BASELINE ASSESSMENT OF ADOLESCENT REPRODUCTIVE AND SEXUAL HEALTH IN YANTALÓ, SAN MARTIN, PERU

by

SHIVANI MURARKA

DISSERTATION

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ABSTRACT
BASELINE ASSESSMENT OF ADOLESCENT REPRODUCTIVE AND SEXUAL HEALTH IN YANTALÓ, SAN MARTIN, PERU

SHIVANI MURARKA
The University of Texas Southwestern Medical Center, 2016
Supervising Professor: Andrea Johnson, M.D.

Background: The term "adolescent fertility rate" refers to the number of births per 1000 in girls ages 15-19. In July 2013, the adolescent fertility rate in rural Yantaló, Peru, was nearly 10%, almost double the national rate of 5.2% in 2012 (World Bank). Adolescent pregnancy remains a major contributor to maternal and child mortality and to the cycle of ill-health and poverty world-wide (WHO). In Yantaló, many young mothers are forced to terminate their schooling in order to care for their children, giving them fewer opportunities for financial independence in a society with a strong machismo culture.

Objective: To gain a better understanding of the adolescent sexual and reproductive health education and practice in Yantaló and the potential interventions that could be made to decrease the adolescent fertility rate.

Methods: This study involved numerous methods of data collection that were then evaluated and presented to the local community. We started by conducting oral interviews with 19 local authorities, who played different roles in the community, to gain a deeper understanding of the issues surrounding adolescent sexual and reproductive health in the region. We then conducted 218 written surveys with high school students ages 11-19 to

investigate their baseline reproductive health knowledge, religious values, family life, and their preferences regarding avenues of receiving sexual health information and sexual health classes. We also evaluated the proposed national curriculum on sexual health. All of this data was then used to create suggestions regarding interventions to improve the adolescent fertility rate in Yantaló, and this information was presented to local authorities.

Results: Analysis of the study revealed that there were many components that contributed to the high adolescent fertility rate in Yantaló and many potential areas for intervention were made apparent. Data from oral interviews pointed to a strong machismo culture, rampant misconceptions regarding sexual health and contraceptive methods, insufficient outreach programs, and a general lack of coordination between local entities as reasons for the high number of adolescent pregnancies. The surveys of the adolescents revealed that they lacked basic reproductive health knowledge but were eager to learn more, especially from local clinicians and their mothers and fathers, despite admitting having difficulty communicating openly about sexual health with their parents. Although the proposed national curriculum was analyzed, the school in Yantaló admitted that it only followed the guidelines loosely, which made it an ineffective tool to evaluate sexual health education in the region.

Conclusion: Yantaló is similar to many other rural communities in South and Central America in that it has a strong traditional, machismo culture that influences much of the adolescent sexual health practices. Like much of Peru, Yantaló also has access to trained

healthcare providers and free contraceptive care, but misconceptions and a lack of education regarding sexual health limits access. This research emphasized the importance collaboration within the community to utilize the existing infrastructure of the village to increase education of adolescents and encourage communication between providers, parents, and adolescents to improve adolescent sexual health and reduce the burden of unwanted teenage pregnancy. This practice could be easily translatable to numerous other communities that struggle with the same inefficiencies.

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PRIOR PRESENTATIONS

PRESENTATIONS:

Murarka, S.M., (2016). *Baseline Assessment of Adolescent Sexual Health in Yantaló, San Martin, Peru* Oral Presentation presented at: UTSW Global Health MD with Distinction; Dallas, TX.

Murarka, S.M., (2014). *Baseline Assessment of Adolescent Sexual Health in Yantaló, San Martin, Peru* Oral Presentation presented at: UTSW Global Health Symposium; Dallas, TX.

Murarka, S.M., Moore, S., (2013). *Baseline Assessment of Adolescent Sexual Health in Yantaló, San Martin, Peru* Oral Presentation presented at: City Council Meeting; Yantaló, PER.

CHAPTER 1: INTRODUCTION

Globally, about 1 million girls under the age of 15 and 16 million girls ages 15-19 give birth every year; 95% of these births occur in low and middle-income countries[1]. In Peru, the national adolescent fertility rate, defined as the number of births per 1000 in girls ages 15-19 was 5.2% in 2012[2]. However, in Yantaló, a village of population size about 3300 located in the San Martin region of Peru, just next to the Amazon jungle, the adolescent fertility rate as of July 2013 was nearly 10%, almost double the national rate, and consistent with the global trend of adolescent pregnancies being more common in poor, uneducated, and rural communities[1,3,9].

Although there has been a marked decrease in adolescent fertility rates since 1990, complications during pregnancy and childbirth are still the second highest cause of death for 15-19 year-old girls world-wide[1]. Pregnant adolescents in the Peruvian Amazon have been noted to be less likely to seek prenatal care as frequently as their non-adolescent counterparts, and in general, pregnant adolescents are more likely to seek prenatal care later in their pregnancies[4,5]. Younger pregnant adolescents with unwanted pregnancies are also more likely to delay seeking an abortion, as they are often unable to recognize the signs and symptoms of pregnancy[5]. When they do seek an abortion, there is a greater likelihood that they choose a non-medical provider or attempt self-induced abortion, resulting in approximately 3 million girls aged 15-19 who undergo unsafe abortions yearly (this statistic does not include countries in which abortion is illegal, such as Peru)[5,1].

Numerous studies also suggest that there are increased health risks associated with adolescent pregnancy, and they are oftentimes a result of the adolescent mother's

physiological and psychological immaturity, and lack of sufficient antenatal care and safe delivery[5]. Adolescent mothers are more likely to be inflicted with pregnancy-induced hypertension and severe anemia (oftentimes due to a combination of menstrual cycles and nutritional deficiencies)[5]. Due to the immaturity of the pelvic bones and their smaller birth canals, they are also more likely to suffer from obstructed and prolonged labor at the time of delivery, resulting in a higher incidence of cesarean sections and operative vaginal deliveries[5]. Adolescent mothers are also more likely to experience long-term complications of vesico-vaginal and recto-vaginal fistulae from these obstructed, prolonged labors[5]. Without adequate emergent obstetric care, these obstructed labors can also lead to the dire consequence of uterine rupture, resulting in high mortality rates for both mother and baby[6]. In some communities, girls less than 15 years of age are five times as likely, and girls aged 15-19 are twice as likely to die from complications related to childbirth than women in their 20s[8].

Infants born to these adolescent mothers also have significantly greater risk of mortality than those born to women ages 20-24[1]. These infants are more likely to be born pre-term (before 37 weeks of gestation), oftentimes due to psychological stress that the mother experiences when she has inadequate social support, influencing physiologic factors or resulting in unsafe habits (such as drug use)[5]. Babies born to adolescent mothers are also more likely to have low to very low birth weights, especially when the mother is less than 15 years old[5]. Adolescent mothers are also more likely to give birth to stillborn babies and have increased risk for neonatal mortality and decreased compliance with vaccination recommendations[5].

The negative downstream economic and social consequences of adolescent

pregnancy are also undeniable and often depend on the girl's individual cultural, family, and community settings[1,5]. While many pregnant adolescents are married to the partners or involved in domestic partnerships, many still are unmarried and often may be considered an embarrassment to their family and left without a support system[5]. In many cultures, marriage to an older man is encouraged by society and family, and the girls often give up the decision-making power regarding conception and pregnancy to their older partners[5]. This often results in sexual coercion and domestic violence, and a multi-country study on women's health and domestic violence conducted by the WHO found that intercourse was forced for more than 40% of women who had their first sexual experience before the age of 15 in both Lima and Cusco[5,7]. Additionally, 15% of women in Lima and 28% in Cusco said they experienced physical violence during at least one pregnancy, and the perpetrator was almost always the unborn child's father[7]. When an adolescent becomes pregnant, she is often compelled to drop out of school in order to raise the child, leaving her with fewer skills and opportunities to find a job and propagating the cycle of poverty[1].

Many of these same factors and consequences come into play in Yantaló. As a community, Yantaló has a significant adolescent fertility rate (nearly 10% as of July 2013), and many of these girls are below the age of 15[9,3]. There is a strong culture of machismo and domestic partnership at a young age, with older males noticing when girls are undergoing puberty and preying on them at that time, making offers of financial stability and companionship to girls who are living well below the global poverty line[9]. These girls begin living with the partners and are encouraged not to use contraception, as there is a fear that the woman will become unfaithful if she does. Because of this, they

often become pregnant at a very young age[9]. As a result of the pregnancy, they drop out of school and often find themselves in a violent relationship that is kept hidden from neighbors and family members[9]. While some girls are able to get back to school and complete their educational goals, most are left without a high school degree and unable to go on to get professional training and skills[9]. This greatly limits their financial independence, and they often stuck living in a violent partnership taking care of their children[9].

Like the rest of Peru, Yantaló has the support of a MINSA clinic, in which an obstetrician is available during business hours[9]. Contraception in Peru is free for people of all ages; however, most adolescents do not seek contraceptive care or advice, as it is often seen as taboo[9]. While contraception is free, it is important to note that abortion in Peru is illegal[9].

Yantaló is unique, however, in that it has the support of the Yantaló Foundation[10]. The Yantaló Foundation was founded in 2005 with the mission of delivering outstanding quality programs in the areas of health, education and culture to help meet the needs of the people[10]. Every year, the Foundation hosts volunteers from around the world; many of these volunteers deliver classes on sexual health to adolescents[10]. These classes, however, are inconsistent, and no efforts have been made to measure their success[9].

Recently, many efforts have been made globally and in Peru to get adolescents involved in the improvement of sexual health education[11,12]. One study conducted in Lima used concept mapping to encourage adolescents to brainstorm and create pathways that explained sexual behavior[11]. This study demonstrated that adolescents in Lima rated personal values, respect and confidence in partner relationships, future achievements, and

parent-child communication as key factors that come into play with adolescent sexual behavior and contraception use, and it emphasized the importance of integrating adolescents into future sexual and reproductive health research, policies, and programs[11]. Based on the success of such studies, this study was created to truly understand the factors that influence adolescent sexual health in Yantaló and to communicate directly with the adolescents to gain their perspective on what might be changed to improve the adolescent fertility rate in Yantaló.

CHAPTER 2: EXPERIMENTAL PROCEDURE

In order to assess the current situation and attitudes regarding adolescent sexual and reproductive health in Yantaló, Peru, 19 oral interviews were conducted with local authorities. These authorities included people from the local police department, the municipality, the local MINSA clinic, the school, and citizens and mothers in the community. Number of interviews based on affiliation can be seen in Figure 1. They were sought out by the interviewers based on the diversity of their professions and their involvement with adolescents. The interviews were semi-structured in order to keep the interview focused on adolescent sexual health but allow the interviewee to speak openly and prevent the introduction of bias by the interviewer. One researcher from the research team, who was fluent in Spanish, interviewed all of the local authorities, and another researcher was present in order to take notes. The team then reviewed the interviews together and categorized the data based on key themes that were mentioned.

The next step was the written surveys of adolescents. The survey was based on an accumulation of numerous sexual health surveys that had been previously completed in adolescent populations. It was then edited to be slightly more pertinent to the local community. For example, statements such as “when was the last time you saw a movie in a movie theater?” were removed, as there is no movie theater in Yantaló. The surveys were completed in two different high schools, one in Yantaló, and one in Los Angeles, a more remote village that is under the district of Yantaló. Prior to administering the surveys, parental consent forms were sent home with all students, and only one student of all of those approached was unable to participate. 218 students participated, ages 11-19; 51% were female, and 49% were male. The distribution of age of participates can be seen

in Figure 2. The survey included questions on demographics, religious preferences, family life, current and preferred avenues of receiving information on sexual and reproductive health, quantity of current sexual health classes, and knowledge of reproductive physiology.

Lastly, the school's proposed curriculum for sexual and reproductive health was evaluated using the Sexual Health Education Curriculum Assessment Tool from the Superintendent of Public Instruction in the state of Washington. The proposed curriculum comes from a national level and was found in a book. It is important to note, however, that the curriculum is only loosely followed by the professors at the school.

At the end, the information gathered from the interviews, surveys, and assessment of the curriculum was analyzed and compiled into a presentation for the local community members and authorities from the police department, municipality, MINSA clinic, school, and Yantaló Foundation. Suggestions regarding interventions to improve adolescent sexual health in the region were made at that time.

CHAPTER 3: RESULTS

The 19 oral interviews revealed many key issues that factored into adolescent sexual health in Peru. The key issues raised and their corresponding frequencies are listed in Table 1. Forty-two percent of interviewees identified clinicians and providers as the responsible sources for dispensing information regarding sexual health, and 32% also acknowledged that they felt there were currently an insufficient number of talks and lectures on sexual health being given. Thirty-seven percent cited a lack of coordination between the local school and the MINSA clinic as a key issue. In other words, many of the local authorities felt as though it was the responsibility of the clinicians to be educating adolescents, but they felt that there needed to be improved communication between the school and the clinic in order to make those lectures happen. Many of the interviewees had examples of times when the providers were ready to go to the school to give lectures but the school was not prepared for them, or when the school was expecting the providers to come and deliver lectures but they never showed up. Along these same lines, many of the authorities also raised concerns regarding the lack of privacy adolescents have when seeking contraception or advice regarding sexual health in the local clinic and how this may deter them from obtaining such guidance and healthcare.

Thirty-two percent of the local authorities also addressed low education levels and misconceptions regarding sexual health and contraception as key issues regarding adolescent sexual health. One example of a misconception that was raised by numerous interviewees was the belief that a woman would have blood pooling in her belly when she stops having periods on birth control. Because of this misconception, many women stop taking their birth control and have unintentional pregnancies. Other key issues raised

by interviewees regarding sexual health were the high risk of adolescent pregnancy (26%) and lack of authority figures for adolescents (26%). The role of gender and the machismo culture was also addressed by a number of interviewees, and 16% posed the idea of a "fatherhood school" to teach fathers in the village how to be actively involved and parent their children. To a lesser degree, authorities also mentioned the influence of religion and its role in contraception use (11%), national law considerations regarding the illegality of abortion (11%), professors being the most important adult point of contact for adolescents (5%), and home factors such as self-esteem and parental relations (5%) as key issues affecting the local adolescent sexual and reproductive health.

The surveys proved to be extremely revealing as well. As mentioned earlier, about 51% of the 218 students interviewed were female and 49% were male; they were distributed from ages 11-19 as seen in Figure 2. In order to determine their baseline knowledge of reproductive physiology, the adolescents were provided 3 true-false statements. The first was "True or False: A woman can get pregnant the first time she has sex." While this statement is clearly true, only 46% of the adolescents answered it correctly. Fourteen percent said that the statement was false (A woman cannot get pregnant the first time she has sex), and 40% said they did not know the answer. The results can be seen in graphic form in Figure 3. The second statement was "True or False: A woman stops growing after the first time she has sex." Results can be seen in Figure 4. While this statement seems obviously false, only 44% of the surveyed adolescents got the correct answer; 9% believed it was a true statement and 47% did not know the answer. The third and final statement was "True or False: A woman is most likely to get pregnant if she has sex during her period." These results, seen in Figure 5, are perhaps the most

shocking. While this statement is clearly false, only 16% of the surveyed got it correct, less than would have happened by sheer chance alone; 40% believed it was a true statement and 44% did not know.

The survey also sought to understand the role of religion in the adolescent population of Yantaló. The results were very varied (Table 2, Figure 6). Thirty-five percent of surveyed students claimed to be Catholic and 21% claimed to be Adventist; 29% denied any religious affiliation. Other religions that were represented include Evangelical Pentecostal, Nazarene, Assembly of God, and Pentecostal United Church of Peru. When asked the importance that religion plays in their lives, 77% of the surveyed students said religion was very important to them, 18% of the surveyed said it was only somewhat important, and only 5% said it had no importance at all (Figure 7).

In an effort to better understand the typical adolescent's family life and ability to have open conversations with their parents, the surveyed students were asked how easy it is to speak to each of their parents about important things. The results for the fathers can be seen in Figure 8. Twenty-five of the students said it was "very easy" to speak to their fathers about important things, 66 said it was "easy," 41 said it was "neither easy nor difficult," 50 said it was "difficult," 14 said it was "very difficult," and 10 said "I don't see my father." Of those 66 students who responded that it was easy to speak to their fathers about important things, only 5% said that they speak to their fathers often about sex and reproduction (Figure 9). Forty-three percent confessed that they never speak to their fathers about sex and reproduction, and 52% said that they discuss it "sometimes." Of the 50 students who responded that it was difficult to speak to their fathers about important things, 4% said that they speak to them often about sex and reproduction

(Figure 10), 68% said that they never speak to their fathers about sex and reproduction, and 28% said that they discuss it "sometimes." The students were then asked how easy it is to speak to their mothers about important things (Figure 11). Forty-five of the surveyed students said it was "very easy," 80 said it was "easy," 33 said it was "neither easy nor difficult," 33 said it was "difficult," 4 said it was "very difficult," and 0 said they never see their mothers. When compared to the same question for fathers, it appears that adolescents in Yantaló generally have an easier time discussing important topics with their mothers than their fathers. However, when the surveyed students who said it was easy to discuss important issues with their mothers were asked how often they talk to them about sex and reproduction, only 4% said they discuss the topic often; 44% said they never discuss it, and 52% said they only discuss it "sometimes" (Figure 12). When those who said it was difficult to speak to their mothers about important topics were asked how often they discuss sex and reproduction with their mothers, 0% said they discuss the topic often, a remarkable 77% said they never discuss sex and reproduction, and 23% said they discuss it "sometimes" (Figure 13).

The students were then asked to reveal their two most important current sources of information regarding 3 separate topics (puberty, sexual and reproductive systems, and sexual relations), and their preferred sources of information for those same topics. The results for the topic of "Puberty" can be seen in Figure 14. The adolescents identified their mothers and teachers as the two most important sources of information regarding puberty. When asked to identify their preferred sources, they listed their mothers, fathers, and physicians. Regarding the topic of "Sexual and Reproductive Systems" (Figure 15), the students once again identified their mothers and teachers as the most important

current sources of information, and their mothers, physicians, and fathers as their preferred sources of information. Lastly, regarding "Sexual Relations" (Figure 16), the adolescents identified their mothers and, to a much lesser degree, their fathers and friends as their current most important sources of information; their preferred sources were once again mothers, fathers, and physicians. Overall, a common theme was seen – although much of the information is currently coming from teachers and mothers, the adolescents would like more involvement from their fathers and physicians. Of note, for all three subjects, some students also acknowledged that they might prefer learning from alternate sources, such as books, magazines, and movies (Figures 14, 15, 16).

Lastly, the students were asked for their opinions regarding the amount of sexual health education they were currently receiving (Figure 17). A remarkable 78% of the students said they thought the number of classes should be increased, 15% said they believed it was sufficient as it is, and only 7% said they believed they should have fewer classes on the topic.

The third part of the study involved assessment of the school's proposed curriculum for sexual and reproductive health education. As mentioned previously, the curriculum is formed at the national level, and the school admittedly implements very little of it. Notwithstanding, the curriculum was insufficient in many areas. Table 3 lists positives and negatives of the proposed curriculum. While it proposed exploring age-appropriate themes and was culturally appropriate and respectful, the curriculum failed to provide the students with information about any local resources if they needed any help or had further questions, did not teach basic anatomy and physiology, provided no information over prevention of pregnancy or STDs, did not encourage confiding in a

trusted adult, and was not sensitive to non-heterosexual pairings.

CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS

The results of this study clearly indicate that adolescent sexual and reproductive health is a concern in the community of Yantaló. Based on the key issues raised by the oral interviews, it is apparent that insufficient education on sexual health, pervasive misconceptions regarding reproductive health and contraception, a strong machismo culture, and a lack of coordination between the local entities (school and MINSA clinic) are major contributing factors to the high adolescent pregnancy rate and lack of basic knowledge surrounding sexual and reproductive health in the adolescent population. Interestingly, although efforts to improve education have been made by volunteers through the Yantaló Foundation, these efforts were hardly acknowledged by the local authorities in oral interviews or the adolescents in written surveys, suggesting that these efforts may also be insufficient or ineffective at this time.

The written surveys provided a significant number of suggestions for improvements, directly from the adolescents. First and foremost, based on their preferred sources of receiving information on puberty, sexual and reproductive physiology, and sexual relations, it is clear that increased involvement from parents (namely fathers) and physicians is warranted. However, in a strong machismo culture such as that of Yantaló, it is important to encourage fathers to get involved in their children's lives and to demolish the idea that it is solely the mother's responsibility. This could occur through the "fatherhood school," where fathers are taught to take a more active role in raising their children, that was suggested in 3 of the 19 interviews. Another potential solution to this issue is "Padres e Hijos" classes. In other words, parents and children are encouraged to come to group lectures over topics like puberty and sexual health. By initiating these

conversations and covering the same material, parents and children then begin to feel more comfortable discussing the lecture material, which will hopefully ease into other delicate discussions. These types of classes also help to dispel the misconceptions regarding sexual and reproductive health that many adults in the community hold, and can often encourage the adolescents to be more open with their own children when they choose to have them.

The written surveys also indicated that adolescents would like to have more formal classes on the subject of adolescent sexual and reproductive health, and that they would like some involvement from their physicians over the matter. Many of the oral interviews also raised concerns regarding privacy of the adolescents when they come to the MINSA clinic and a lack of coordination between the school and the MINSA clinic. Two potential long-term suggestions were developed based on these issues. The first is the formation of a committee of representatives from the pertinent entities in the community of Yantaló – one from the police department, one from the local government, one from the MINSA clinic, one from the school, and one from the Yantaló Foundation. This committee could then form a master calendar and schedule lectures, activities, and events that help the community tackle not only adolescent sexual health but also other issues they deem important. It is important to note that Yantaló has all of the necessary resources in order to educate the population and provide them with contraceptive care as needed, especially with the support of the Yantaló Foundation. However, they lack the simple coordination in order to do so, and the formation of a committee to keep everyone informed and communicating could indeed be helpful.

The second suggestion based on these specific issues involves having the clinic

come to the adolescents instead of the other way around. The MINSA clinic in Yantaló is located in the center of the village, and numerous people are walking in and out of the waiting area. When a patient has an appointment with the local obstetra (who provides all contraceptive care and advice), the patient's name is called out in the public waiting area, and he or she is asked to come back. This leaves little room for privacy and often results in adolescents being hesitant to see a healthcare provider if they do not want the whole village being aware of their personal lives. However, if the obstetra were to come to the school once every one or two weeks to privately answer questions after school, this would save the adolescents the embarrassment and exposure.

The written surveys also suggested that the students may prefer to receive information from non-traditional means, such as magazines, books, and movies. Providing students with access to such information along with local resources in the community and in the nearby town of Moyobamba. Based on evaluation of the proposed curriculum, teachers and visiting lecturers (such as volunteers from the Yantaló Foundation and local physicians) could definitely improve adolescent sexual health education by discussing STDs, contraception, and family planning. Given the culture of machismo and numerous anecdotes of girls being pressured into their first sexual interaction, the adolescent sexual health classes would also be enhanced by encouraging and emphasizing self-esteem and open communication between partners as well as confiding in a trusted adult. In order to assess effectiveness of the curriculum, teachers should start the year out by conducting a baseline evaluation of the students' knowledge of sexual and reproductive health and then reevaluating at the end of every semester or every year. By doing this, weaknesses in the curriculum may be identified and improved

in the future.

While this study was extensive and made an effort to include local authorities from numerous entities within the community, it failed to involve religious leaders in Yantaló. Based on the data from the written surveys, adolescents in Yantaló affiliate themselves with a number of religions within the Christian faith, and a significant majority of them (78%) identify religion as being "very important" to them. Therefore, gaining a basic understanding of how religious leaders in the community view adolescent sexual health and trying to gain their involvement in the education of adolescents could certainly be of great benefit. Additionally, the study made the assumption the population of students surveyed was representative of all adolescents in the community of Yantaló. However, numerous adolescents in this village are forced to drop out of school at an early age, either to take care of their siblings, to work on their parents' farm, or to take care of their own children. Including them in the study could have very possibly influenced outcomes. Despite these weaknesses, much information was gained from assessing baseline needs within adolescent sexual health in the community of Yantaló and involving both adult and adolescent community members in order to find potential solutions to the problem.

Although this study was conducted in the community of Yantaló, many of these aforementioned recommendations can be extrapolated to other communities, particularly in Latin America. Within Peru, the government ensures that basic healthcare needs may be met in every region by the "SERUM" program, where first year physicians are placed in and required to serve remote areas for one year before gaining access to a residency program. By utilizing this resource and improving basic communication and

coordination, sexual health education could potentially be significantly enhanced throughout the country. Requiring evaluation before and after interventions are enacted would allow the process of improving sexual health education to remain dynamic and could be applied to all communities. Other suggestions, such as “Padres e Hijos” classes and a focus on emphasizing the importance of self-esteem and open communication in relationships at an early age, can also be easily implemented in other populations.

LIST OF TABLES

Table 1: Key Issues Raised in Oral Interviews & Corresponding Frequencies

Issue	Frequency
Clinicians as responsible sources of information	8
Lack of coordination between school and clinic	7
Low education regarding sexual health	6
Misconceptions about sexual health	6
Insufficient talks/lectures given	6
Lack of authority figures	5
High risk of adolescent pregnancy	5
Need for fatherhood school	3
National law considerations (abortion being illegal)	2
Religious influence	2
Professors as most important point of contact for adolescents	1
Home factors: self-esteem, parental relations with children	1

Table 2: Religious Affiliation of Students

Religion	Percentage
Catholic	35%
Adventist	21%
Evangelical Pentecostal	13%
Nazarene	3%
Assembly of God	2%
Pentecostal United Church of Peru	1%
Other	2%
Unaffiliated	29%

Table 3: Assessment of Proposed Curriculum

Positives:

1. Age-appropriate themes
2. Culturally appropriate & respectful

Negatives:

1. No local resources provided
2. No information regarding anatomy and physiology
3. No information regarding prevention of pregnancy or STDs
4. No encouragement of confiding in a trusted adult
5. No sensitivity to non-heterosexual pairings

LIST OF FIGURES

Figure 1: Number of interviews Based on Affiliation

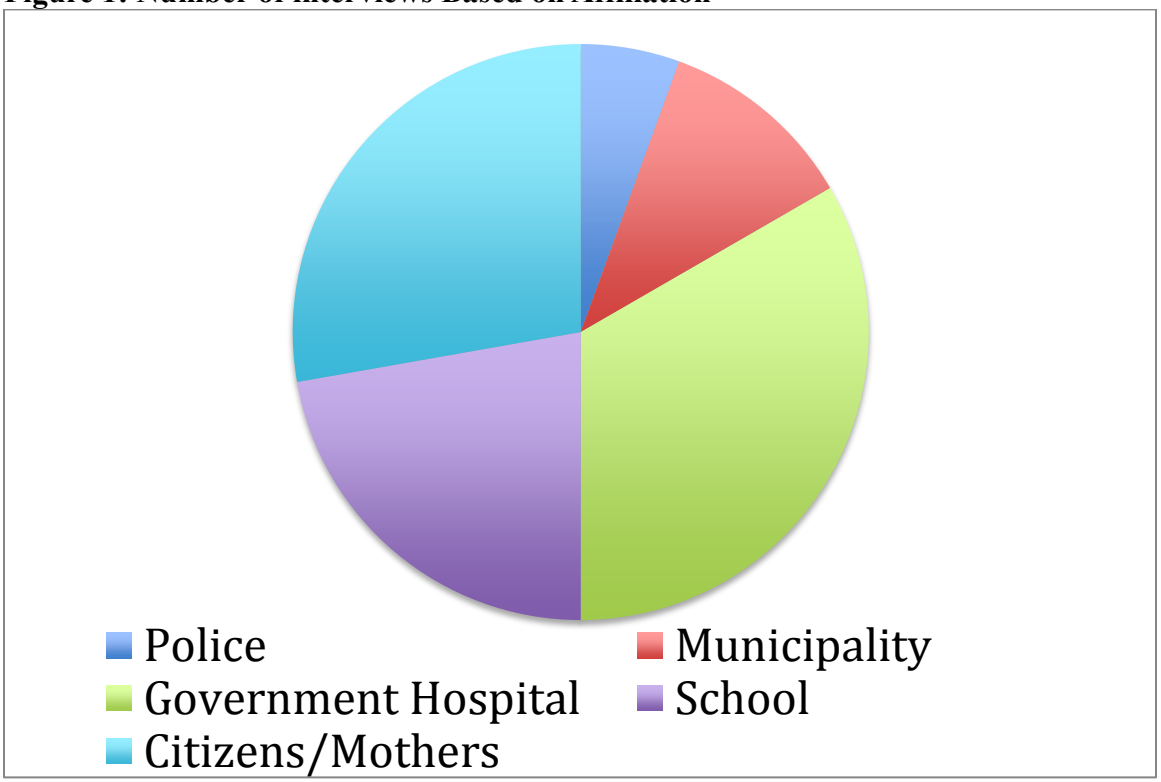


Figure 2: Distribution of Age of Participants in Survey

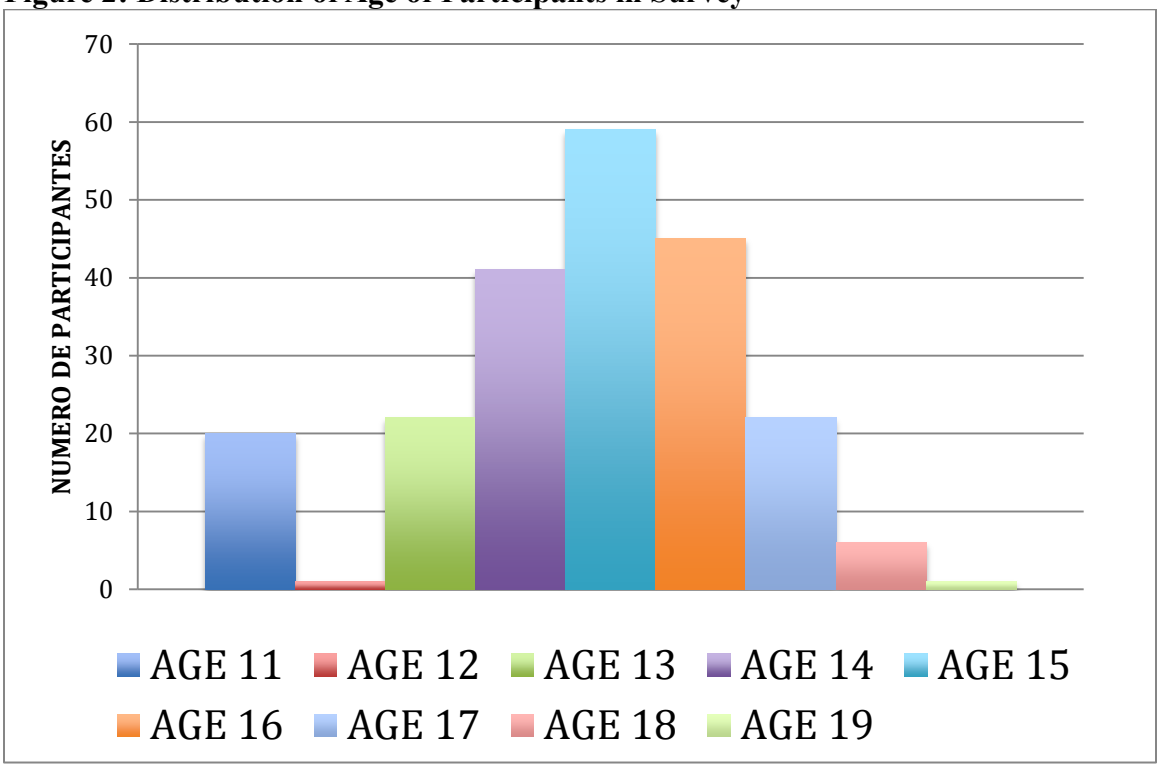


Figure 3: Results from "True or False – A woman can get pregnant the first time she has sex."

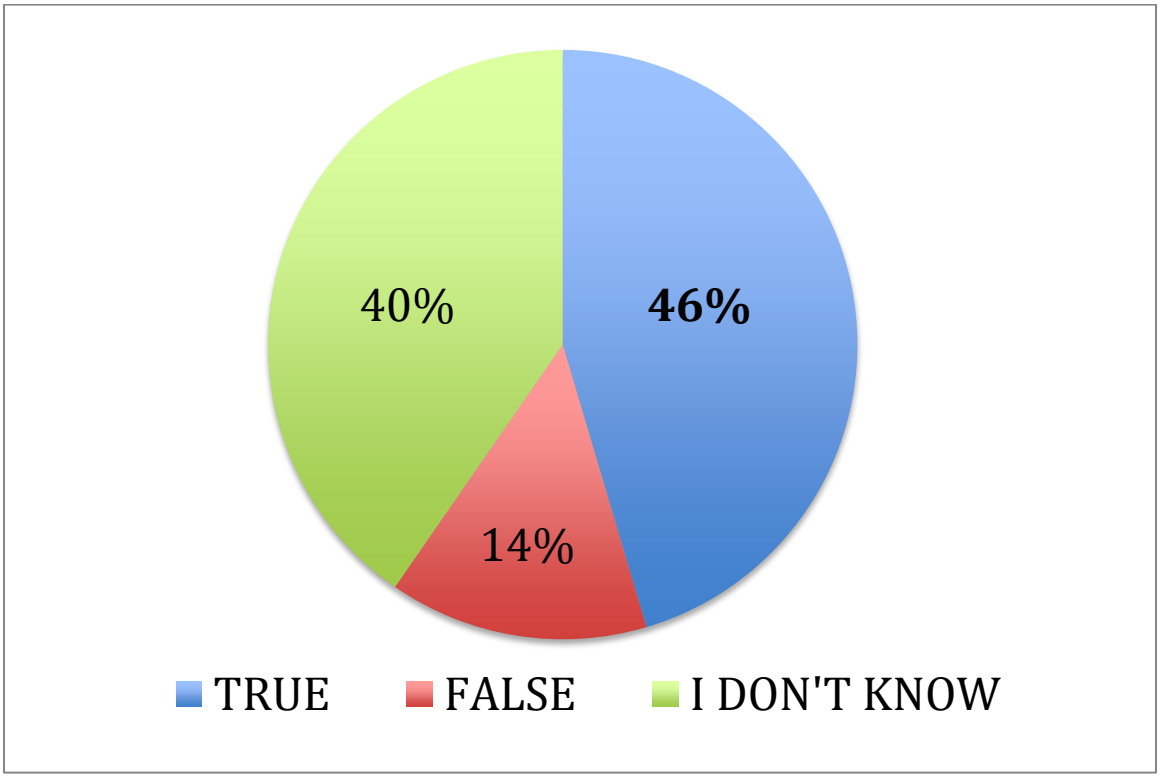


Figure 4: Results from "True or False – A woman stops growing after the first time she has sex."

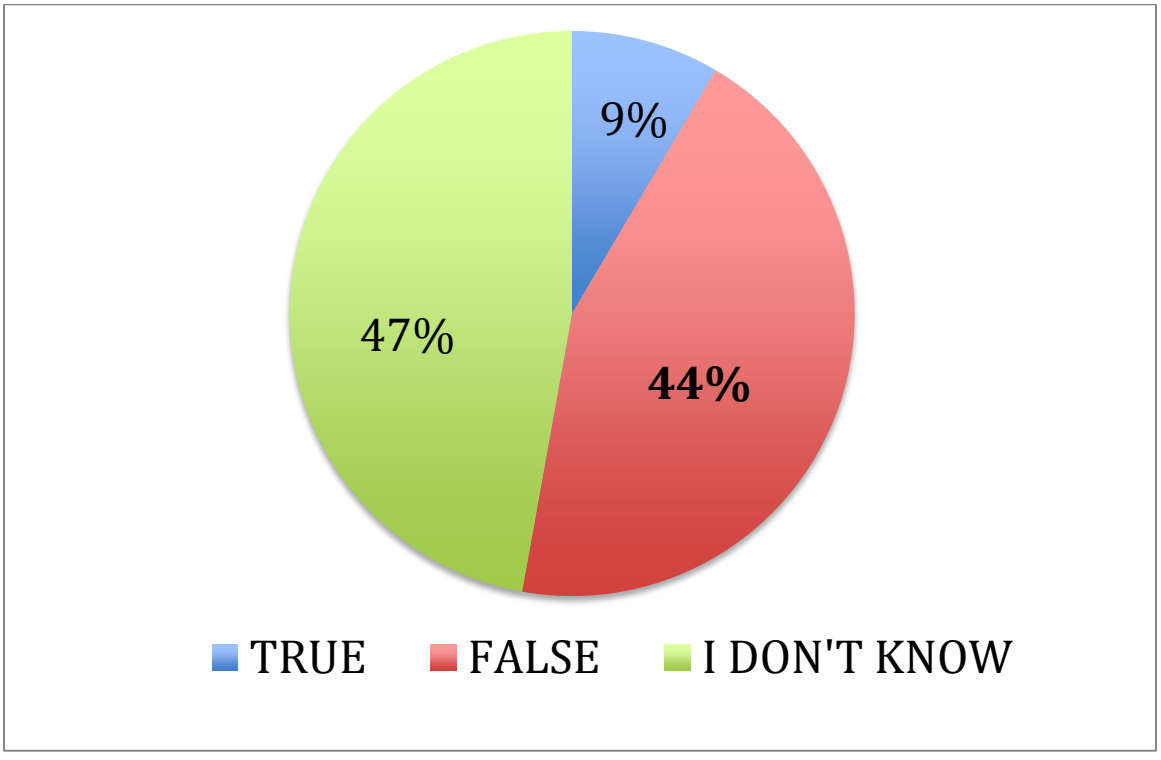


Figure 5: Results for "True or False – A woman is most likely to get pregnant if she has sex during her period."

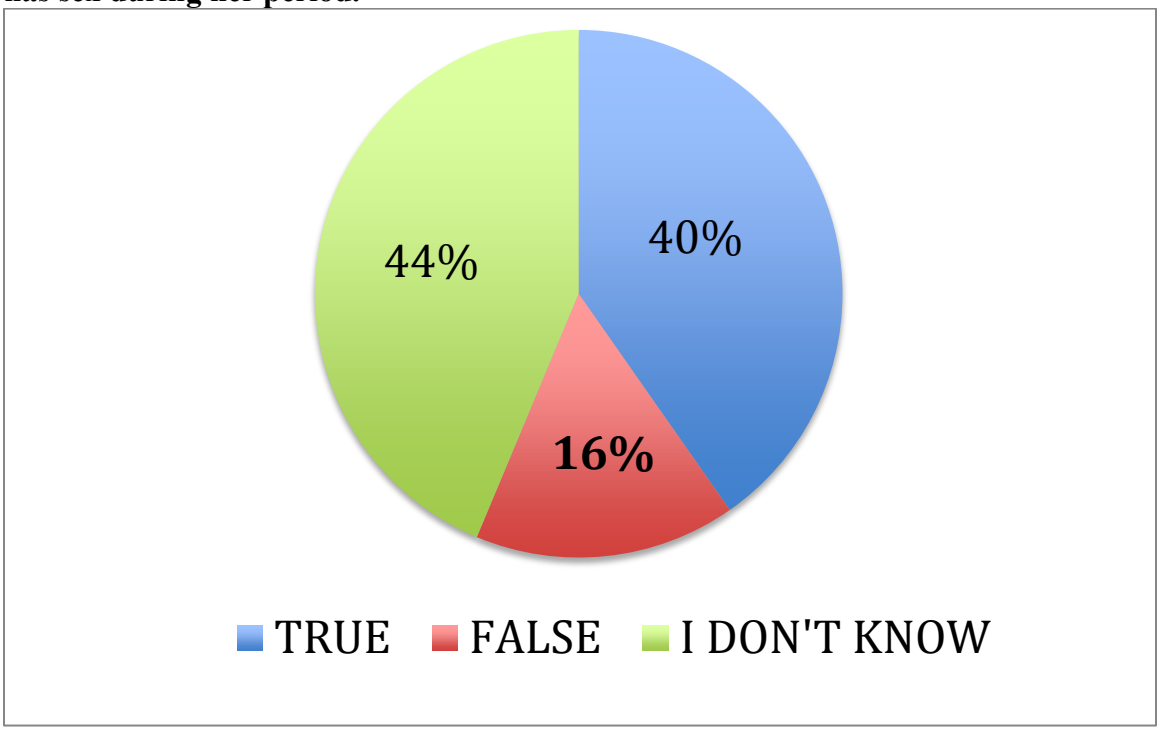


Figure 6: Religious Affiliation

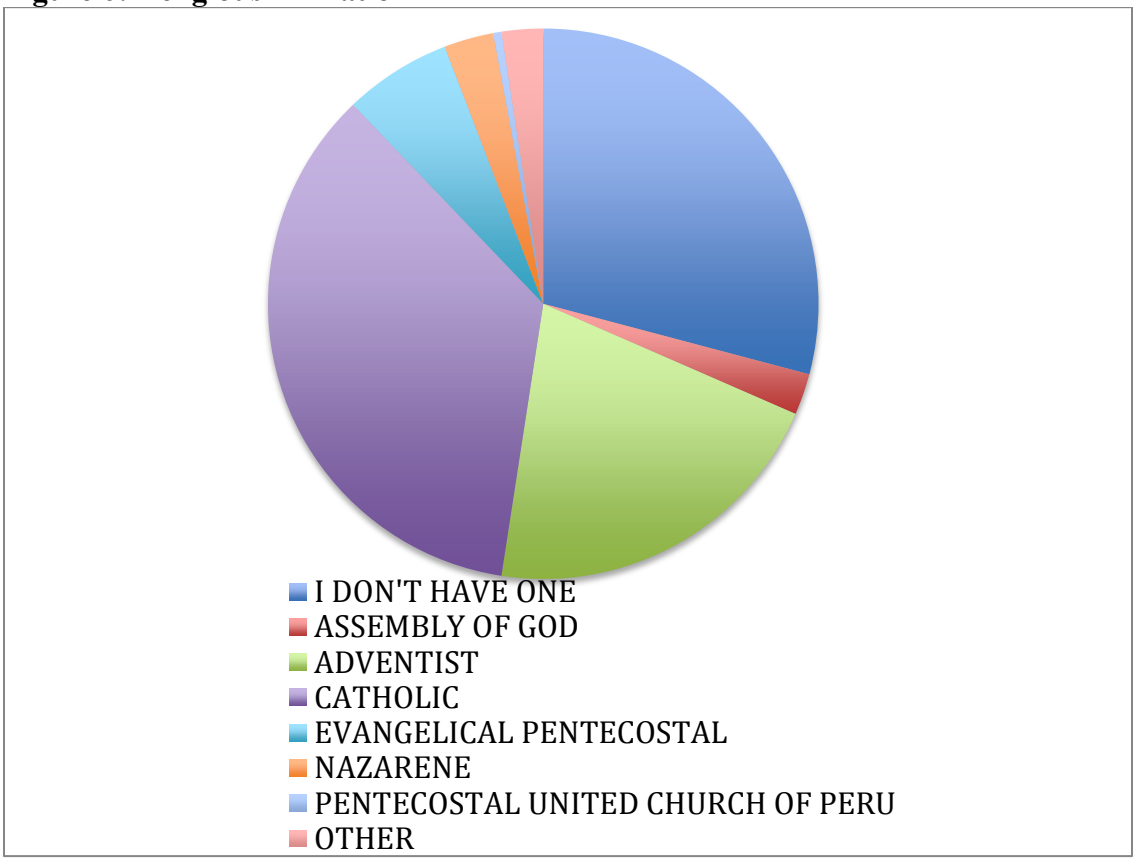


Figure 7: Importance of Religion

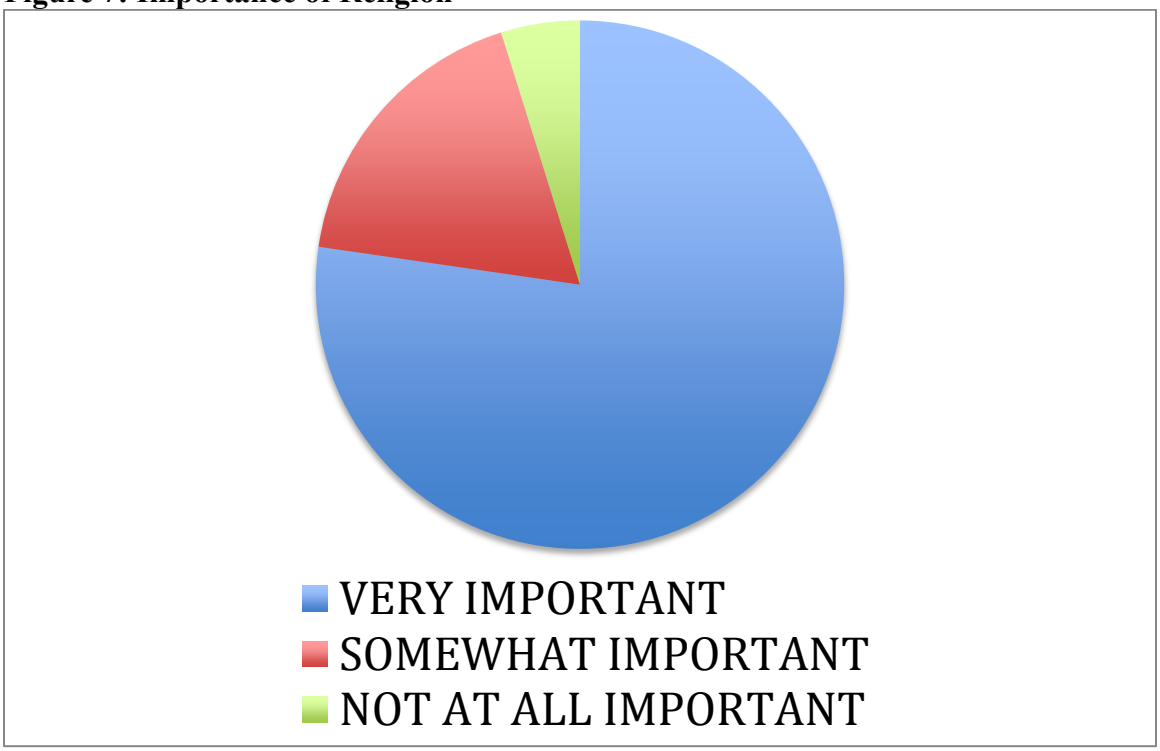


Figure 8: How easy is it to speak to your father about important things?

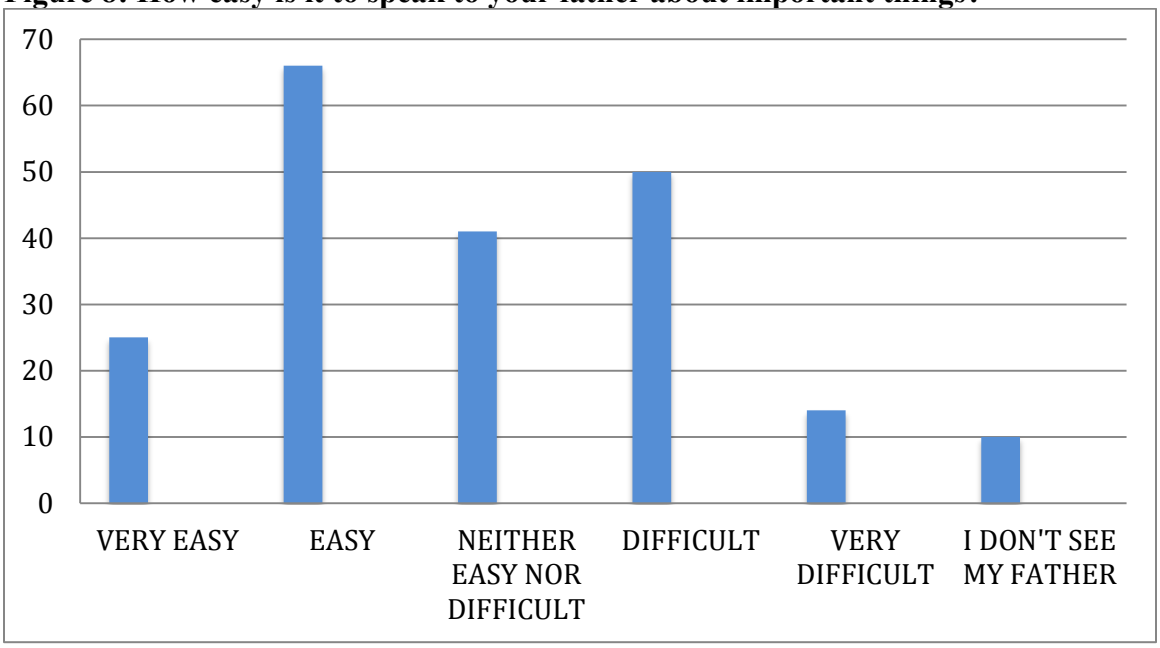


Figure 9: Of those who responded "easy," how often do they speak to their fathers about sex and reproduction?

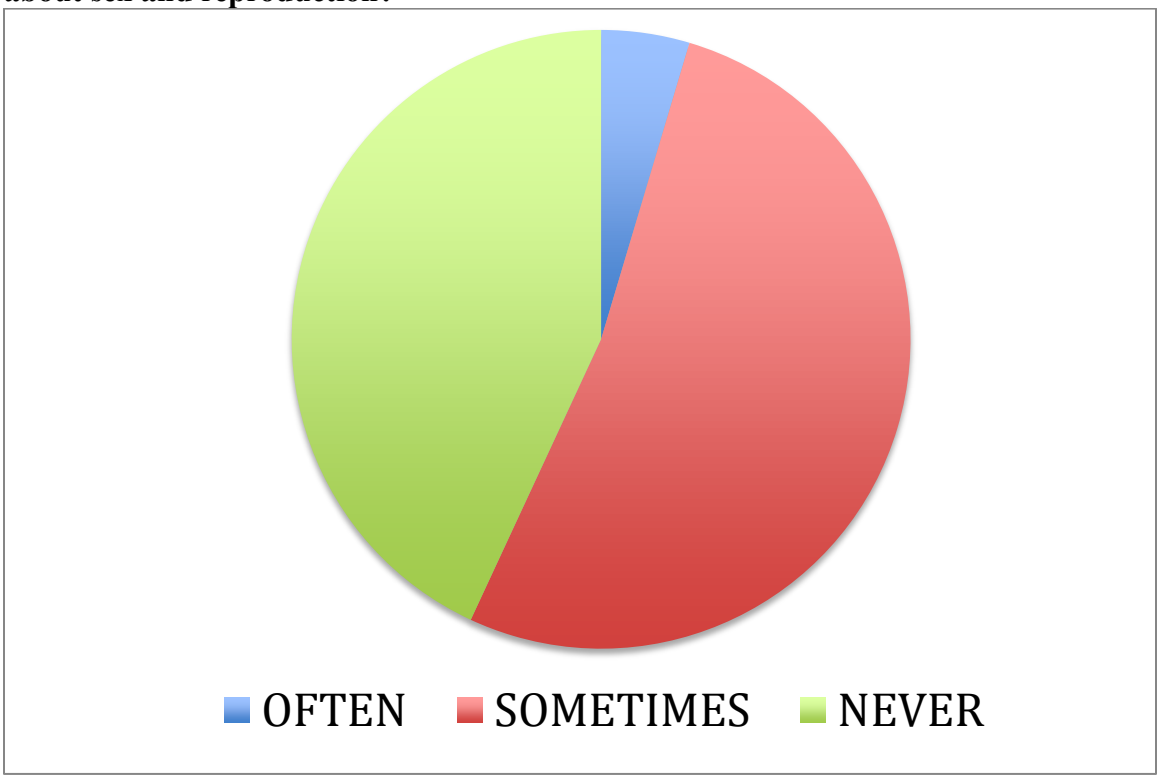


Figure 10: Of those who responded "difficult," how often do they speak to their fathers about sex and reproduction?

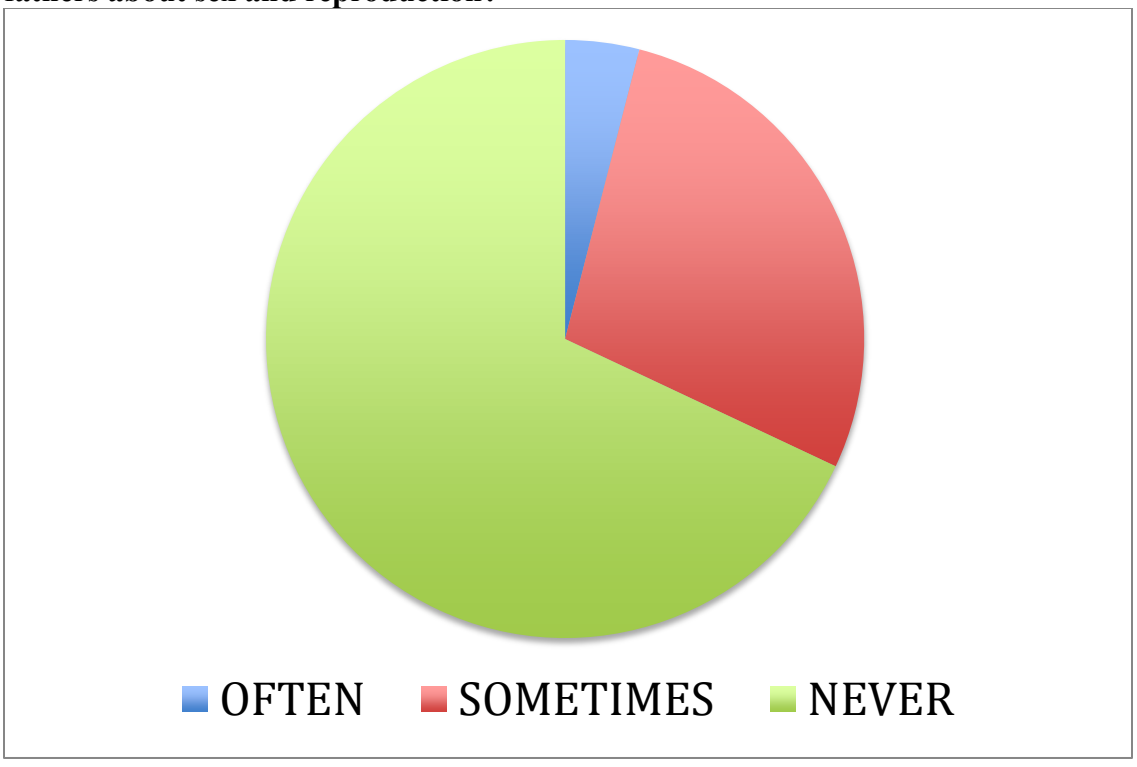


Figure 11: How easy is it to speak to your mother about important things?

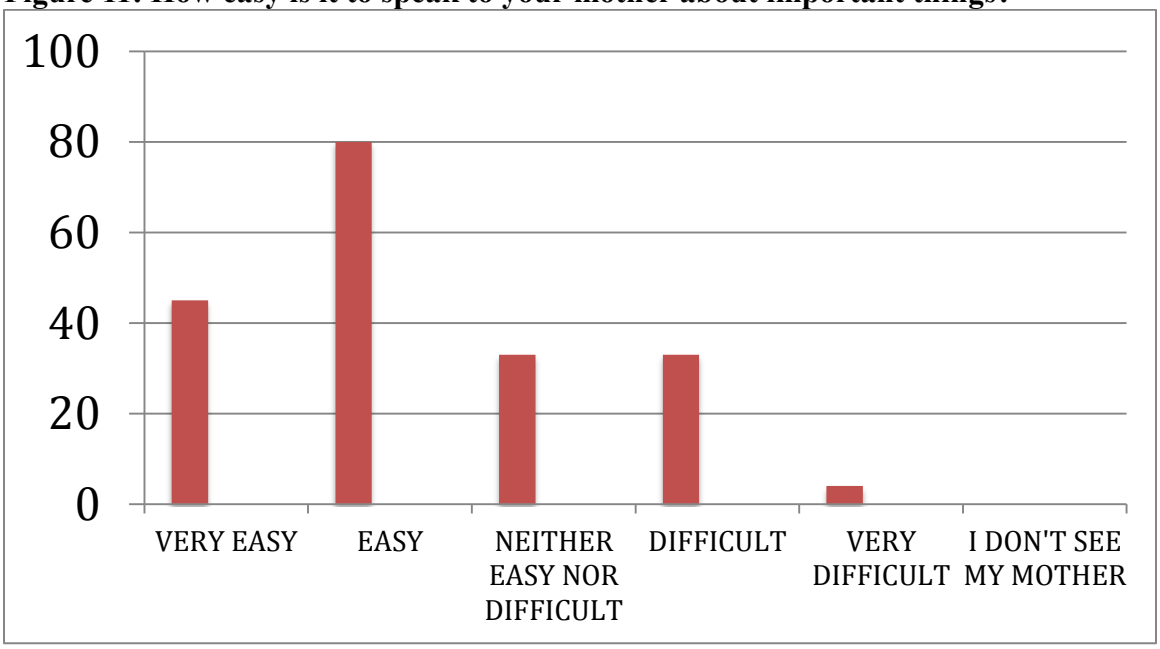


Figure 12: Of those who responded "easy," how often do they speak to their mothers about sex and reproduction?

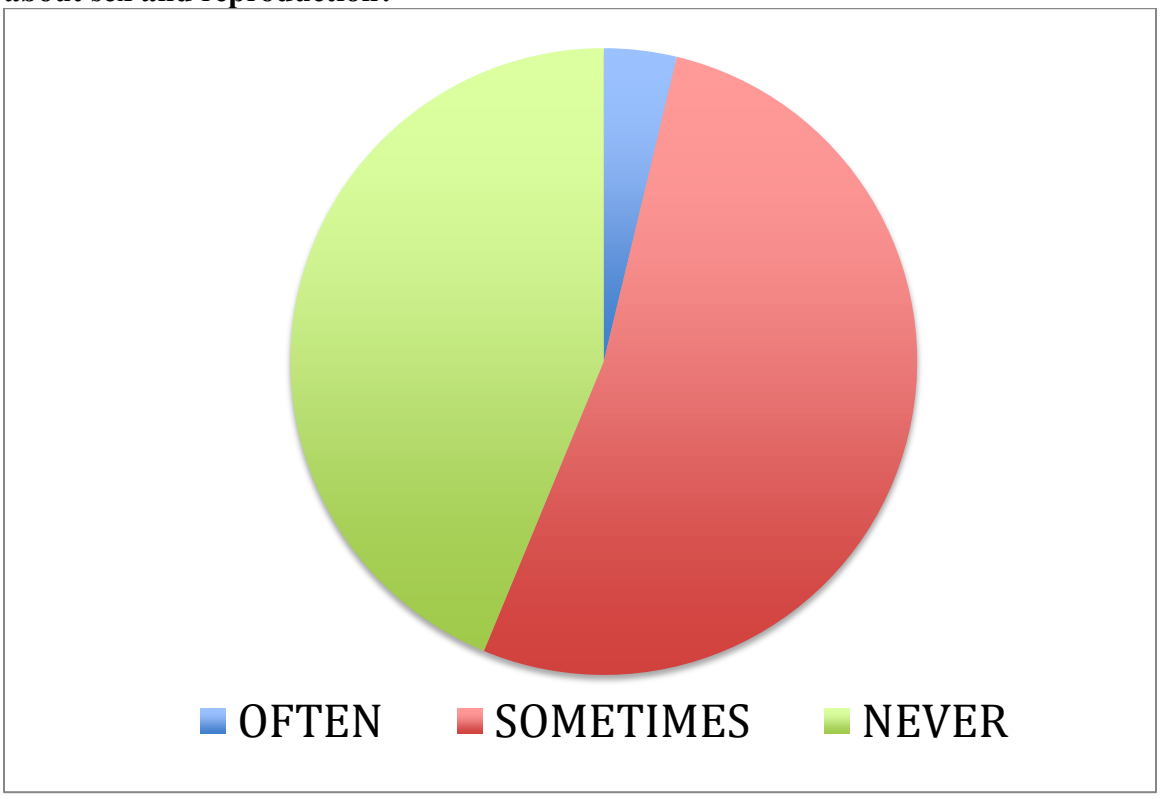


Figure 13: Of those who responded "difficult," how often do they speak to their mothers about sex and reproduction?

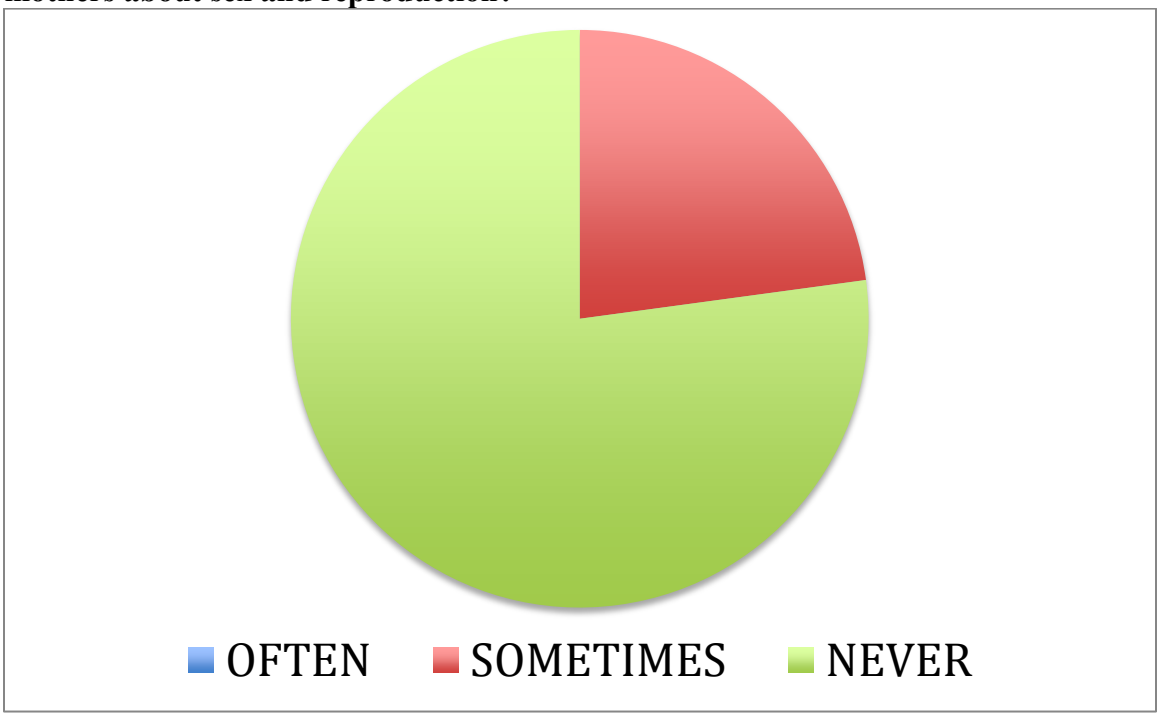


Figure 14: Current and Preferred Sources of Information regarding Puberty

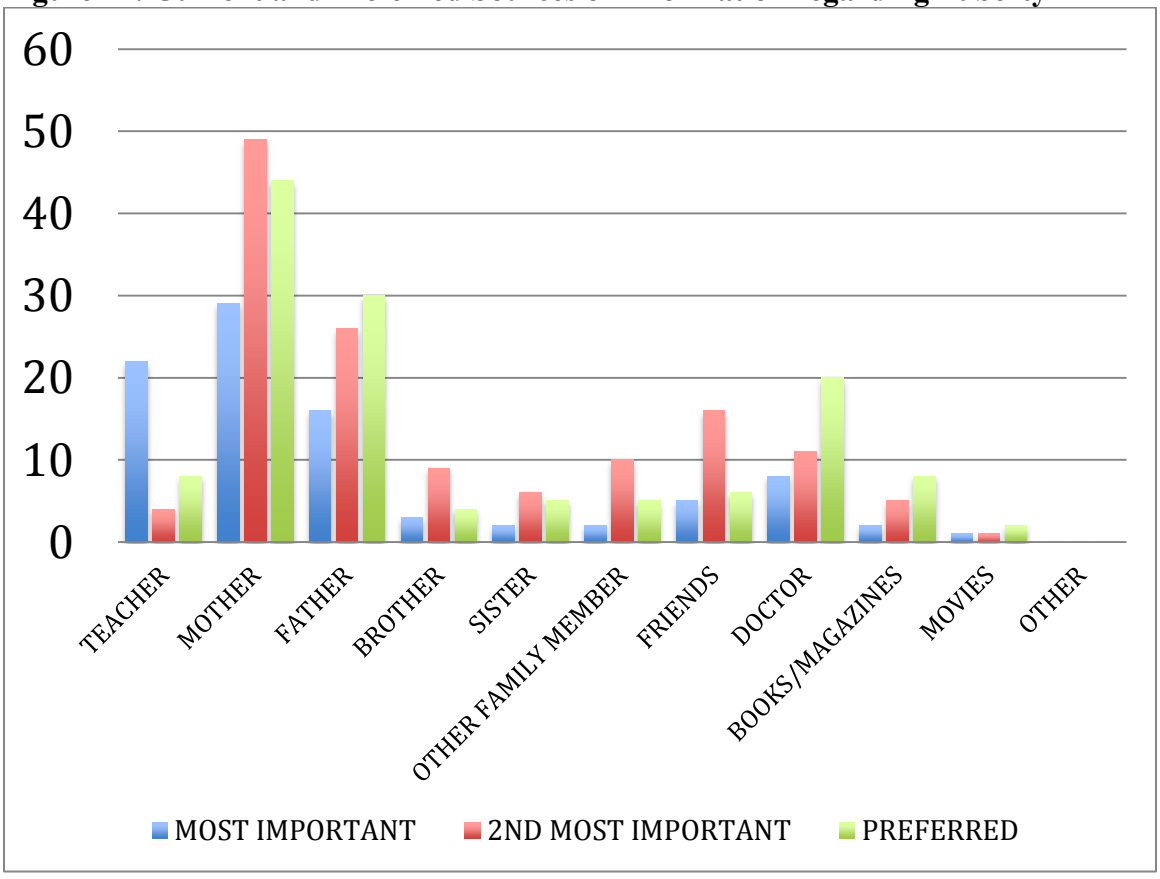


Figure 15: Current and Preferred Sources of Information regarding Sexual and Reproductive Systems

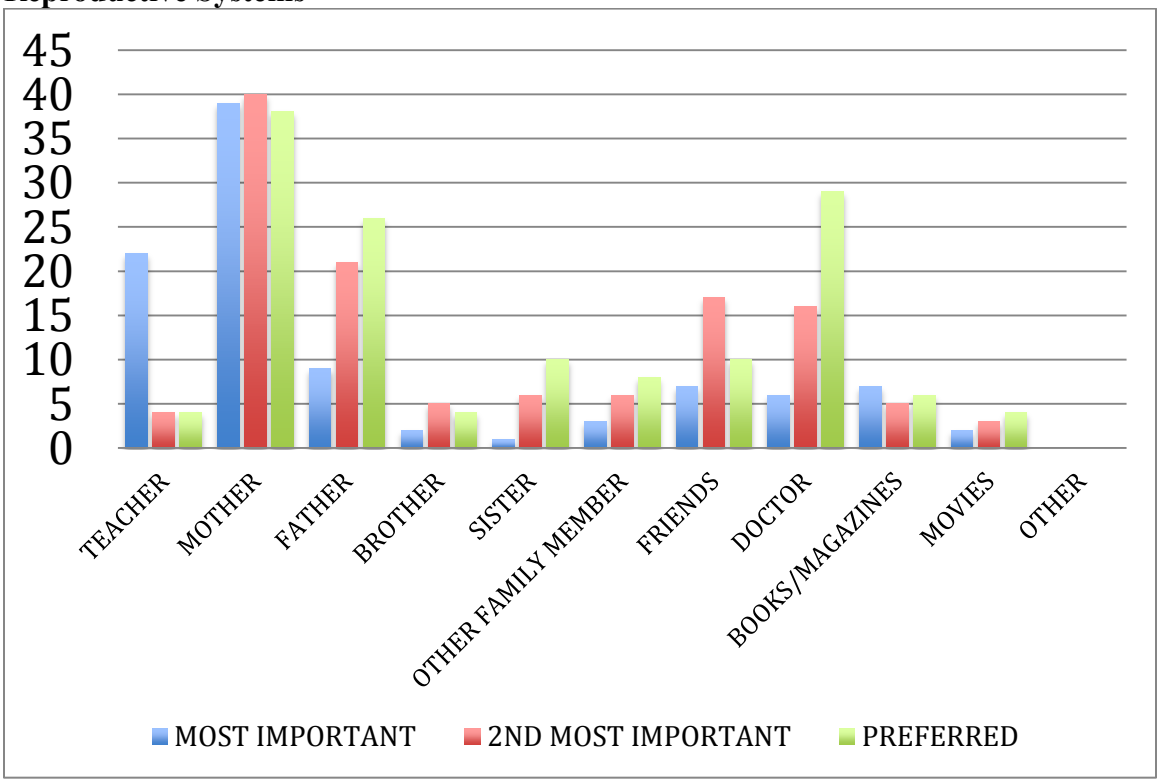


Figure 16: Current and Preferred Sources of Information regarding Sexual Relations

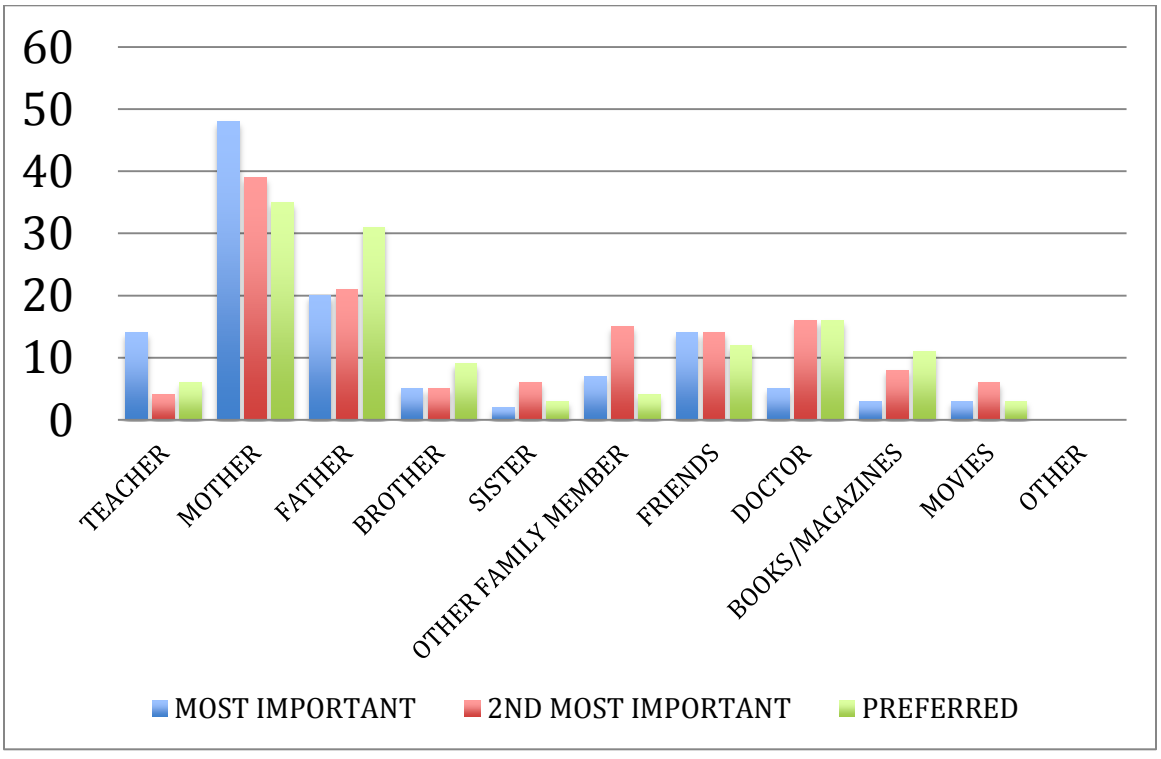
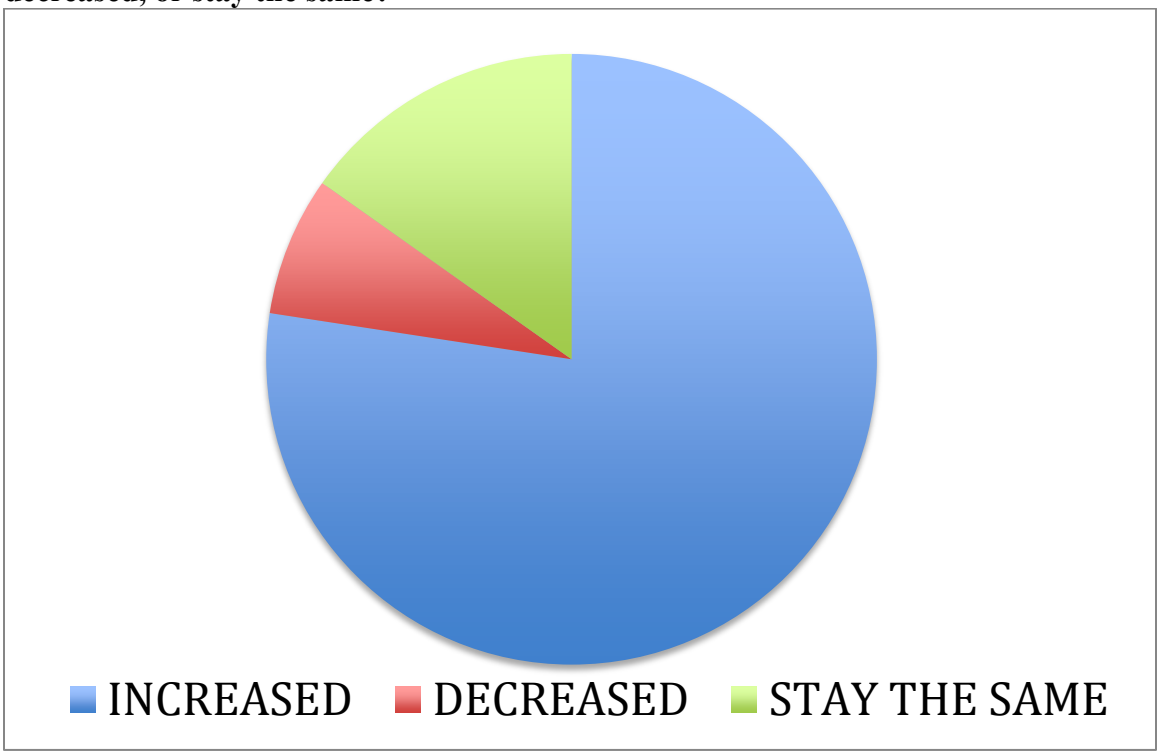


Figure 17: Responses for "Should the number of sexual health classes be increased, decreased, or stay the same?"



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VITAE

Shivani Murarka (February 22nd, 1990 – Present) is an avid traveler (whether it be crossing an ocean or hiking through a national park) and loves immersing herself in new cultures. She grew up in Katy, Texas, and went to UT Austin (hook 'em!) for undergrad before coming to UT Southwestern for her medical training. She is a future OB/Gyn resident at Baylor College of Medicine and has a special interest in adolescent medicine.

Permanent Address:
4311 Stonecroft Circle
Katy, TX 77450