HOW YOUNG ADULTS LEARNED ABOUT SEXUAL HEALTH

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Quality sexual health education is a significant influence on how decisions are made throughout one's life. In order to make safe and healthy choices, like wearing condoms, getting tested for sexually transmitted infections, and being prepared for puberty, quality sexual health education is needed. This qualitative study at the University of Pittsburgh involved interviews with a total of 11 people, nine females and two males. All of the interviewees were college educated and ranged in age from 21 to 25 years old. Understanding the sources of people's sexual health education is important because it can provide valuable insights into the effectiveness of current sexual health education practices, parental involvement, and media influence, and how these can be improved. Looking retrospectively at how young adults have received their sexual health education provides a critical look at how their knowledge has influenced their lives to this point, and what they now know on the subject. Several public health relevant themes emerged in this study; sexual health education is needed and wanted earlier in life, should be provided in a realistic way, and should include parental involvement. Inaccurate or inadequate sexual health education can lead to being unprepared for puberty, ignoring symptoms of sexually transmitted infections, and using contraceptives incorrectly. When people are provided with correct, accurate and comprehensive sexual health information they can make better decisions, like being prepared for puberty, getting tested for sexually transmitted infections, and using contraceptives correctly.

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1.0 INTRODUCTION

It is important to have sexual health education because it prepares individuals to make healthy, smart decisions throughout their sexually active life. As children, most are taught what puberty is and the changes that are happening to their body so they are prepared for when it happens. However, in addition, adolescents should be taught how to have safer sex, how to use condoms, and consequences of not having safer sex. These topics are not discussed consistently in schools and homes in the United States. Adolescents receive an assortment of sexual health information from parents, teachers, friends, and media sources, which may be mixed messages. When the information provided is not sufficient to make healthy choices, adolescents are at risk of being unprepared for puberty, contracting STIs, and using contraceptives incorrectly, which could lead to unwanted pregnancy.

The purpose of this study is to explore how young adults today have received sexual health information and in what ways they are still obtaining this information. It is more important now than ever before to obtain this information because technology has and will continue to change drastically in the future. This study increases understanding of how young adults would have preferred to receive sexual health information, what sexual health information they wanted when growing up, how media affect the way that information is obtained and understood by young adults, and how they discuss sexual health with various groups in their social networks. After describing the methodology for the current study, the paper presents the

results of interviews conducted with 11 participants, discusses what these results mean and how they could impact future research.

2.0 BACKGROUND

Early adolescence is a time of intense physical, cognitive, social and psychological transition.[1] During this time adolescents are learning many things from a variety of sources and experiences. They can be influenced to make poor health decisions such as drinking underage, experimenting with illegal drugs, and smoking cigarettes, or be influenced to not partake in these unhealthy behaviors.[25] School, family, peers, and friends are all part of an adolescent's educational upbringing, and they can promote or hinder what an adolescent learns. One of the most important things that adolescents are (or in some cases are not) learning about is sexual health. According to the Centers for Disease Control and Prevention (CDC), in 2009 46% of high school students had sexual intercourse with 34% having had intercourse during the past three months.[25] Of those who had intercourse in the previous three months, 39% did not use a condom and 77% did not use a hormonal method of contraceptive to prevent pregnancy the last time they had sex.[25] Additionally, adolescents are nearly 10 million of the 19 million new STIs each year.[25]

While dating and sexual experimentation are a normal part of adolescence, early initiation of sexual intercourse is associated with a variety of high-risk behaviors that put an adolescent at increased health risks such as unwanted pregnancy, sexually transmitted diseases, and infection with human immunodeficiency virus (HIV).[2-4,7-10,13,14,17] It was found that adolescents who were sexually active with low perceived knowledge of sex engaged in these

high-risk sexual behaviors.[5] Unintended pregnancy can put a mom's and baby's health at risk.[26] By not having a planned pregnancy, delayed prenatal care can occur, which may lead to complications such as spina bifida, other birth defects, and low birth weight.[26] Additionally, liberal attitudes towards sexual activity have also been associated with high-risk behaviors among adolescents.[2]

Sex education is taught in almost all public secondary schools in the United States (93%); more than 95% of 15-19 year olds have had some sort of formal sex education instruction in their schools.[11] One of the cited fears about offering more sex education throughout secondary school is that it will encourage adolescents to engage early in sexual activities instead of delaying this type of experimentation.[7,8] However, multiple studies have shown that not only is this incorrect, but that the converse is likely to occur: "…School-based and community-based sex and HIV education programs can delay sex…" (pg. 53).[7] Various studies have shown that comprehensive knowledge delays first sex.[2,4-9,13,14] According to the CDC, having early first sex may have the consequences of unintended pregnancy and STIs which result in high social, economic, and health costs for affected persons, their children, and society.[27] Nevertheless, fear of encouraging students to have sex through teaching comprehensive sexuality programs has led to more abstinence-focused programming. However, this type of sexual education does not change most adolescents' values and attitudes about premarital sex or their intentions on whether to engage in sexual activities.[12]

The federal government supported and encouraged abstinence-focused education from the late 1990's through the early 2000's by providing financial incentives for schools using this type of programing.[11,12] In contrast, public opinion supports instruction on condoms and other contraceptives in school.[11] Condom education is important to have before first sex occurs. It has

been shown that condom demonstrations and easy access to condoms for adolescents increase the likelihood of proper condom use.[9] In addition, young people who are taught that they should use contraceptives if and when they do have sex are more likely than others to engage in preventive behaviors.[11] Preventive behaviors include how to protect themselves against STIs, unwanted pregnancy, and deciding if they are ready for intercourse.[11]

Research has found that many adolescents feel that they are not getting all the information they need to make informed choices.[6] One of the reasons adolescents feel this way is that they are offered formal sexual health education only once in high school and often do not absorb most of the information since they do not see how it relates to their life choices at the time.[6] For example, a ninth grader who does not have any interest in engaging in sex is less likely to pay close attention to or remember health lessons, such as those about contraceptive methods, which would be beneficial later when he or she will actually be able to put the knowledge into action.

It is not just formal education (information provided by a teacher or professional) that affects attitudes toward sexual health and behaviors. Parenting is also one of the most significant influences on child's behavior. This clearly happens through parents' direct communications with their children, and parents have stated that they believe sex education should begin with them.[14] Research has also shown that adolescents who are not communicating with parents on these topics were five times more likely to report multiple sex partners in the past three months.[16] Having multiple partners can increase the risk of contracting STIs.[24,25] While most STIs are treatable, undiagnosed and untreated STIs can lead to continuous spread of the disease, infertility, or pelvic inflammatory disease (PID) in females.[24,25] With this obvious need for these conversations to occur, only 62.7% of adolescents said they had a conversation with their parents

about pregnancy, puberty, sexually transmitted infection (STIs) or birth control.[16] Many parents have defended the fact that they do not initiate sexuality conversations with their children by saying that they are waiting for their children to bring up the topic.[14,20] However, as the adult in the relationship, it is the parent's responsibility to have preventative conversations with her children, not the children's job to ask for information. In many cases the first time a child seeks this advice is after she has made a mistake that could have been prevented through informative conversations.

A child not only learns from conversations with her parents but indirectly from observing the behaviors of her parents.[2] A parent's own standard of conduct greatly impacts the formation of her child's behavior.[2] For example, if a parent tells her child to feel safe to come to her with any questions or concerns about using condoms, the parent cannot chastise or make judgment if her child does come to her. If parents' reactions do not agree with what they have told their child, it will decrease the child's trust in feeling safe and able to talk with her parents about a sexual health issue. In some research teens have indicated they want to talk with someone they can trust and suggested parental involvement.[17] However, many parents might not have the necessary information, tools, or communication skills to effectively teach their children about such sensitive and important issues.[17-20]

It is also known that parental monitoring, such as knowing who a child is friends with, is related to less frequent sexual intercourse, lower sexual risk-taking, and delayed first intercourse.[17,18] Low parental involvement has been related to sexually promiscuous attitudes of teens.[16,17] The more involved a parent is in her child's life, the more aware she is of actions and decisions her children are making. Ongoing parental monitoring and discussing sex-related

topics provide a protective benefit which delays first sex, increases contraceptive use, and lowers the number of sexual partners.[16-18,20]

School and family are not the only places that adolescents learn about sex. The media have an influential role in how an adolescent views sex and sexual health behaviors.[21,23] Studies have shown that youth ages eight to 18 are on average exposed to media for about six hours a day.[21,23] That is a quarter of their time for a span of ten years spent with the media. Television is the most influential media source and provides a visual depiction of how a sexual encounter may work.[21-23] Movies and television shows create romantic scenarios that lead viewers to believe the characters are engaging in sexual intercourse. Teen magazines include articles that discuss sex and safer sex behaviors.[21-23] However, most mass media do not depict commitment, contraceptives, or consequences of unprotected sex.[22,23] Reliable websites on the internet provide this information, but accessing it requires that individuals take the initiative to research this material, while other forms of media, such as movies, passively provide sexual health education.[21,22]

Many different factors can influence an adolescent's sexual health knowledge and behaviors. The literature has shown what factors influence adolescent behavior, the health outcomes of a lack of sexual health education, and who is and who should be providing sexual health information to adolescents. There is no available research that asks young adults to analyze their sexual health education and how it affected their sexual health decision-making. This study seeks to fill this gap in the literature by using a small cohort of young adults to look at how parents, school, and media influenced their sexual health education and decision-making both as adolescents and in the present day.

3.0 METHODS

This study was designed to learn about how young people learned about sexual health topics, such as puberty, how this type of education was provided, who provided it, and other sources, such as television, that influenced their understanding of sex. This study was approved by the Institutional Review Board at the University of Pittsburgh (see Appendix A).

Most of the respondents were recruited through advertisements in the University of Pittsburgh Medical Center employee newsletter, a suburban neighborhood newsletter, the Graduate School of Public Health student newsletter, and flyers posted throughout the Oakland area of Pittsburgh, Pennsylvania; some of the participants were acquaintances of the interviewer. The data were collected via voice-recorded, one-on-one in-person interviews. The interviews took place in participants' homes, coffee shops, and offices based on the location that was convenient and provided a comfortable environment for the participant.

The interview questions (see Table 1) were created by the interviewer and were designed to chronologically examine the interviewees' sexual health education starting from their initial learning about sex up until their most recent educational experience. The questions were asked in the same order for each participant with the number and type of follow-up questions varying for participants depending on his or her answers. The length of the interview depended on how much a participant could remember and how many follow-up questions were asked. On average the length of interviews were around 20 minutes. A total of 11 people were interviewed.

Table 1. Interview Guide
1. When did you first learn about sex?
2. Who taught you about puberty?
3. Did you have health class in high school? What do you remember learning about sexual health?
4. Were your parents involved in teaching you about puberty, safer sex, pregnancy, STIs, etc.?
5. Are you comfortable talking to your parents now about these subjects?
6. Have you considered how you want to discuss this subject matter with your children?
7. Was sexuality ever discussed either in school or at home? How was it discussed?
8. How did media, movies, TV shows, internet, etc. play into your education or understanding about sex?
9. What sources do you trust most when looking for information? Has this changed throughout the years?
10. How would you change your education on these subjects if you could?
11. After high school, did you have any formal sexual health education?
12. What topics do you wish you learned more about? Did you seek this information out on your own?
13. How often do you have conversations with peers, family members, etc. about sexual health?
14. What is your comfort level talking about sexual health with same sex, different sex, same sexual orientation, family, strangers, classmates, etc.?
15. Do you think that your education was sufficient to aid you in your sexual health decision-making? If you had learned more in high school/post-high school would you have done things differently?
16. Did anyone ever formally teach you how to put on a condom? Should it be taught/experienced outside of an intimate setting?
17. Anything else to add?

The interviewer reviewed the recordings of the completed interviews and took notes to establish common themes. The data were then analyzed to compare each participant's education experiences. Finally, the results were examined to determine how they can be used for future research studies.

4.0 RESULTS

A total of 11 people were interviewed, nine females and two males. All of the interviewees were college educated and ranged in age from 21 to 25 years old. Ten interviewees were Caucasian (eight females, two males) and one female was African American. Ten (nine female, one male) identified themselves as heterosexual, and one male identified as homosexual. Pseudonyms have been used to protect interviewees' identity in the results.

4.1 EDUCATION

The first time participants remembered hearing about sex ranged between three years old to 10 years old. While all of the participants remembered having their first formal educational experiences about sexual health between fourth and sixth grade, each was exposed to sexual health topics in various ways prior to that time.

> At 10 years old I heard in school a girl got her period and had no idea what that was. (Tammy)
>
> In third grade we kinda started realizing body parts were there for a reason. (Tom)
>
> At seven or eight years old I walked into my parents' room in the middle of the night and was told to leave. (Amy)

All 11 participants recalled having a health class in ninth or tenth grade. Five of the 11 participants reported that their high schools used scare tactics to encourage students not to have

sex. The scare tactic was comprised of showing pictures illustrating extreme cases of STIs on genitals. For Emily the STI lesson was the "… most haunting lesson." This same sentiment was expressed by Alexis when she said that the STI lesson's goal seemed to be to put the "…fear of God into people."

Graphic pictures of genitals with grotesque cases of STIs were not the only vivid memory for participants. How the actual class was taught was impactful, too. Katie said that her teacher "stunk" at teaching sexual health while Kayla described the class as "awful." Amy and Tom both wished their teachers would have made the lessons less awkward.

When asked if their parents were involved in teaching them about puberty, STIs, safer sex, or pregnancy, eight of the participants said their parents talked to them about puberty. Brittany first learned about pregnancy when she was three years old. She and her mother were watching the movie *Look Who's Talking*, and she did not understand the opening scene of a sperm and egg traveling to meet each other. Her mother used that part of the movie to explain pregnancy. Another participant's experience was very different from Brittany's. Tammy has very conservative parents who did not talk to her about anything related to sexual health. The first time she remembers learning anything of significance was in seventh or eighth grade. At that time she was in a private Catholic school and learned only a little about puberty.

Alexis' and Katie's parents chose to use religion as a focus when talking to their children about sex. Alexis grew up believing that one does not have sex until she is married while Katie's parents explained that abstinence is the best contraception and emphasized their family's religion and religious beliefs.

Sarah was completely unprepared when she started menstruation. Her mother had not talked to her about puberty and she had no formal sexual education before that point.

> I was 11 years old at summer camp and the day before girls were talking about their periods. The next night I went up to the counselor and said 'I think I got mine.' She told me about pads and how to use them. I called my mom to tell her and she cried since she wasn't there and did not know if I was being told the right information.

One of the two males interviewed remembered his dad talking to him. The extent of the conversation was Bob's dad saying, "Be smart, wear a condom." Emily had a similar experience with her mother. Emily was told, "If you choose to have sex you need to be safe." However, her mother never clarified what "safe" was or how to be safe. She was "pretty sure" her mother was telling her to use a condom, but her mother never actually said "condom," showed her how to use a condom, or told her where she could get condoms.

After high school, only two of the participants had formal sexual health classes in college. These two participants took these classes as electives because of their interest in sexual health, not because the colleges required the courses. Of the nine who did not have formal sexual education in college, four (three females, one male) of them were exposed to sexual health via workshops or brief one-time talks. For example, one participant had a freshman dorm orientation on date rape. Two participants were exposed to some sexual health information when it was covered in their biology and nursing classes, but the topics were discussed in relation to the class and were not the primary focus. Three (two females, one male) of the participants said they spoke with a doctor to ask more in-depth questions about sexual health after high school. One participant does not remember receiving any formal or informal sexual health information at all after her high school graduation.

Participants were asked if they were ever formally instructed on the proper way to put on a condom. Seven (female) said no, two (one male, one female) said yes and two (one male, one female) could not remember. The two participants who were instructed both learned when they were in college and were already sexually active. One of the participants who were not sure if

they were instructed to put on a condom does remember that most of his learning was done by "trial and error and having experienced partners."

All of the participants agreed that adolescents should be instructed on how to put on a condom in a formal educational setting prior to becoming sexually active so they are prepared. Emily's high school provided condoms in health class but did not teach students how to properly use them. When discussing if condom usage should be taught in a formal setting, Tom said that "…withhold[ing] information from kids doesn't make them innocent." Tammy held the same sentiment, saying that teachers "…need to be honest, ignorance is more dangerous."

4.2 SEXUAL ORIENTATION

Sexual orientation was discussed in seven of the 11 participants' homes. Of these seven, three (two female, one male) participants learned that homosexuality was wrong or unacceptable because of religious or moral reasons. The other four (three females, one male) participants learned about sexual orientation in an open and accepting household, with three of these having someone in their lives who was homosexual. Three participants did not discuss sexual orientation growing up in their homes, and one did not remember if it was discussed.

While they were growing up, Bob and Kayla had homosexual people in their lives. Bob, whose uncle was gay, explains that "I grew up just knowing he is gay and [my parents] never had to explain it to me." Kayla's mother had a personal trainer who was a lesbian, and one summer her family went to the trainer's beach house. During that trip Kayla saw photographs of the trainer and her partner, and Kayla, figuring out that the trainer was a lesbian, realized that there was another sexual orientation besides heterosexuality.

Alexis, however, had a completely different experience with learning about homosexuality while growing up. She was raised in a religious atmosphere and was taught that being gay is wrong, but through her life experiences her views on homosexuality changed.

> When you're younger, parents' view of sexuality affected me more…now I have gay friends and don't think they will go to Hell.

Tammy's family never discussed sexuality, but her father uses derogatory terms for homosexuals around her. Tom is a gay man, but sexuality was never discussed in his home growing up. His father is a Marine and had clear, negative stereotypes about homosexual people. Tom believes that

> If I had better communication relationship between me and my parents, our relationship now that I am open about being gay would be different.

Three (one male, two females) participants remember that in high school, sexual orientation was discussed. Only one of the female participants remembers having a day in health class dedicated to sexual orientation. The other two (one male, one female) remember the word "gay" being used only as a way to tease people among peers. Two female participants never discussed sexual orientation in high school.

4.3 MEDIA

All of the participants agree that media have a significant role in sexual health and how sex is portrayed. Eight (six females and two males) of the participants said that media (television, magazines, books, internet or other) educated them in some way. One female participant remembers learning about menstruation on an episode of the television show *7th*

Heaven, a family-friendly teen soap opera. Sarah and her mother were watching *Oprah*, a talk show, and that day's topic was teenage pregnancy. On a commercial break Sarah's mother asked, "Do you let boys touch your breasts?" She responded "No" and that was the extent of the conversation.

Brittany had a different experience from Sarah. Brittany and her mother were watching *Grease,* a love story based in the 1950's. Brittany did not understand the scene in which Kenickie and Rizzo were about to have sex in a car and Kenickie refers to the condom as his "twenty-five cent insurance plan." Brittany's mother explained that he was referring to a condom, which prevents pregnancy but it broke, which is why Rizzo and Kenickie have a pregnancy scare later in the movie.

One participant stated that she believes that the media "portrays all teenagers as being sexually active, which can put pressure on non-sexually active teenagers." Amy said, "How the media portrays everyone hooking up you would expect someone to get a disease or pregnant." Emily had a different take on television: "When younger, TV/movies present sex as everyone does it, now there is more programming that talks about sex in a serious way, for example *16 and Pregnant.*" Alexis felt that television and magazines educated her on what sex was, the different stages of sexual activity such as kissing, touching, and oral sex, and what it means to be in a romantic relationship. Tom and Kayla remember media as tools for showing homosexuality as a common occurrence. Kayla watched *Will and Grace,* which showed gay men living average lives and having normal jobs, which helped normalize homosexuality for her.

4.4 COMFORT LEVEL

The participants' responses to how often they have conversations about sexual health topics with their social networks show that conversations about sexual health do happen. As Bob puts it, "People talk about it more than they think." However, the comfort level of having these conversations varies from person to person, and depends on with whom they are having the discussion. When growing up, seven of the participants used friends as their main source for sexual health information. Three (one male, two females) of the participants used the internet as their first trusted source, and one participant asked her mom and looked up answers in books. At present all of the participants either go online to look up a topic or ask their doctor if they have a more serious concern.

Participants varied in their comfort level and ability to talk with their parents about personal sexual health topics such as pregnancy scares or contracting a STI. Two participants could not talk to their parents at all. On the opposite end of the spectrum, two participants could talk to their parents about personal experiences and general information. Two participants would talk to their parents about something personal if it was serious; otherwise, they were comfortable talking to them about general topics. The other five participants could talk to their parents about non-personal topics but would not talk to them about anything personal. All of the participants rated family as those they would be the least comfortable discussing issues with or would not talk to at all. Additionally, all nine females indicated that they felt more comfortable discussing sexual health topics and personal matters with a female compared to a male.

When asked about their comfort level in talking about sexual health with friends, people of different sexual orientation, coworkers, and the other gender, all of the participants mentioned that they could talk about sexual health if it was something in the news or not a personal

experience. No one felt it was appropriate to discuss personal sexual health matters with coworkers. All of the participants said that they felt the most comfortable discussing personal sexual health topics or concerns with close friends. Abby felt that it would be harder to talk to a male because he would not be able to understand as well as a female. Katie is more comfortable talking about relationships with people of the same sexual orientation because she feels that they can better relate to each other.

Participants were asked if they had thought about how they would explain different sexual health topics to their children. Two of the participants said they had "no idea" but would want to talk to their spouses about it. Two of the participants had not thought about it. One participant said, "My parents were not the biggest factor in my education, so teaching my kids I'd be clueless."

The other seven had general ideas about how they would discuss different sexual health topics with their children. Three of these participants planned on educating their children the same way that their parents educated them, which was providing comprehensive sexual health information. Two of the participants' parents did not talk to them at all about sexual health, and they believe that was an inappropriate parenting decision and would want to talk to their children about the subject matter. Tammy feels that her parents did not educate her correctly and would definitely want to be open with her children. She wants to stress a realistic approach to sexual health, not an idealistic approach of waiting until marriage.

4.5 HINDSIGHT

Participants were asked how they would change their education if they could go back in time. Two participants could not think of anything. Five of the participants said they would like to have had sexual health education sooner. One participant wanted her parents to have had a bigger role in her education while another participant wished her parents were more realistic with her sexual health education and not so based in religion. The other four participants stated that they would want their school educational experiences to have been more realistic, not so focused on abstinence, and less awkward, and to have provided the information on a more consistent basis.

There are many topics participants wanted their education to have covered in more detail. The most frequently identified topics were contraception and STIs. Alexis wished her education had been "more about safe sex and responsibility…better than 'don't do it.'" Tom believes if his sexual health education had emphasized condoms earlier in his education, then he would be more likely now to use condoms with partners for a longer time period. The same goes for Sarah:

> I am the first person to tell people to be safe and use a condom, but I never use condoms. I know I should, but if I learned earlier the importance of condoms maybe I would be more adamant about using them.

Four participants wanted to know more information about sexual health before high school. Amy wished that the school made it less awkward while Bob thought sexual health should be an ongoing discussion throughout his high school years. Kayla had similar sentiments, but also believed that her education was a bit of "shock and awe." When she learned about sexual health in high school, she was not thinking about being sexually active. The topics were far removed from her own personal life at that time so having it again later would have been more relevant.

When the participants were asked if they thought that their education was sufficient to aid them in sexual health decision making throughout their lives, three said no, three said yes and five were not sure. Nine of the participants felt that more education definitely would have positively influenced many of their decisions. Two participants mentioned that if wearing condoms was ingrained in them before they became sexually active, their current condom use behavior would likely be different.

5.0 DISCUSSION

Understanding the sources of people's sexual health education is important because it can provide valuable clues as to the effectiveness of current sexual health education practices and specific areas that need to be improved. Looking retrospectively at how young adults have received their sexual health education provides a critical look at how their knowledge has influenced their lives to this point, and what they now know on the subject. For this type of research, including participants classified as young adults is optimal because they have had enough life experiences to determine which education experiences were beneficial and which were a hindrance to their growth and development. Young adults are also ideal because they are not far removed from these meaningful experiences.

5.1 EDUCATION

The participants all had their first sexual health lessons when they were in elementary school. During elementary and middle school the participants learned about puberty but were not taught about other sexual health topics. When they reached high school they were exposed to more diverse sexual health information. One method that several schools used was to show pictures of extreme cases of STIs to students as a scare tactic to deter engagement in sexual activity. However, the participants in this study indicated that this was not effective. While it

"grossed them out," looking back on the lesson they do not remember any of the information that was provided, just the pictures that were shown. Other research has shown that a better tactic would be to explain realistically how STIs are contracted, what most people experience when they are infected, what testing is like, and how treatment works.[1,2,6,7]

According to the participants in this study students should not receive sexual health education only once in their lifetime. Instead, it should be an ongoing process, providing age appropriate information as children grow and develop. Parents can begin talking with their children about puberty before it starts. Then they will be able to build on this as their children grow by having continuous conversations pertaining to sexual health issues relevant to their child at any given point in her development. The participants in this study expressed the desire for their parents to have been more involved in educating them about puberty and safer sex. Haglund supports this, saying that "ongoing education would allow for opportunities to discuss more sophisticated topics and real-life situations" (pg. 373).[14]

In addition to parents having ongoing conversations with their children, schools also need to have education throughout the grades, not just one week in health class. In ninth grade, students who are not sexually active may not remember the information being taught because it is not relevant to their life. When the time does come for the students to use this information, it is unlikely that they will be able to recall what they have learned. To compare, if students are taught how to fill out college applications in middle school, how will they remember when it comes time to apply years later?

Not one person interviewed was taught how to use a condom properly before they were sexually active. Adolescents are taught how to drive, the dangers of drinking irresponsibility, and proper nutrition. All of these topics are addressed to help teenagers be safe and grow into

responsible and healthy adults; sexual health should be added to this list since nearly half of all new STIs are in 15-24 year olds.[24] Condoms are the only contraceptive method that prevents both STIs and pregnancy. One participant's high school provided condoms but did not teach the students how to use them. This is analogous to giving someone a parachute to jump out of a plane but not training him on how to use it beforehand. There is a need for adolescents to be taught how to properly use a condom by school, parents or both.

College is traditionally a time when students can explore their freedom. They may experiment with drugs, alcohol, and their sexuality. Administrators realize that this experimentation and exploration will happen while students are attending college, so they should be providing this vital information in a more formal setting to inform students to make healthier and safer choices. While a few of the participants had some exposure to sexual health education during college, none of the participants received formal education on safer sex.

Sexual health education provides important information that people will use throughout their life. Just as young children learn about puberty to prepare them for their body development, teenagers need to learn about safer sex to prepare them for the time when they become sexually active. Whether the source of the information is parents, schools, or some other place, the most important issue to remember is the quality of the information.

5.2 SEXUAL ORIENTATION

The interviews revealed that participants remembered learning about homosexuality only when their high school health class discussed HIV/AIDS. This perpetuates the stigma that only gay men are at risk of contracting HIV/AIDS when in fact anyone not practicing safer sex is at

risk of contracting HIV/AIDS and other STIs. Schools teach equality and tolerance of people with different races, beliefs, and gender. Sexual orientation needs to be a part of this conversation.

As shown in this study population, most parents do not feel comfortable discussing sexual orientation with their children. Schools can take over this specialty role and explain that some people have a different sexual orientation than heterosexual. This can be incorporated into equality and respect lessons.

5.3 MEDIA

While parents and school were the primary influences in the participants' education, media were also influential. Television and movies were most dominant on the participants' view of relationships and how the physical act of sex is actually carried out. While media portray sex, they rarely show safer sex or the consequences of having unprotected sex. On the other hand, media have done a respectable job in showing people of different sexual orientation in a positive light.

It was interesting to learn that the Internet was not a substantial source of information for participants as they were growing up. This may be because the Internet was just becoming a prominent source of information as participants were entering middle school and high school. It was not surprising to learn that the Internet presently is the number one media source that participants use to look up information to answer their questions as there are a multitude of websites that provide sexual health information geared towards young adults.[22]

5.4 COMFORT LEVEL

The ability to talk with parents openly about sexual health topics grew as participants got older. However, most were not comfortable talking to their parents about personal matters, such as pregnancy scares or STIs. Children need to feel comfortable going to their parents about a health concern and not fear judgment or being scared. The home environment should be a supportive and safe place to talk about sexual health topics. Participants wanted their parents to be more involved in educating them as they were growing up. Parents initiating conversations with their children when they are young and continuing to have sexual health conversations as they grow up may increase the comfort level for adolescents to come to their parents with questions or health concerns. Participants who felt that their parents were not involved enough expressed the desire to be more involved with their own children. When participants recognize the gaps in their own sexual health education, they can make positive changes with their children in providing better and comprehensive education to them.

5.5 HINDSIGHT

This retrospective look at the strengths and weaknesses of participants' sexual health education suggests areas that could be improved upon. Some challenges were that teachers and parents often presented sexual health information in a way that made the situation very awkward. Also, being taught abstinence until marriage for religious reasons was not effective with study participants; a more realistic approach would make adolescents feel intelligent and able to have conversations about decision-making when they are ready to become sexually active. Finally,

while the participants did receive some information on STIs and contraceptives in high school, they are aware that it did not contain all the vital information which affected how they made decisions. These are areas that can and need to be improved upon for future generations.

6.0 CONCLUSION

Growing up, young adults are bombarded with sexual health information from their parents, schools, and the media. How they interpret this information, remember it, and apply it to decision-making in their lives needs to be understood. This study interviewed a sample of young adults in order to comprehend how they received sexual health information, what they remember learning about sexual health, and how they applied this information to their own lives.

Several themes emerged in this study: sexual health education is needed and wanted earlier in life; should be provided in a realistic way; and ought to have parental involvement. Participants who were exposed to pictures of genitals with extreme STIs did not respond well to this tactic and remembered the class in a negative light. All of the participants who were encouraged to abstain from sex until marriage wanted to have been educated in a more realistic way. Also, there seems to be a need for a refresher course either at the end of high school or at the beginning of college on sexual health information. These themes seem to suggest that high school students are in need of comprehensive sexual health information.

This study had several limitations. First, the sample was only 11 people. Second, all participants were all college educated, and the majority were white and female. Third, a few of the participants were acquaintances with the author, which may have introduced some sampling bias. This was a retrospective study; the data collected depended on what participants could remember. Therefore, some of the information may not be accurate. While this sample may not

be representative of the general United States population, the results can be used as formative research for additional studies conducted in the future.

Based on this research, a follow-up study with a larger sample that is more representative of the United States population should be interviewed. It would be interesting to do a prospective study to see how students, ages 12 to 18, are learning about sexual health now and follow them through their mid-twenties to see how they make decisions based on their education received. Some questions that could be asked are:

> Which of the following topics, STIs, pregnancy, contraceptives, condoms, decision-making, and healthy relationship do you wish you had more education on in a high school class?
>
> On a scale of 1 to 5, 1 being not at all and 5 being significantly, how has state and national government policies affected your sexual health?
>
> How did your parents provide you with sexual health information? Video, one-time talk, multiple talks, books, online resources, movies, or other.

Another study that these results seem to suggest would be to help parents to develop open relationships with their children, so children feel comfortable coming to their parents and asking questions instead of talking to friends and learning incorrect sexual health information. This study has provided a basis from which many other studies can be formulated. While there are many research studies that have interviewed adolescents and young adults, none has asked young adults to assess their health education throughout their lives and how it has affected them.[1-19,21,23] This study has shown that young people want their parents involved in educating them about sexual health, that they are aware that they are not receiving enough information in school to make fully informed sexual health decisions, and that they feel they still need more education now as young adults. If any part of the sexual health education field could use just one of the

suggestions made in this paper to improve instruction then it would be taking a large step towards improvement in education and knowledge of adolescents and young adults.

APPENDIX A: APPROVAL LETTER

University of Pittsburgh
Institutional Review Board

3500 Fifth Avenue
Pittsburgh, PA 15213
(412) 383-1480
(412) 383-1508 (fax)
http://www.irb.pitt.edu

Memorandum

To: Alexandra Illes

From: Sue Beers , Ph.D., Vice Chair

Date: 12/15/2011

IRB#: PRO11120317

Subject: Retrospective Study on Learned Sexual Health Information During the Adolescent Years.

The above-referenced project has been reviewed by the Institutional Review Board. Based on the information provided, this project meets all the necessary criteria for an exemption, and is hereby designated as "exempt" under section

45 CFR 46.101(b)(2) Tests, surveys, interviews, observations of public behavior

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Please note the following information:

If any modifications are made to this project, use the " Send Comments to IRB Staff" process from the project workspace to request a review to ensure it continues to meet the exempt category.

Upon completion of your project, be sure to finalize the project by submitting a "Study Completed" report from the project workspace.

Please be advised that your research study may be audited periodically by the University of Pittsburgh Research Conduct and Compliance Office.

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