDS preventive behavior.[21] A study of male college students' sources of sexual health information and messages conveyed found that messages from parents were most likely about contraceptives, abstinence, HIV/AIDS/other STDs, or no messages at all; while messages from peers/media were sex-positive/permissive and provided more description of relationships.[18]

Most studies of parent-child sexual health communication indicate that it can serve as a protective factor regarding adolescents' later sexual behavior and decision-making. Studies have found that teens are more likely to delay sexual debut, use condoms consistently, reduce their numbers of sexual partners and are less likely to experience a STD or an unplanned pregnancy if they have discussed sexual topics with their parents prior to becoming sexually experienced.[13, 15, 22] However, the timing, quantity/frequency and nature of this sexual communication, as well as the quality of the parent-child relationship can affect how influential parents will be in shaping their child's sexual behavior.[16, 23]

PURPOSE

To our knowledge, no prior research has: (1) specifically examined the role of parents/family members as sources of sexual health information among at-risk urban adolescents, (2) identified messages that are perceived and remembered by teens, or (3) examined associations between parental/family messages of sexual health and later sexual risk behaviors/consequences. Understanding how adolescents experience learning about sexual topics from family members and how those experiences influence their sexual risk decision-making and behavior might assist in informing targets for intervention to reduce these risks. Using semi-structured in-depth individual interviews among high-risk adolescents from alternative educational and juvenile correction settings, the current study was designed to answer the following research questions: (1) how do teens identify family members as sources of sexual health information, if at all?; (2) what messages do teens recall receiving from family members? (e.g., content of messages, tone of messages, context/circumstances of the experiences); and (3) in what ways do these learning experiences influence more recent sexual behaviors/consequences?

METHODS

Participants

Participants were 69 adolescents, ages 15–18 years, from two separate cohorts of a study examining adolescents' sexual histories and relationship concepts. The study was conducted using convenience samples of adolescents recruited from an urban alternative high school in

2005 and a juvenile correctional facility in 2006, both of which are located in southern New England. Families of both cohorts reside in similar urban, low SES, predominantly minority communities. Data were collected using protocols approved by an affiliated hospital's Institutional Review Board.

Recruitment

Adolescents were recruited through presentations to potential participants that provided information about the study and asked them to indicate their interest in participating. Parental consent forms were sent to parents/guardians of interested adolescents who were under 18 years old, who then provided their own assent. Those who were 18 gave consent prior to the interview. To be eligible, participants had to speak English and be between the ages of 15 and 18 years, inclusive, Because the ultimate goal of our research was development and evaluation of a multi-session risk-reduction intervention, an additional criterion for juvenile justice system-involved adolescents was adjudication to the facility for at least four months. Participants did not need to be sexually experienced.

Of the 50 adolescents approached at the alternative high school, 40 (80%) expressed interest in participation. Subsequently, nine could not be enrolled (eight were no longer interested and one was unable to obtain parental consent). Ultimately, 31 participated (20 females and 11 males). Of the 139 adolescents approached at the correctional facility, 113 (81%) expressed interest in participation. Subsequently, 75 could not be enrolled (42 did not meet adjudication eligibility criteria, 31 were unable to obtain parental consent, and two were no longer interested). Although we did not specifically track reasons why parental consent could not be obtained, it was often due to difficulties reaching parents (through mail or phone calls). Ultimately, 38 participated (18 females and 20 males). Of the 69 adolescents who participated, 56 (81%) were sexually experienced (reported having engaged in vaginal and/or anal intercourse) and 13 (19%) were sexually inexperienced.

Procedures

Due to the sensitive nature of the interview, gender-matched, age-appropriate (no older than 30s) interviewers conducted face-to-face interviews with participants in a private room on the school/correctional facility campus or at research offices. Interviews consisted of a brief demographic and risk assessment questionnaire which was filled out by the interviewer, and then a semi-structured in-depth, individual interview. Interviews lasted approximately 90 minutes and were audio-recorded. All participants received $25 for their participation in the study.

Measures

Participants indicated their age, gender, ethnicity, race, each parents' educational attainment and whether each parent had ever been incarcerated. Sexually experienced participants indicated their age at first intercourse (vaginal or anal – asked as a single question), number of lifetime sex partners, condom use at sexual debut and most recent intercourse, consistency of condom use in past six months, whether they or their most recent partner had engaged in concurrent sex (sexual relationships that overlapped), if ever diagnosed with a STD, and if they had ever been or "gotten someone" pregnant. Individuals were characterized as "high-

risk" if they reported four (the median number of risks/consequences for the sample) or more of the following: (1) sexual debut before age 15; (2) four or more lifetime sexual partners; (3) condom non-use at sexual debut; (4) condom non-use for most recent intercourse; (5) inconsistent condom use in the past six months (asked as how often they used condoms – with any answer other than "always" counted as inconsistent); (6) concurrent sex; (7) STD history (asked as whether a doctor or nurse had ever told them they had an STD – with a list of STDs for them to refer to); and/or (8) pregnancy history.

Qualitative data were collected using in-depth interviews designed to elicit adolescents' descriptions of how they learned about sex when they were younger (this could have been interpreted any way participants chose to define "younger"), including the source of information and what the messages were that they recalled. The specific questions posed were: *When you were younger, how did you learn about sex? What did you learn? How did you feel about these learning experiences? What have you found unhelpful or misleading about the information that you heard/received when you were younger? What information do you think that you needed to know but you didn't feel that you learned?*

Interviewers did not specifically ask about each potential source of information, but followed up when sources were specifically identified by participants. Other topics discussed during the interview, but not addressed in the current analysis, included concepts of adolescent sexual relationships, the natural history of a recent relationship, and details of participants' last sex with and without a condom (for sexually-experienced participants) or reasons for/against condom use (for sexually-inexperienced participants).

Coding and Data Analysis

Audio recordings of interviews were transcribed verbatim by a medical transcriptionist. Each transcript was cleaned (to clarify statements that the transcriptionist could not hear and insert behavioral observations of the interviewer) by the original interviewer using details from debrief reports that they completed immediately following each interview. As suggested by Crabtree and Miller,[24] initially, responses to open-ended questions were organized by the study's principal investigator (CR) then later by an interviewer and another research team member. Preliminary codes were generated based on: (1) a priori research questions from the interview guide, and (2) identification of additional themes and patterns in responses. A priori research questions from the interview guide resulted in codes to confirm the major sources of information that were expected from participants (e.g., school, peers, family members, media) and topics that we imagined might be identified by participants (e.g., STDs, pregnancy, condoms, contraceptives, puberty).

Emergent themes were added to the coding system as they were identified through reviewing the transcripts. Examples of unexpected themes that emerged were the role of pornography as a source of sexual health education and the importance of learning the mechanics of sexual activity that was described by participants. Each transcript was independently coded by two trained researchers (the study's principal investigator (CR) and three interviewers – all of whom received 30 hours of qualitative training in interviewing and transcript coding from an expert in qualitative methods (KM)). The coders then compared coded transcripts to examine correspondence, resolved any lack of correspondence and generated a master coded

transcript for subsequent analyses. Coders met regularly throughout the process to discuss coding issues and maintain fidelity to coding scheme. Transcripts and the corresponding codes were entered into NVivo 8 software.[25] Coded transcripts were then sorted (according to different groupings like sexual risk levels) and reviewed to identify passages that addressed how adolescents learned about sex. Frequencies and measures of central tendency of sexual behavior and history variables, and demographic variables were calculated from quantitative data for descriptive purposes.

RESULTS

The results section will include a description of the demographic and sexual behavior of the sample, how family members are identified as sources of sexual health information, the messages imparted by family members that were recalled by participants, and how these learning experiences were associated with current/recent sexual risk behavior. Throughout the results section, comparisons between males and females will be presented as well.

Description of the Sample

Participants from the alternative high school (N = 31; 20 females and 11 males) and correctional facility (N= 38; 18 females and 20 males) reflect similar ages (alternative high school: M = 16.0; SD = 0.86; correctional facility: M = 16.8; SD = 0.96) and racial/ethnic profiles (Table 1). Nearly half of each sample report living in single-parent households and parental education levels of high school or less (a marker of socioeconomic status). Many teens in each cohort reported parental incarceration histories. Each of these factors points to the higher-risk environment from which these participants come. The teens in the sample were also more likely to report being sexually experienced than comparably-aged, in-school teenagers from the same U.S. state at the time of data collection[26] and their median ages of sexual debut were also younger than national averages.[27] Of particular note, a third of the females and more than two thirds of the males reported four or more “high-risk” behaviors/consequences (see Table 2). Review of the transcripts revealed that, in terms of the types of sources (e.g., family, school, and friends) or content of messages provided that were identified regarding sexual health information, there were no differences between alternative school and juvenile justice-involved cohorts, so their data were combined for qualitative analysis.

Family Identified as Sources of Sexual Health Information

Participants identified between two and six sources of sexual health information. The most frequently identified sources were: (1) school; (2) family members; (3) friends; (4) media (movies, television, Internet); and (5) “own sexual experiences.” The sources identified most by girls were family and school, while for boys, the sources identified by most were school and media. Of those males who identified “media,” the majority specifically mentioned pornography as a source of sexual information.

Family members were identified by participants, regardless of participant gender, as sources of information about sexual health topics. In particular, mothers and other female adult relatives (e.g., aunts and grandmothers) were most often reported (by females more than

males), followed by siblings/cousins (by males more than females), and fathers. Some described detailed conversations with family members that included important information like instruction for condom application or support for obtaining birth control. As one 15-year-old, sexually-active, Hispanic, alternative high-school male reported: *"she (mother) told me that the best sex is no sex at all. Use a condom and protect myself… and taught me how to put on a condom… if it wasn't for her I wouldn't have known that."* These types of interactions between family members and teens appear to open the lines of communication and allow teens to feel as though they have resources for discussing sexual topics and gaining knowledge about how to practice safer sex. This same male participant went on to add: *"I asked [my mother] if I got a girl pregnant, what would she say? I asked her if she would kick me out. She said 'whatever happens happens.' And you better tell me when you do have sex'… now me and my mom we have an open relationship."* Having the opportunity to ask family members challenging questions about sex or to discuss their own personal sexual relationships without experiencing any sense of rejection or judgment by family members seems to contribute to open and honest communication.

More frequently, participants identified receiving vague messages about sex from parents like "don't do it," "protect yourself," or "wait until you are married." A 16-year-old, sexually-inexperienced, black, alternative high-school female explained how these messages are often conveyed to teens: *"She [mother] was, 'nobody in our family is going to have sex before they're married or get pregnant before they're… married."* Similarly, a 17-year-old, sexually-experienced, white, juvenile justice system-involved male indicated: *"they [parents],… they always told me, once in a while, make sure I use a condom and everything'*." A 16-year-old sexually-experienced juvenile justice system-involved female of mixed race described the lack of balance in how her mother talked about sex:"…*she (mother) always talks about why it's bad. Oh, that you could get pregnant. Like catch sexually transmitted diseases and things like that but she never talks about like the good things about it. Like she never like has said like how it goes. She never explained the details but like she just talked… like, I don't know, like a brief overview of it."* While these messages communicate parental values and beliefs about sex, they can also convey discomfort with broader discussions of sexuality with teens and lack specific details about how or why. In particular, many of the females reported feeling "awkward," "uncomfortable," or "weird" during sexual-health related conversations with their parents.

Several participants of both genders described uncomfortable or negative experiences as a function of the way in which they acquired knowledge about sexual practices through direct observations of family members' engagement in sexual activities. A 16-year-old, sexually-experienced, white, juvenile justice system-involved female described her mother as being a bad role model: *"Well, my mom wasn't a very good influence on me…like she used to disrespect herself when it comes to guys. I remember bein' little… and seem' my mom on the table with like two or three guys and I'm just like what the hell is this? And then later on I found out what it was and she used to take me wit' her prostitutin' and just learned about it from that.*" Similarly, some participants identified seeing other family members having sex. A 16-year-old, sexually-experienced, black, alternative high-school male explained: *"I seen my brother a lot, because he'd just do it in front of me… They bring people… girls in the house and then they just have sex with 'em. My mom won't be home… I just beyoung and I*

wanted to watch 'cause I don't know what's goin' on, I just heard a girl screaming, so I assumed he was hurtin' her." Witnessing their parents/family members having sex was experienced by participants as inappropriate and potentially detrimental to their healthy sexual development.

In sum, many teens' descriptions of experiences of family members as sources of sexual health information suggest that the level of detail and specifics regarding important information was lacking. Participants often indicated that curiosity and incomplete information led them to get their information elsewhere – primarily from friends and pornography.

An unanticipated source of sexual health information that was identified by a third of the sample (mostly males) was pornography. In many cases, this source of information was accessed at early ages (10–12 years old) through finding pornography videos belonging to family members, borrowing videos from friends, or seeking out pornography sites on the Internet. Teens reported feeling curious about how sex actually works and looked to pornography to provide needed information about how to engage in sexual activities and guidance on sexual positions and performance. In particular, one 17-year-old sexually-experienced, black, juvenile justice system-involved male reported: *"I used to uh…see my mom and them do it… I heard noises…started to walk into my mom's room, opened the door a crack, peep in, saw things goin', so then I closed the door, went back to my room. Just started to get suspicious like…well, if they could do it then I could do it. I took a couple of my father's tapes. Porno tapes, I guess. Popped…popped one of those in and started figuring out the way they did it… just basically how to do it."*

Another 17-year-old, sexually-experienced, Hispanic, juvenile justice system-involved male indicated that: *"it [the Internet] actually taught me how to do it. It would tell me where to put it. Also like how to get a girl wet, get her ready. All stuff like that."*

Pornography appears to provide teens with what they feel is important information about how to actually have sex and what it might look like. A 17-year-old, sexually-experienced, Hispanic, juvenile justice system-involved female expressed this sentiment in her description of watching pornography *"[Before watching porn] I didn't know that sex was like a penis going into a vagina. I thought it was just like when you hump somebody. Like I used to sit on people's laps and think that I was havin' sex."* The information provided by pornography, like the vague messages received by some young people from family members, is also incomplete and potentially misleading – failing to provide guidance on how to relate to and communicate with sexual partners and not emphasizing the importance of condoms and contraception.

Main Messages from Family Members

The most often identified messages adolescents recalled from their sexual learning experiences with family members included: (1) the risks associated with sex (e.g., STDs and unplanned pregnancy); (2) protection (e.g., condoms, birth control methods, generic "protection"); and (3) relationship advice.

Risks associated with sex—For most participants sexual risk-related messages from family members centered on pregnancy and STDs. One 16-year-old, sexually-experienced Hispanic, juvenile justice system-involved male demonstrated this point by stating, *"…my mom just tells me stay protected and be safe. Don't get the girl pregnant."* Another juvenile-justice-involved Hispanic male who was 18 years old and sexually-experienced said that his brother encouraged him: *"To use condoms and if you're gonna get a girl pregnant, just have one baby's mama not a lot cuz that's gonna… that's gonna mess you up. "* Another juvenile-justice-system-involved male, this time a black 17-year-old, who is sexually-experienced, described this conversation with his father: *"He'd (my father) always remind me, remember there's AIDS, gonorrhea, this and that. He was more…he was more scared of STDs than I am."*

Sometimes the risk-related messages made by parents/family members focused on damaging one's reputation, as described by a 16-year-old, sexually-experienced, white, alternative high-school female: *"She [mother] would tell me 'don't have sex with a lot of guys, you can ruin your reputation …never have sex when you're drunk or high… She told me it would be good just to keep my virginity… and make sure I lose it to someone I really want to."* Similarly, a 18-year-old, sexually-experienced, white, juvenile-justice-involved female indicated that her mother's messages were *"you should do it with someone special or someone you wanna be with and don't sleep with a lot of people because that makes you a whore.…don't have oral sex with people because she said that is gross."*

Some participants commented on the overall negativity of the sexual health messages offered by parents/family members, while others focused on the ways in which information was not made clear or provided soon enough. A second juvenile justice system-involved female, who was 17 years old and of mixed-race felt that she had learned too late about pregnancy dangers: "*I didn't know that [you could get pregnant the first time]. I didn't know if you could or you couldn't. I didn't think that, at the age of 14 that I could get pregnant at all. That was very misleading to not know that.*"

Messages recalled by participants about the risks associated with sex appeared to have the desired effect of cautioning teens about the negative consequences of unprotected sexual behavior, but often lacked detailed guidance about how best to avoid these consequences and did not provide a balanced picture of what is positive and pleasurable about sex.

Protection—Messages regarding protection include generic instruction to "protect yourself" as well as more detailed information about condom use, birth control methods, and abstinence. A 16-year-old, sexually-experienced white, alternative high-school female recalls her sister's protection message: *"I remember her [sister] telling me to like…I mean she told me about to use protection. She was the first person to tell me that…so from when I was 12 on I knew that if I ever were to, I would use protection…just to be smart."* Some examples of minimal protection messages include one by a 17-year-old juvenile-justice-involved black male whose parents told him *"Yeah. They told me to wear condoms, not really anything else"* and a 16-year-old, sexually-experienced, black alternative high school male who said that his mother is *"…always tellin' me. She's like I know you're about to go to college so just, you know, stay protected."*

Here too, there was an overall sense by participants that protection messages focused on the negatives, portraying sex as something which requires protection and safety, and lacking specifics/details on protection were not entirely useful and, in some cases resulted in misinformation and poor decision-making. A 16-year-old, sexually-experienced, Hispanic, juvenile justice system-involved male described his disappointment in how he learned about condoms: *"Just use a condom. Yeah, that's it. To tell you the truth it kind of sucked. They weren't telling me everything. He just said 'use a condom' you don't wanna get an STD and that's it."* Perhaps more poignantly, a 16-year-old sexually-experienced, white, juvenile justice system-involved female who was pregnant at the time of her interview indicated what she'd learned about condoms in this way: *"They just…they said that it could…it helps prevent STDs but it's not 100%, 'cause the condom could break and everything. So I was thinkin' 'like then what's the point of usin' it because it's not 100% anyway.'"* As illustrated in the preceding quotes, although teens expressed getting the overall message of the importance of protecting themselves, they also expressed frustration that they did not feel they were getting the whole picture or enough details about protective methods.

Relationship advice—The topic that seemed to get the least amount of attention was how to form and participate in healthy sexual relationships. The information that was provided to adolescents about relationships from family members tended to focus on: (1) the importance of waiting for a special partner to have sex, and (2) cautions (particularly to girls) regarding pressures to have sex which portray boys as only interested in sex and as likely to leave partners after having sex. One 18-year-old, sexually-experienced, black, juvenile justice system-involved female described her confusion about her mother's advice to preserve her virginity until she was married and her regrets for having become sexually active: *"I have never had a conversation with my parents about sex. When I lost my virginity, I really didn't know nothing about, like, the only thing my mom told me was save my virginity until I was married. I never knew the reason why I shouldn't, so…but I did it, and it was for all the wrong reasons…[if I had known why I should wait] I think my sex life wouldn't even be what it is now and I would probably…understand the whole relationship thing better."*

The same 16-year-old, sexually-experienced, white, juvenile justice system-involved female who described her mother's prostitution earlier talked about how those learning experiences influenced her views on sex and relationships: *"'Cause I then looked at sex like it was no big deal and it is 'cause it should be with somebody you really care about instead of just every guy 'cause every guy isn't gonna be there for you if a mistake happens when you get pregnant."*

A number of the female participants described messages they received from family members that cast males in a negative light. The aunt of one 17-year-old, sexually-experienced, juvenile-justice-involved, female of mixed-race said: *"guys are pigs and she didn't really get in depth about sex but she said that's what guys only wanted"* One 15-year-old, sexually-experienced, black female alternative high school student described her mother's relationship advice this way: *"make sure that he's good to you and that he won't just do it to you and then he leaves. Make sure that you trust him. That yous trust each other and um… make sure that he's not one of them boys that after yous do it he goes and tells everybody"* Another 17-year-old, sexually-inexperienced, black, alternative high school female

described her mother's similar characterization for potential male partners, saying: *"sex is no good because she told me about her own experience… because some boys all they want to do is penetrate you and that's it and they leave you for the next girl."*

When asked about what she wished she had learned about relationships, a 17-year-old, sexually-experienced, mixed race, juvenile-justice-system-involved female stated: "… *if you are with apartner, and you choose to have sex with him, that's a choice. But also, I didn't know that, like just 'cause you are with them, if you don't want to do it, you don't have to do it. I was thinking, well, if that's your boyfriend and you choose to do it one time, you know what I'm saying; it's something that needs to be continued.*"

Although framed under the heading of "relationship advice," here, too, the messages recalled by many participants were overwhelmingly pessimistic about sexual relationships. Most of the messages were cautionary and prohibitive, and not at all encouraging about developing and enacting healthy relationship skills and decision-making within strong emotional relationships.

Behaviors/Consequences and Sexual Health Learning

To understand how family sources of sexual health information and perceived/recalled messages can potentially influence adolescents' recent sexual decision-making and behavior, we categorized the sample into those who were sexually experienced and reported four (the median number of sexual risks/consequences reported by the sample) or more high-risk sexual behaviors and/or consequences (sexually-experienced/high-risk), those who were sexually experienced and reported fewer than four high-risk sexual behaviors and/or consequences (sexually-experienced/at-risk), and those who were sexually inexperienced (sexually inexperienced/low risk). Within each group, we then examined whether or not parents were identified as sources of information, the nature of messages recalled, and whether pornography was cited as a source of sexual health information.

Sexually experienced/high-risk—Among the 69 participants interviewed, 33 reported four or more high-risk sexual behaviors and/or consequences (i.e., sexual debut before age 15, condom non-use at sexual debut, four or more lifetime sexual partners, condom non-use for last sex episode, recent condom inconsistency, sexual concurrency, and/or STD or pregnancy history). Among girls in this group, the most prevalent risks included early age at sexual debut and inconsistent condom use. More than half of these girls reported a prior pregnancy and many reported high numbers of life-time sexual partners. Among boys in this group, almost all reported early age at sexual debut, high numbers of life-time sexual partners, and inconsistent condom use. Another prevalent risk reported among the males in this group was concurrent sexual behavior (partner and self).

Two-thirds of high-risk participants identified parents or family members as primary sources of information about sexual health topics. Among those who listed parents/family members, nearly two thirds reported an uncomfortable learning experience (as described above), rather than a positive or informative experience. A 17-year-old, sexually-experienced white juvenile justice system-involved female described overhearing conversations between her father and his friends which she found disgusting: *"And then his [father's] friends would*

talk about um… it was sexual talk like…disgustin talk… all right, let's say we go to the store and then some fine chick… [laughs]…would walk by and um…and like they'd look and he'd [father] be like 'I'd like to have that.' Like I didn't really know what… now that I think back at it I think, it's like… they were a bunch of crack heads…"

Just over half of the high-risk group reported pornography as a source of sexual information and most focused on the mechanics of sex as the important message that they received. A 17-year-old, sexually-experienced, mixed-race, juvenile justice system-involved male talked about how pornography (movies and Internet sites) showed him how to be a good lover: *"Like how to do it, like what to do. At first I was just humpin' and stuff but and then seein' that you stick it in the hole so it went on from that. I don't know, I thought I was good at it… I just copied what I seen and since…like…like at that time, I thought like anybody who was on TV or tape must be great so I thought I was great and good at it."*

Sexually-experienced/at-risk—Twenty-three participants reported sexual experience, but did not report four or more of the high-risk sexual behaviors and/or consequences mentioned above. All of these participants reported at least one high-risk sexual behavior or consequence and many reported multiple risks. Among the at-risk girls, condom inconsistency was reported most frequently (80%), and a third reported a prior pregnancy. Among the at-risk boys, young age at sexual debut was reported by half of them.

Among the at-risk group, more than 8 in 10 identified parent/family members as primary sources of information about sexual health topics (the most of all three groups). The majority of these participants mentioned talking with parents, mostly mothers and few reported negative or uncomfortable learning experiences. One 17-year-old, sexually-experienced, black, alternative high school male discussed his father's messages regarding pregnancy: *"he [father] always tells me that if I have a kid that that's my fault and that I'm on my own and stuff. That I have to move out because he's always tellin' me to use condoms and I have to face the consequences…if I'm willing to go through the actions."* It is interesting to note that none of these at-risk participants reported pornography as a source of sexual health information.

Sexually inexperienced/low risk—More than two thirds of the 13 sexually-inexperienced participants identified family members as primary sources of sexual health information. Like the other participants, sexually-inexperienced participants reported a variety of sources that provided information about reproduction/pregnancy, STDs, condoms and anatomy/puberty. A number of those participants who were sexually inexperienced credited their parents' expectations as assisting them in maintaining their abstinence, as illustrated by one 16-year-old, Hispanic, alternative high school female: *"my main reason for not having sex is my parents, so imagine me with a kid? How that would break my parents' heart. I can't do that to them… You know? I mean I have a whole life ahead and I have goals and my main goal is to make my family proud and I'm gonna reach 'em and I'm not gonna mess up that way."* Again, none of the sexually-inexperienced participants reported pornography as a source of sexual health information.

DISCUSSION

Family members were often cited as important sources of information by the urban adolescents we interviewed. Consistent with previous work, there were slight variations in the family sources mentioned and messages recalled between males and females.[15, 18, 22] The overall theme that emerged with respect to family members was the strong emphasis placed on the negatives and consequences of sexual behavior to the neglect of desired information about the positives and mechanics of sex. It is clear from the material gathered that adolescents need and want to hear this type of practical information along with cautions and protection messages and that teens will turn to media and friends to learn this material if it is not included in the messages received from family members. This finding echoes strongly the gap identified by Louisa Allen between the sexual health knowledge gained from secondary sources (like parents) and the practice of sexual behavior experienced by young people,[28] as well as their needs for "information about pleasure, desire, and the logistics of sexual activity"[29] (p.576).

Implications for Interventions

The teens who reported being sexually-active, but not at high-risk were more likely to identify family members and less likely to identify pornography as sources of information than those who were sexually-experienced and reported four or more sexual risks/outcomes. On the other end of the risk continuum, the teens who reported four or more risk behaviors or consequences were slightly less likely to identify parents/family members as sources of information, often reported negative learning experiences associated with family members, and were highly likely to have relied on media (especially pornography) to provide sexual health information.

These findings support the benefits of age-appropriate comprehensive sexuality education (both in school and at home) for children and adolescents. In keeping with the suggestion of the 2006 position paper for the Society of Adolescent Medicine,[30, 31] teens have a right to receive specific, practical information about how to use condoms, where to obtain birth control methods, empowerment to make informed decisions about behavior and protection, sex-positive messages about the importance of sexual behaviors within healthy relationships, as well as encouragement to keep the lines of communication open and honest between teens and adults (teachers, parents, coaches, etc.). Such learning experiences can provide a balance between the positive benefits and negative consequences of sexuality and provide guideposts for identifying when and under what circumstances one might feel "ready" to take on sex and the possible outcomes of sex.

Many teens reported negative and sometimes uncomfortable interactions with family members as part of their learning about sex. This demonstrates both the degree to which children are paying attention to the actions of family members and the challenges that teens feel in being comfortable seeing their family members as educators and role-models when the topic is sex. The strategies of providing vague messages regarding "protection" or abstinence, negative messages about gender norms and relationships, or providing no discussion about sexual topics at all place youth in a position of having to seek out this

information from alternate sources (i.e., peers, internet, pornography) – much of which may be inconsistent with parents'/families'values and hopes for their children's future behavior.

Shtarkshall and colleagues[32] draw a distinction between *sexual socialization* (imparting values, which is primarily the responsibility of parents/families) and *sexual education* (providing information and social skills development, which is primarily the responsibility of schools). Providing parents with opportunities for practicing sexual health discussions; giving them accurate and practical information for timing these discussions prior to their child's initiation of sexual behavior; and incorporating more information about the characteristics of healthy adolescent relationships and the appropriate place of sexuality in their child's healthy development might enhance the quality and positive impact of parents/family as agents of sexual socialization and advocates for sexual education. As discussed by Parkes and her colleagues, it is also important to reinforce the indirect ways in which families may influence their teen's sexual decision-making and behavior – such as parental monitoring, parental rules regarding television viewing, and demonstrating the importance of sex within relationships through modeling of positive behavior.[33]

Our data raise the question of whether or not males are being overlooked in parents/family members' discussions of sex. Consistent with prior findings with college males (e.g.,[18]), the males in our study were more likely to report peers and media as agents of sexual health information and the majority of males reported multiple high-risk behaviors and consequences. They were also more likely to focus on the mechanics of sex as important lessons learned, rather than recall specific messages regarding how to effectively reduce sex-related risks, prevent negative health consequences, or initiate and maintain healthy relationships with their sexual partners. The majority of research and educational efforts regarding sexuality has been targeted at young women, perpetuating the assumption that girls bear the brunt of poor sex-related decision-making and reinforcing the stereotypes that females are the gate-keepers and males are the instigators of sexual behavior in relationships. Specific materials for educating young men should be developed and evaluated through additional study of what males need, how they wish to receive information, and from whom.

Limitations

Caution should be taken in interpreting the results of this exploratory/formative qualitative research project. Although there were some behavioral differences between cohorts, we chose to combine the data gathered from alternative high school students and incarcerated teens in order to capture the breadth and range of experiences described in our study. The perspectives described here are not meant to be generalized to other urban teenagers, but are intended to illustrate the variety of experiences often encountered by teens from urban settings. All interviews were, of course, self-report—reflecting the perspectives and memories of adolescents of how they learned about sex when younger—therefore, we could not verify or validate their accounts of these experiences.

TRANSLATION TO HEALTH EDUCATION PRACTICE

To make informed choices regarding sexuality and how it is practiced, adolescents require reliable and open sources of information that can balance practical, sex-positive guidance on healthy sexual development and relationships with clear and consistent messages regarding the serious and potentially life-altering consequences of unwise sexual behavior, along with specific and detailed information about how to protect oneself from experiencing these outcomes.

Adolescents require information on how best to experience their sexuality and will seek that information out from whatever sources they can find. Our findings support the guidelines for comprehensive sexuality education developed by SEICUS[34] that emphasize the importance of relationships, the development of personal/interpersonal skills, the centrality of sexuality in human experience, and the ways in which our society and culture shape the way sexual health is learned and expressed. As suggested in Fortenberry's recent editorial in the *Journal of Adolescent Health:* "…an empirical discussion of sexual pleasure among adolescents is nearly impossible because we continue to lack the courage to explore the physical and emotional subjectivities of adolescents' sexual experiences"[35 (p.220)]. Our data suggest that if there is a vacuum of information provided by parents, family members, and school, then friends and media (pornography) will fill that void. Conversely, if needed practical information can be provided by courageous parents, family members, and schools, teens may view all sexual health materials (including prevention messages) as more relevant to their lives and use this information to support healthy sexual relationships and behavior.

REFERENCES

1. The Public Costs of Teen Childbearing. National Campaign to Prevent Teen Pregnancy, 2006. [Accessed February 25, 2012] Available at: http://www.fhenationalcampaign.org/resources/pdf/pubs/btn_full.pdf.
2. Weinstock H, Berman S, Cates WJ. Sexually transmitted diseases among American youth: Incidence and prevalence estimates, 2000. Perspect Sex Reprod Health. 2004; 36(1):6–10. [PubMed: 14982671]
3. Grunbaum JA, Kann L, Kinchen SA, et al. Youth risk behavior surveillance national alternative high school youth risk behavior survey, United States, 1998. J Sch Health. 2000; 70(1):5–17. [PubMed: 10697808]
4. Grunbaum JA, Lowry R, Kann L. Prevalence of health-related behaviors among alternative high school students as compared with students attending regular high schools. J Adolesc Health. 2001; 29:337–343. [PubMed: 11691595]
5. Grunbaum JA, Tortolero SR, Weller NF, et al. Cultural, social, and intrapersonal factors associated with substance use among alternative high school students. Addict Behav. 2000; 25(1):145–151. [PubMed: 10708330]
6. Belenko S, Dembo R, Weiland D, et al. Recently arrested adolescents are at high risk for sexually transmitted diseases. Sex Transm Dis. 2008; 35(8):758–763. [PubMed: 18461014]
7. Dembo R, Belenko S, Childs K, et al. Drug use and sexually transmitted diseases among female and male arrested youths. J Behav Med. 2009; 32:129–141. [PubMed: 18979194]
8. Morris RE, Harrison EA, Knox GW, et al. Health risk behavioral survey from 39 juvenile correctional facilities in the United Statues. J Adolesc Health. 1995; 17:334–344. [PubMed: 8924439]
9. Breuner CC, Farrow JA. Pregnant teens in prison: prevalence, management, and consequences. West J Med. 1995; 162:328–330. [PubMed: 7747498]

10. Belenko S, Dembo R, Rollie M, et al. Detecting, preventing, and treating sexually transmitted diseases among adolescent arrestees: An unmet public health need. Am J Public Health. 2009; 99:1032–1041. [PubMed: 19372535]
11. Dembo R, Belenko S, Childs K, et al. Individual and community risk factors and sexually transmitted diseases among arrested youths: a two level analysis. J Behav Med. 2009; 32:303–316. [PubMed: 19224357]
12. Nesmith JD, Klerman LV, Oh MK, et al. Procreative experiences and orientations toward paternity held by incarcerated adolescent males. J Adolesc Health. 1997; 20(3):198–203. [PubMed: 9069020]
13. Karofsky PS, Zeng L, Kosorok MR. Relationship between adolescent-parental communication and initiation of first intercourse by adolescents. J Adolesc Health. 2000; 28:41–45.
14. Hutchinson MK, Cooney TM. Patterns of parent-teen sexual risk communication: Implications for intervention. Fam Relat. 1998; 47:185–194.
15. Hutchinson MK, Jemmott JB, Jemmott LS, et al. The role of mother-daughter sexual risk communication in reducing sexual risk behaviors among urban adolescent females: A prospective study. J Adolesc Health. 2003; 32(2):98–107. [PubMed: 12782448]
16. Clawson CL, Reese-Weber M. The amount and timing of parent-adolescent sexual communication as predictors of late adolescents sexual risk-taking behaviors. J Sex Res. 2003; 40(3):256–265. [PubMed: 14533020]
17. Kaiser Family Foundation. Talking with kids about tough issues: A national survey of parents and kids. [Accessed August 11, 2010] Available at: http://www.kff.org/youthhivstds/1460-index.cfm.
18. Epstein M, Ward LM. “Always use protection”: communication boys receive about sex from parents, peers, and the media. J Youth Adolesc. 2008; 37:113–126.
19. Aspy CB, Vesely SK, Oman RF, et al. Parental communication and youth sexual behavior. J Adolesc. 2007; 30:449–466. [PubMed: 16750265]
20. DiClemente RJ, Wingood GM, Crosby R, et al. Parent-adolescent communication and sexual risk behaviors among African American adolescent females. Pediatrics. 2001; 139(3):407–412.
21. Teitelman AM, Ratcliffe SJ, Cederbaum JA. Parent-adolescent communication about sexual pressure, maternal norms about relationship power, and STI/HIV protective behaviors of minority urban girls. J Am Psychiatr Nurses Assoc. 2008; 14(1):50–60. [PubMed: 21672881]
22. Hutchinson MK. The influences of sexual risk communication between parents and daughters on sexual risk behaviors. Fain Relat. 2002; 51:238–247.
23. Taylor-Seehafer M, Rew L. Risky sexual behavior among adolescent women. J Spec Pediatr Nurs. 2000; 5(1):15–24.
24. Crabtree, BF.; Miller, WL. Using codes and code manuals. In: Miller, WL., editor. Doing Qualitative Research. Thousand Oaks, CA: Sage Publications, Inc; 1999. p. 163-177.
25. QSR. NVIVO qualitative data analysis program. QSR International Pty Ltd; 2006.
26. Perry D, Pitt L. Sexual behavior health risks among Rhode Island public high school students 1997 through 2005. Rhode Island Department of Health. 2006
27. Alan Guttmacher Institute. Sexual and reproductive health: women and men. AGI; 2002. Available at: http://www.guttmacher.org/pubs/fb_10_02.html [Accessed February 25, 2012]
28. Allen L. Closing sex education’s knowledge/practice gap: The reconceptualisation of young people’s sexual knowledge. Sex Educ. 2001; l(2):109–122.
29. Allen L. Doing ‘it’ differently: Relinquishing the disease and pregnancy prevention focus in sexuality education. Br J Sociol Educ. 2007; 28(5):575–588.
30. Santelli J, Ott MA, Lyon M, et al. Abstinence-only education policies and programs: A position paper of the Society for Adolescent Medicine. J Adolesc Health. 2006; 38:83–87. [PubMed: 16387257]
31. Santelli J, Ott MA, Lyon M, et al. Abstinence and abstinence-only education: A review of U.S. policies and programs. J Adolesc Health. 2006; 38:72–81. [PubMed: 16387256]
32. Shtarkshall RA, Santelli JS, Hirsch JS. Sex education and sexual socialization: Roles for educators and parents. Perspect Sex Reprod Health. 2007; 39(2):116–119. [PubMed: 17565625]

33. Parkes A, Henderson M, Wight D, et al. Is parenting associated with teenagers' early sexual risk-taking, autonomy and relationship with sexual partners? Perspect Sex Reprod Health. 2011; 43(1): 30–40. [PubMed: 21388503]

34. Sexuality Information and Education Council of the United States. Guidelines for Comprehensive Sexuality Education: Kindergarten 12th Grade. 3rd. SIECUS; 2004. p. 1-112.

35. Fortenberry JD. Fate, desire, and the centrality of the relationship to adolescent condom use. J Adolesc Health. 2010; 47:219–220. [PubMed: 20708558]

Table 1

Description of Samples

Descriptive Variable	Alternative School Sample (*N* = 31)	Correctional Facility Sample (*N* = 38)
Race/Ethnicity		
Hispanic	45%	32%
Black	33%	24%
White	16%	24%
Mixed Race		32%
Refused Racial Category	33%	13%
Living Situation		
Single Adult Home	48%	42%
Two Adults Home	52%	32%
Other Relatives		18%
Friends		8%
Maternal Educational Attainment		
< High School	29%	37%
High School Graduate	10%	26%
Some College/College Graduate	58%	24%
Unknown	3%	13%
Paternal Educational Attainment		
< High School	29%	18%
High School Graduate	26%	21%
Some College/College Graduate	35%	18%
Unknown	10%	42%
Maternal Incarceration History		
Yes	13%	21%
Unknown	3%	0%
Paternal Incarceration History		
Yes	39%	42%
Unknown	10%	3%

Table 2

Participants' Sexual Behaviors/Outcomes

	Females (*N* = 38)	**Males (*N* = 31)**
Sexually Experienced		
Yes	74%	90%
Sexual Behaviors(median/range)		
Age Sexual Debut	15 (12–16)	14 (5–17)
Number of Lifetime Sex Partners	2 (1–20)	6 (1–35)
Sexual Risk Behaviors of Sexually Experienced		
Sexual Debut <15	46%	79%
Condom Non-Use at Sex Debut	18%	46%
>4 Lifetime Sex Partners	32%	68%
Condom Non-Use at Last Sex	61%	50%
Recent Inconsistent Condom Use	82%	79%
Concurrent Sex (Recent Partner)	36%	68%
Concurrent Sex (Self)	25%	57%
Sexual Risk Consequences of Sexually Experienced		
Sexually Transmitted Disease	29%	14%
Prior Pregnancy	39%	36%
"High-risk" Categorization (4 + risk behaviors and/or consequences)	32%	71%