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Where You Have Friends Who Care : An Evaluation of the Safe Harbor Adolescent Reproductive Health Center, Bohol, Philippines

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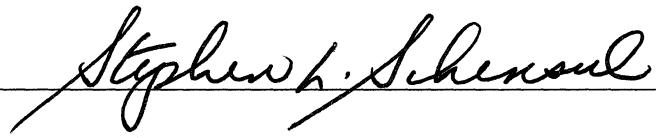
Associate Advisor 

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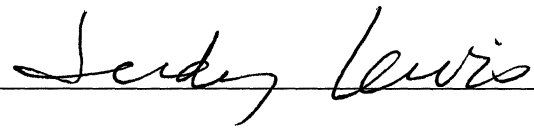
Associate Advisor 

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Introduction

In 2004, an opening ceremony took place in Tagbilaran City, Bohol Philippines. The ceremony was to celebrate the opening of Safe Harbor, an adolescent reproductive health center. The center was part of a large scale, multifaceted intervention designed to educate the youth of Tagbilaran City about sexuality, safe sex, and gender equity. There were three universities and one NGO (located both in the United States and the Philippines) involved in the project planning and implementation. The research presented here is an evaluation of the effectiveness of the program in reaching its goals. We used a pre-intervention knowledge and attitude survey, followed by a post-intervention knowledge and attitude survey, distributed among high school and college age students in Tagbilaran City. We ultimately found that knowledge about sexuality showed small but consistent improvements, and that there was a small shift towards more equitable gender attitudes for younger age groups.

Background

ASRH in the Philippines

In 1994, 179 countries participated in the United Nations International Conference on Population and Development in Cairo. This conference outlined a plan to promote human rights and sustainable economic development across the world (ICPD: 1994). The principles outlined and developed at the conference emphasized the importance of universal human rights; including the right to education, the right to the benefits of sustainable development, and the right to equity between genders. The

Programme of Action drafted at the conference also stressed the importance of population policy as a means to achieve well-being and global sustainable growth (ICPD: 1994).

Chapter Seven of the Programme of Action outlined the importance of reproductive rights and reproductive health to the overall goals of the conference; declaring that people have the right to a safe and satisfying sex life, the right to decide when, and how many children to have, and the means to realize those plans. The plan also recognized the important responsibility that men play in their own sexual health and that of those they are involved with. Hence they must be included in efforts to increase access to reproductive health materials, education and services. The Programme of Action also focused specifically on adolescents, advocating the idea that adolescents need to understand their own sexuality so that they can be free of disease and avoid unwanted pregnancy. The sexual health of adolescents was something that, according to participants in the conference, had been largely ignored (ICPD: 1994).

The conference represented a shift in the way that population programs and reproductive health strategies were designed (ESCAP: 2003). Up until this point, discussion of population policy centered on "demographic targets", where the unit of interest was really the population. Policy goals such as fertility of 2.1 children per woman or reduction of levels of infant mortality to 40 per 1,000 live births, reflected this (ESCAP: 2003). In contrast, the ICPD program focused on the needs of individuals; towards insuring that they have the ability to make reproductive decisions that are right for them.

The Philippines was one of the participating countries at the ICPD conference, and has been a member of The United Nations Economic and Social Commission for

Asia and the Pacific (UNESCAP) since 1947 (UNESCAP: 2005). UNESCAP has also been involved with adolescent reproductive health issues. Government officials also participated in a USAID funded study of ASRH needs in the Philippines, as part of a 13 country study in 2000 (Varga and Zosa-Feranil: 2003).

The situation in the Philippines with respect to ASRH issues seems to be one of growing support for ASRH at the national level, where the government has recognized the importance of adolescent sexual and reproductive health (ASRH) as a strategy to combat over-population and poverty, but with little implementation on the local level (Alcantara: 2002). At the national level, the Philippine Department of Health (DOH) drafted the Adolescent Youth and Health Policy of (AYH) 2000. This policy, along with placing great importance on general adolescent health care, also emphasized the need to create "youth friendly" health services. Provision of contraceptive services to youth was a stipulation of these services (Varga and Zosa-Feranil: 2003). The Philippine DOH also initiated the Adolescent and Youth Development Program (AYHDP), targeting youth ages 10-24 years old (Alcantara: 2002). This program, which was a partnership between the DOH, The Department of Education Culture and Sport (DECS) and the Commission on Higher Education (CHED), provided guidelines for comprehensive "youth friendly" health care services at all levels of government (from national to municipal) (Varga and Zosa-Feranil: 2003). There have also been adolescent oriented programs sponsored by other departments, such as the Department of Social Welfare's PUNK 2001 program (A youth convention aimed at identifying the needs of young people in the Philippines), and a Department of Justice Initiative to help children who are the survivors of armed conflict (Alcantara: 2002).

Judging from these initiatives, it appears that the national government in the Philippines is very aware of the important needs of its adolescent population; and places a high priority on adolescent health in general, and reproductive health in particular. The goals of the national government, however, do not always filter down into action at the municipal level. According to Alcantara (2002) and Varga and Zosa-Feranil (2003), the decentralized system of government in the Philippines makes it very difficult for provincial authorities to exert enough control over municipalities to ensure that national ASRH goals are implemented. In Tagbilaran, the field site for this project (discussed below), the local government simply did not see a need for special programs on adolescent issues, and so programming efforts here were weak (Alcantara: 2002). Ironically, decentralization has also led to a lack of implementation because local governments, though possessing the mandate to implement programs, still feel as though they need permission from the national government to act; while the national government takes the position that the local government should act autonomous, and offers no formal permission to begin programming (Varga and Zosa-Feranil: 2003). Also, there are significant differences in need depending on area. The needs of youth in Manila, may be different than those in Tagbilaran, or Cebu, so national programming is problematic if it does not suit the local needs (Varga and Zosa-Feranil: 2003). In addition, the funds and manpower needed to implement programs are often not available, which means that programs or initiatives on ASRH can easily fall by the wayside.

Some of the deficits seen in governmental programs are compensated for by the work of NGOs, including the Baguio Center for Young Adults (BCYA) (Alcantara: 2002), the Foundation for Adolescent Development (FAD) (Alcantara: 2002, Varga and

Zosa-Feranil: 2003), and the NGO family planning and reproductive health program (Varga and Zosa-Feranil: 2003).

Lack of funds and manpower, and unmotivated local governments are not the only barriers to ASRH programming in the Philippines. Cultural stigma against unmarried sexually active youth is strong in this predominately Catholic and conservative area (Varga and Zosa-Feranil: 2003). In general, sexuality is not openly discussed within families. Partly because of this tradition, even parents who would like to talk about sexual health issues with their children, feel inadequately prepared to do so. Individuals, especially older generations believe that sexual relationships should not begin until after marriage, and that contraception (if permissible at al, beyond natural family planning) is only permissible for married couples. Similarly, virginity until marriage is an important attribute of a woman. There is also a strong pro-natalist view in the region, so for married couples, procreation is expected to begin soon after marriage, creating a stigma against couples who may want to wait to have children (Varga and Zosa-Feranil: 2003).

These conservative views on sexuality and reproduction manifest themselves in the way in which ASRH issues are dealt with by providers: Often youth who are married are treated differently by health care workers than their unmarried peers -regardless of age. Many clinics in the Philippines will turn away young people who ask for contraceptive information or supplies (Varga and Zosa-Feranil: 2003). Girls who become pregnant are often forced through social pressure to leave school (Varga and Zosa-Feranil: 2003).

Conservative views on adolescent sexual health and behavior, however, do not suggest that youth are avoiding sexual encounters. Twenty-three percent of Filipino youth reported having pre-marital sex in 2002 (up from 18% in 1994) (PSPR: 2002). Of those who engaged in sexual activity, 94% of them said that they were not ready, or not willing to become parents. There is also evidence that adolescents are having their sexual debut at younger ages: In 1994, 2% of youth reported a sexual debut at 15 or younger, according to the Philippine State of the Population Report. In 2002, 16% of youth reported sexual debut at 15 years old or younger (PSPR: 2002). There is also evidence that contraceptive use is low: Seventy percent of respondents in the same state of the population survey reported that their most recent pre-marital sexual encounter was without any type of protection (PSPR: 2002). This is troubling, since 94% of these adolescents reported being ill-equipped to be parents. Adolescents interviewed during formative research for the Safe Harbor project cited lack of access to contraceptives, and the spontaneous nature of most sexual encounters as reasons why contraceptives are not often used (Badiane: 2002).

Overall, the situation in the Philippines is one in which there is a growing understanding that adolescents need access to information and resources so that they can make decisions about their own sexual lives and wellbeing. This comes partly from a human rights orientation; that people (including adolescents) simply have a right to pursue a satisfying sexual and familial life, and in conjunction, have the right to the information needed to make informed decisions. In addition, there is also a practical need for an increase in access to ASRH knowledge and resources: Adolescents are engaging in sexual behavior, and are doing so more frequently. Contrasting this, however, is a

strong conservative element, which believes that sexual topics are taboo, and that since adolescents should not be engaging in premarital sex at all, providing them information about ASRH is unnecessary, immoral, or will somehow encourage "good" kids to "go bad".

Despite the need, however, the USAID study reported that lack of access to reproductive health information and commodities was the most frequently mentioned barrier to improving adolescent reproductive health in the Philippines (Varga and Zosa-Feranil: 2003). Unless they are given access to ASRH resources, many adolescents will suffer from the potential negative consequences of sexual activity (unwanted pregnancy, STIs and HIV to name a few).

It is in this environment that the Safe Harbor project was conceived and developed by Engenderhealth (a US based NGO who had an office in the Philippines), and the University of Bohol Family Care and Lying in Center in Tagbilaran City, Bohol (which was a training center for area nurses).

The Safe Harbor Project

The Safe Harbor project began with two objectives: The first was to create a project built upon the partnership of several large institutions; which could combine their resources to promote innovative methods of applied research and effective service delivery. The institutions ultimately involved were Engenderhealth, a Non-Governmental Organization based in New York; The University of Connecticut, the Flagship University of the State of Connecticut; De la Salle University in Manila; and the University of Bohol, in Tagbilaran City (Loganathan: 2002). The Andrew W. Mellon Foundation was the granting agency. The project started as part of Engenderhealth's

Men as Partner's program (MAP). Engenderhealth developed MAP in order to involve men in reproductive health issues. Men, in many places, have a disproportionate amount of decision making power in comparison to women when it comes to reproductive health issues. Despite this, most reproductive health programs are targeted at women. The guiding concept of the MAP program was to bring men into the process, so that healthy reproductive decisions for both partners could be made (Loganathan: 2002). This inclusion of men as partners in reproductive health decision-making, specifically among youth, was the second objective of the project. The original project plan involved conducting formative research on the impact of male and female gender roles on reproductive health in the Philippines, and designing an intervention to promote equity in reproductive decision making among youth (See Badiane: 2005 for a complete discussion of the results of the formative research).

During the formative research phase, four sites were considered for implementation of the project: Manila, the capital on Luzon; Davao City, Mindanao; Cebu City, Cebu; and Tagbilaran City on the Island of Bohol. The last two cites are close to each other in a group of islands known as the Central Visayas. Manila was ruled out because of a conservative local government and because there was already a proliferation of NGO sponsored youth programs there (though few focused on ASRH). Davao was ruled out because of the tense political situation there, and the high incidence of violence. Tagbilaran was chosen over Cebu because Cebu had already developed some ASRH programming, while Tagbilaran had none (Loganathan: 2002).

The Safe Harbor (SH) project was a multi-faceted intervention, built upon the idea that community support and understanding would be vital to the success of the

project; and that multiple ways of delivering information and services would be most effective in bringing about positive results.

After analysis of the formative research carried out in Tagbilaran in the summer of 2002 with youth and community leaders (and presented to the community in December of 2002), the research team outlined three specific goals for the project: 1) To raise awareness of adolescent sexual and reproductive health issues among the community of Tagbilaran, especially the youth, 2) to increase adolescents' access to quality sexual and reproductive health services and 3) to build and strengthen the partnership between SH and community stakeholders, in order to build a safe and supportive environment that would encourage youth to make well informed and responsible sexual decisions, and give them the resources to do so (Granado: 2005). When SH began, Bohol was lacking in ASRH services for both males and females, so the team decided to engage both men and women equally. In reference to the original MAP program, while there was no emphasis on men over women in the project design, a gender equity approach was built into the information and programs.

The philosophical orientation of the project was very similar to that of the ICPD conference in Cairo:

"The project envisions to contribute to the development of well informed, empowered, responsible, and healthy young natives of Bohol Province (popularly known as Boholanos) on adolescent sexual and reproductive health in a supportive and enabling environment *where their rights are promoted and respected*"(emphasis added) (Granado 2005).

This vision emphasizes individual freedoms and rights, which was the revolutionary aspect of the Cairo conference.

The core of the project was the Safe Harbor youth center, which the project planners conceived as a central location where youth could "feel safe" to talk about and explore ASRH issues, such as reproductive health knowledge, HIV/AIDS awareness, gender equity, and violence against women (Granado: 2005). Youth could "hang out", talk to counselors informally, or look through the many books and videos on ASRH and general life skills. The center staff was all female and included a director, a program manager, two peer volunteer moderators, a coordinator for information and education materials, a financial officer, and a health services coordinator/nurse midwife.

The Safe Harbor project used a multi-faceted approach to intervention, from wide-field information dissemination to more personalized activities. All activities, both those held at the center and those held elsewhere (such as partner schools) were planned and implemented by the Safe Harbor staff. During the course of the project, four flyers and two booklets were developed, and 6000 copies of each were printed and distributed (there were also pamphlets and booklets from other sources available at the center). They were available for takeout at the center, and were also distributed in the many small group discussions that formed a core piece of the intervention. The print material covered a wide range of topics. For example the booklet "Discover Urself[1]" discussed the emotional and mental side of puberty; including a section on the difference between sex and gender, a section about understanding sexuality and sexual orientation, and a section on determining if one is ready for sexual intimacy. Its companion booklet, "Discover UR Changing Body", dealt with the physical changes-such as breast development, the maturing of sex organs, menstruation, and nocturnal emissions- that one may encounter

[1] Ur is a common way to say "your" in cell phone text messaging. Text messaging is extremely common in the Philippines, and a primary way of communicating.

during puberty. Other pamphlet titles included "Information You Need to Know about Sexuality and Gender", "Information You Need to Know about Family Planning" and "Information You Need to Know about RTIs and STIs." In addition to pamphlets there was also a small library at the center, including titles such as "Teenage Life", "Chicken Soup for the Teenage Soul" and "Towards Health through Family Planning". In addition to print material, Safe Harbor also had a collection of videos with both entertaining and educational components. These were shown at the center and in partner schools. The most common video shown was a fertility awareness video called "Pito Pito (seven-seven) Seven Common Myths on Sex". This video was shown to students in classes, and was suitable for both teenagers and young adults. There were 14 video showings overall, reaching 650 students (Granado: 2005).

The staff of Safe Harbor built a strong relationship with local schools, particularly with the University of Bohol (UB), and UB High School. This relationship included an extensive orientation to the Safe Harbor center and its activities for the teachers at UB. One of the benefits of this relationship was that UB made learning about ASRH issues a required part of their curriculum: Students in both high school and college were instructed to write academic theses about ASRH issues, choosing specific topics on contraceptives, reproductive health, AIDS/STIs, teen pregnancy or gender issues. UB also sponsored film showings, and allowed time out of the school day for small group discussions at the center (discussed further below). In addition to the work with UB, the Safe Harbor staff also sponsored a Gender Equality Discussion Forum at Holy Name University. This was one of 5 forums held which reached 1335 youth. The staff also

trained 31 elementary school teachers in HIV story telling; using scenarios to give HIV prevention information to children.

Safe Harbor's partnership building also involved the local government, including the City Health Office and Provincial Population Office-which funded some training for Safe Harbor staff, and the HIV/AIDS story telling project.

Safe Harbor also formed partnerships with local NGOs: With financial support from the Philippine NGO support program, they were able to train college level peer outreach workers, and conduct training and orientation with the teachers at UB. 3RG Philippines (Reproductive Rights Resource Group) provided financial assistance for some staff at SH, and the Packard Foundation supported the training of the Safe Harbor program manager at the Center of Education Development and Population Activities in Washington DC (Granado: 2005).

Safe Harbor also "rode along" with the events of other agencies; including the Fun Run with the WINGS organization (a Catholic charity for women) which promoted family violence awareness by running a race through the City of Tagbilaran, and organizing an ASRH workshop in conjunction with LITMUS II, an interschool literary and musical competition. The staff also sponsored a candle lighting program for World AIDS Day (Granado: 2004).

Safe Harbor made a large effort to educate youth leaders through the LEAD training. Twenty Bohol youth leaders participated in this training, including both college and high school students (most of whom were student government leaders), and members of the SK (Sangguniang Kabataan), the youth representatives to local government[2]. The

[2] The SK are considered as part of the local government, and have government sources of funding for programming

LEAD training was a five-day training for youth to discuss youth issues in Tagbilaran, and to develop a plan of action for youth programming in the city. The students were trained in leadership, gender issues, age and gender discrimination, conflict resolution, and human rights. Many participants in this training brought their fellow student government leaders to the center to become trained facilitators for the ongoing small group discussion sessions.

The Safe Harbor program reached a large number of students through small group discussions. Much of this was accomplished with the help of the peer educators known as PORTERS (Promoters of Rights and Transforming Education for Responsible Sexuality). The Safe Harbor staff recruited PORTERS from lists of students given to them by school teachers and administrators. Safe Harbor staff then trained the PORTERS in adolescent reproductive health, gender issues, gender based violence, fertility awareness and sexual health. A majority of the PORTERS were also trained in interpersonal communication and peer counseling (Granado: 2005). There were 26 PORTERS from high school that were funded by Engenderhealth and 18 PORTERS from college whose activities and training were funded by the Philippines NGO support program.

The PORTERS helped out at Safe Harbor; assisted with Safe Harbor programs, promoted the center amongst their peers, and led small group discussion sessions. As the funding for the project drew to an end, the high school PORTERS were in the process of becoming recognized as an official school organization, so that they could continue to operate after the funds from Engenderhealth were no longer available to support their training and ongoing work.

The PORTERS were the primary facilitators of the 89 small group discussions that took place during the course of the project. Many of these were arranged for school classes, and teachers from UB would send students down to the Safe Harbor center, which was located down the street, for the discussions. These discussions centered on reproductive health topics and allowed participants to talk freely on these issues. They were a main source of education and outreach, reaching 1335 students at UB (Granado: 2005).

Among the many other activities organized at the Safe Harbor center to spread the word about ASRH and the existence of the center were a blood-typing event (where students could find out what blood type they were), painting lessons and Tae Kwon Do lessons. These activities reached beyond ASRH to general skill building and enrichment, and exposed a large number of adults and youths to the center. ASRH pamphlets were also distributed during these events.

Safe Harbor also held a "Fun Day" at the center, which included an ASRH game show, talent shows and group activities. One hundred fifty students from National High School, 550 students from UB High School, and 297 students from UB night High School attended.

Perhaps the farthest reaching (and arguably most successful) of the Safe Harbor programs was Safe Harbor Radio. Beginning in August 2004, the program, which reached about 10 towns in Bohol (as well as other islands in the Central Visayas), was a mix of popular music and discussion about ASRH issues. The radio announcers asked questions on air, and listeners called-in with answers and opinions. Those who called often received a prize for participating. During my last field visit, I had an opportunity to

listen to the radio program. Much of the ASRH conversation on that program focused on whether it was healthy for adolescents to have ASRH knowledge. The response from listeners was overwhelmingly positive. The interest from area teens was large enough that the original 60 minute time slot was increased to 120 minutes to accommodate the call volume.

Along with the outreach and information programs, Safe Harbor also offered a full spectrum of clinical services (though these were implemented late in the program; see Appendix 2), including contraceptive counseling and supplies, STI testing and health assessments. There was also an email address, so that teens could ask questions of counselors in writing if they felt more comfortable doing so than coming into the center.

Safe Harbor in the Context of Worldwide ASRH Projects

Safe Harbor is one of a growing number of ASRH intervention programs that have been implemented around the world, with the assistance of NGOs from developed countries. The efficacy of these worldwide programs, however, is difficult to assess, with a wide range of both positive and negative results being reported. It appears that there is a high success rate for programs with regard to increasing knowledge: A meta analysis of 67 studies by Song et al. (2000) reported that in 97% of studies, the target population saw an improvement in ASRH knowledge. Similarly, Kim et al. (1997) reported that out of 40 studies reviewed, 88% saw positive increases in knowledge. Whether these programs actually have an impact on behavior, however, appears more difficult to prove. For example, Grunseit (1997) reports that of 55 studies on HIV prevention programs, 22 reported a positive change in behavior, including later onset of sexual activity, reduced number of sexual partners, reduced pregnancy rates or reduced STD infection rates.

Twenty-seven, however, saw no change in these variables. Franklin et al. (1997) examined 32 studies on adolescent sexual and reproductive health. They found that out of 17 studies, only five showed evidence of reducing sexual activity, but that there were statistically significant improvements in the 22 studies that examined the use of contraceptives before and after educational programs[3]. They also found that community based programs had a higher success rate than school based programs, and that older students showed more improvement than younger students. Kirby et al. (1997) concluded that almost all programs can produce some sort of socially beneficial effect, but it is much harder to prove that sexual education programming can consistently change sexual risk taking behaviors. Moreover, programs that can achieve this have the following characteristics: They focus clearly on reducing sexual risk behaviors, are age and culture appropriate in materials, are of long duration, are planned using a specific theoretical orientation (i.e. social learning theory), provide accurate and straightforward information, employ a variety of teaching methods, include activities that address social pressure, and use staff that believe in the program and are adequately trained. Dicenso et al., however, found no positive changes in sexual behavior for 29 studies reviewed (2002).

That being said, some studies with programs similar to that of Safe Harbor have shown positive results. Kim et al. (2001) reported that an ASRH program in Zimbabwe, which utilized posters, leaflets, peer educators, a radio show, and role playing educational programs was associated with increased contraceptive knowledge, increased teen discussion of ASRH issues, increased likelihood to say no to sex, and an increase in utilization of contraceptive services. Agha, who studied four interventions in Africa,

[3] Numbers of studies do not match because some studies had multiple outcomes

found that the two that managed to reach a large number of adolescents (with a combination of peer volunteers, radio programs, and access to reproductive supplies), had a positive impact on contraceptive use among women, women's perceptions of the benefits of barrier methods of contraception, and to a lesser extent, a lowering in the incidence of multiple sex partners among men (Agha: 2002). ASRH interventions that have similar elements to Safe Harbor, have also been shown to have positive effects on knowledge in Belize (Martiniuk et al.: 2002), Brazil (Magnani et al.: 2001), and Kenya (Erulkar et al.: 2004). In addition, Raine's (2003) research on male involvement shows that efforts to engage men in reproductive health yields positive results.

The history of sexual health interventions proves difficult to assess. Increases in knowledge appear to be much more common than increases in positive behaviors. Safe Harbor decided to focus their first year of work on knowledge rather than behaviors, thus the evaluation was designed to assess changes in youth knowledge of ASRH issues. We have no way of knowing whether any increases in knowledge will translate into better sexual decision making behaviors It can be noted, however, that the Safe Harbor program does have some of the aspects that Kirby et al.(1997) noted as being part of successful behavior changing programs. Namely that the intervention was culturally appropriate in materials (designed by Boholanos for Boholanos), was of long duration (1 year), provided accurate and straight forward information, employed a variety of teaching methods, and used staff that believed in the program and were adequately trained.

Goals of Evaluation

Since evaluation funding was limited (only $10,000 was budgeted for project evaluation) and a large part of the Safe Harbor information and education intervention

was targeted at in-school youth (especially UB), the primary evaluation measure was the determination of whether school students' knowledge about ASRH improved, and whether gender attitudes shifted towards greater gender equity, between the time of a pretest evaluation survey and a posttest evaluation survey.

Methods

The data for this study were collected using a self-administered structured survey in a pretest/posttest format. The pretest was conducted in January of 2004, before the opening of the Safe Harbor center. The posttest took place 10 months later, in October of 2004. Originally the pre and post tests were planned to be 12 months apart, but unavoidable funding delays postponed the start of the intervention. Due to funding restrictions, all of the evaluation activities had to be complete by December 2004, and all funds had to be spent by then. This situation led to the truncated time table and the shorter time between pretest and posttest.

Sampling

All data discussed below were collected from Bohol area high schools and colleges that were specifically targeted by the intervention and were close to Safe Harbor. In Bohol, there are six public and five private high schools, with a total population of 6,000 students. There are five colleges, with a total population of 7,300 students.

The Catholic influence is felt in the school system in Tagbilaran. Not every school would allow an intervention such as Safe Harbor access to their students by hosting activities, or by allowing a survey on subjects such as sexual health. This limited the number of schools involved. The schools involved were the University of Bohol, the

Central Visayas State College of Agriculture, Forestry and Technology (CVSCAFT), UB high school, and National High School. The approximate school populations and target samples are in Table 1, below:

Table 1: Pre-Post Test Schools, Population, and Sample Sizes[4].

School	Estimated Student Population	Pre-test target/final	Post-test target/final
High Schools			
University of Bohol Day High School	600	150	150
University of Bohol Night High School	420	100	100
National High School	800	150	150
CVSCAFT High School	250	100	100
Subtotal High School	**2070**	**500**	**500**
Colleges			
CVSCAFT College	2000	250	250
University of Bohol	6000	250	250
Subtotal Colleges	8000	500	500
Target Sample	10,070	1000	1000
Final Sample Size		**807**	**966**

The high school samples were collected from health classes and class selections had to be approved by the school principals. These classes are mandatory for all students. There are four levels of health classes in high school and four semesters in college. The high school classes range from about 35 to 49 students per section and there would be about two to three sections running at one time per school. The college health classes are also about 50 per class and about 2000 students all together in each level. Health classes are mixed, so there are both males and females in each class. The moderators picked

[4] Table by Pamela Erickson

classes, attempting to select those at different levels and different times of day when possible.

The samples from CVSCAFT were also taken from health classes, but the data collection at University of Bohol was not taken in any specific type of class, and the classes involved were chosen by arrangement with the Dean of the college.

The survey was administered and data collected by staff at the University of Bohol. The data was then analyzed afterwards by staff at the University of Connecticut.

Ten proctors administered the pretest, and 12 administered the posttest. The proctors were all teachers and counselors from the University of Bohol. Each proctor administered the survey to two or three classes, or about 100 students.

The pre/post tests were self administered, and were completed by the students in the class while the proctors were available to answer questions. The surveys were anonymous, and voluntary. Informed consent from each and every participating student (or their parents) was not required because in the Philippines, the school system is permitted to act *en loco parentis*, and the schools gave permission for the survey to take place.

The Survey

The pretest survey contained 91 questions that were broken down into four parts: Part I contained demographic information, Part II contained questions on youth attitudes towards gender roles and family responsibilities, Part III asked questions on sexual reproductive health knowledge, and Part IV asked about attitudes toward sexual relationships and family responsibilities. The posttest was identical to the pretest, except

for the addition of a fifth section which contained questions specifically about Safe Harbor.

The surveys that were used in the pretest/posttest were adapted from questions contained in an evaluation manual by Adamchak et al. 2000, as part of Pathfinder International's FOCUS on young adults research program. This program was a USAID funded partnership between Pathfinder International, Tulane University School of Public Health, and the Futures Group International. One of the goals of the program was to increase the capability of organizations to carry out youth programming by suggesting methods of project planning, service delivery and evaluation (Pathfinder 2005). The questions in the guide appear to be adapted from Pathfinder's work in various countries, as well as conferences where information was exchanged between researchers as part of the FOCUS Project. The staff at Engenderhealth requested the use of the Pathfinder survey, which they had used successfully in other projects.

"Instrument 12: Comprehensive Youth Survey" was examined question by question by the research team at the University of Connecticut. Knowledge questions thought to be appropriate for the pre/post test were chosen. The gender attitude questions were adapted from two sources: The questions on women's roles were adapted from Kaplan et al.'s study of Latino gender roles (2002), and the questions on sexual norms were adapted from Erickson's work on Latina teen pregnancy in East Los Angeles (1998). These questions were also used during the formative research to assess ASRH knowledge, and had already been translated into Boholano (the local language). Additional questions were added to the pre/post test that focused on topics relevant to the intervention, but had not been included in the formative research The questions for the

pretest and the posttest, as well as all survey instructions, were written in both English and Boholano[5].

Data Entry and Analysis

Pretest data were entered by trained students at the University of Connecticut and posttest data were entered by trained students at the University of Bohol. The pretest data were entered directly into SPSS version 9.0, which was the primary statistical software used; the posttest data were entered into Excel and transferred into SPSS. The author trained all students in the Philippines and prepared them for data entry. In the pretest, the decision to eliminate a survey due to lack of completeness was at the discretion of the individual performing the data entry. Surveys that were less than half completed were rejected by the Connecticut data entry team. During the posttest, nearly all surveys were entered into the database by the data entry team. All surveys that were entered were used, since even partially completed surveys yielded some usable information. SPSS automatically removes missing cases before analysis and SPSS was the main analytical tool used. Systat Version 10 was used for the factor analysis.

Of the 91 questions on the survey, 19 questions dealt with knowledge of sexual health, of these, nine[6] knowledge questions which covered sources and topics of sexual education, knowledge of contraceptive methods, knowledge of STIs and knowledge of HIV/AIDS were used to evaluate the students' knowledge. Twenty questions were used to examine changes in attitude about gender equity.

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[5] Though Boholano is the local language, English is also widely used and is an "official language" of the Philippines

[6] Of the 19 questions, we used the ones that reflected the core knowledge we were interested in based on the subjects covered during the program. In addition, some were eliminated because they did not translate well, or did not fit well into a scoring format.

Since many of the questions were "circle all that apply", each choice had to be considered as a separate variable. In order to analyze the large number of variables in a meaningful way, survey questions that dealt with the same topic were combined into scores that we examined for changes from pretest to posttest for the overall categories of ASRH knowledge. Since most of the questions in the survey were binary; either "yes/ no", or "circle all that apply", the scores were created by summing all correct or "yes" answers for each section. In this analysis there are four knowledge scores considered: the education and information score, the STI knowledge score, the HIV knowledge score, and the contraceptive knowledge score.

We wanted to know whether there were differences between males and females in knowledge and gender attitudes, since formative research indicated that role expectations for romantic relationships were different for males and females (Badiane, 2005). In addition we wanted to test whether older students and younger students had different levels of baseline knowledge or showed different patterns of knowledge change between the pretest and the posttest.

In order capture both age and sex differences, the data were divided into four groups: younger females, older females, younger males, and older males. The age cutoff between older and younger was 16 years. Those 16 and under were in the younger group, those 17 and older were in the older group. This cutoff was selected since the ages of 16 and 17 are when students in the Philippines usually transition from high school to college.

Since the summary scores were scales, they were analyzed as ordinal, rather than interval data. In many cases, the data did not assume a normal distribution. Thus Mann-

Whitney U tests were used in order to test for differences between groups. Mann-Whitney U tests establish statistical significance by ranking cases based on value then testing whether the overall ranks between two populations are statistically different. The P-values and mean ranks are reported here. The mean ranks are reported to give a sense of the direction of any changes, since the group with the higher mean rank also has the higher overall scores. This allows the reader to see the differences pre to post, in a statistically valid way. Since the data was not normal, median values are reported instead of means since they are much less susceptible to skew ness in data. The medians were not compared to one another in order to test for statistical significance of relationships. They are merely used to give the reader a sense of the level of knowledge at baseline and of the magnitude of improvement from pre to post. In addition, the mean ranks from the Mann-Whitney U tests help to corroborate the changes seen in the median.

Two sets of analysis were performed on the data: Within the pretest sample, each of the four age-sex groups were compared to one another to test for differences in knowledge or attitude at base line. Mann-Whitney U was used to compare each group to one another.

Each age-sex group in the pretest was then compared to its corresponding age-sex group in the posttest (older females to older females, younger males to younger males etc.), in order to test for improvements between the pretest and the posttest.

In addition to the Mann-Whitney U test on the score categories, an ordinal regression was performed on the summed knowledge score of all of the knowledge categories, with age, sex, and pre vs. posttest as the independent variables.

The posttest had a section that asked students about activities that they had attended at Safe Harbor. In order to further examine the impact of the intervention, the number of activities a student attended was used as an independent variable in an ordinal regression with total knowledge score as a dependent variable. This regression tested for the presence of a dose-response relationship between higher number of activities attended and higher overall knowledge scores.

The gender attitude questions were also analyzed using Mann-Whitney U scores, after first exploring the data using factor analysis, in order to examine which groups of these variables should be dealt with as a single unit.

Results

Demographics

In the pretest, respondents ranged in age from 12 years of age to 26 years of age, with a mean age of 16.6 years for the sample (SD +/- 2.4). Fifty-six percent of the total pretest sample was female, 44% was male. Respondents were overwhelmingly Catholic (88%), though there were some Protestants (4%) and other (8%). Church attendance for the group of respondents was very high, with 78% of respondents reporting that they attended church at least once per week. Fifty-one percent of the respondents reported utilizing public health care as their primary means of health care, while 30% reported using private health care. Eighteen percent of respondents reported using indigenous healers or lay midwives as a primary means of health care.

For the posttest, the numbers were similar, except that the sex ratio favored women a bit more (65% women vs. 35% men), and the average age was a bit older at

17.1 years (SD +/- 2.225) (16.62 vs. 17.1; t=-.2.202, p< .05). In the posttest, the ages ranged from 12 to 28 years of age.

In both cases, there were more women than men in the sample. This is not surprising because in the Philippines, there are more women in higher education (both high school and college) than men (Varga and Zosa-Feranil: 2003).

Sexual Health Knowledge

Exposure to Sex Information

Students were asked "Where do or did you get most of your information about sexual matters?" They were presented with a list of possible sources of sex information, and asked to circle the ones that they had used. Of these, five reflected programming efforts of Safe Harbor: School, books, videos, peer educators, and health care providers. Students were also asked if they had received any formal sex education and what topics were covered: Of these, six were topics that were covered during Safe Harbor programs: HIV/STIs, contraceptives, family planning, relationships, anatomy and biology. These two sets of questions on sex education were combined to create an 11 point score[7] (Cronbach's alpha =.76) measuring exposure to sex education and information.

In the pretest, there were no differences in exposure to sexual education by sex; since there were no differences between young females and young males, or older females and older males. There was, however, a difference by age, with older students scoring higher than younger students: Both with younger and older females (mean ranks 138.23 vs. 175.66, median score 3.0 vs. 5.0, p=.000), and younger and older males

[7] Scores were combined in this manner in order to get larger scores and ranges to work with. In this example, it is easier to see and interpret changes in ranks and medians out of a score of 11, than two separate scores of five and six.

(though not enough of a difference to change the median score of 4.0 for both groups of males) (mean rank 120.1 vs. 138.3, p=.049). The overall median score for the sample was 4 out of 11 or 36% of the total possible score, indicating a rather low exposure to sex information.

Exposure to sex information and education, however, improved during the posttest. The results by grouping are shown below in Table 2:

Table 2: Sources and Subjects of Sexual Health Information and Education

Group	Pre			Post			P
	N	Mean Rank	Median	N	Mean Rank	Median	
Younger Females	205	164.3	3.00	169	215.7	5.00	.000
Older Females	94	117.5	5.00	175	144.4	6.00	.007
Younger Males	150	117.1	4.00	108	146.8	5.00	.001
Older Males	104	90.5	4.00	93	108.6	5.00	.025

Overall, there were statistically significant increases in the numbers of places that students got sexual information and the subjects covered for all of the groups. The highest median change was for young females, who had a median shift of two points or 18% of the total possible score. The rest had a change of one point or a 9% shift higher. These changes, though statistically significant, are small in magnitude.

Familiarity with Contraceptive Methods

Familiarity with contraceptive methods was tested by asking students whether they had ever heard of any contraceptive methods, and which ones they had heard of. The contraceptive methods listed were condoms, foam, spermicide, pills, diaphragm, injections, withdrawal, natural family planning, vasectomy, and IUD; for a total of score of 10.

In the pretest, there were age differences, but no differences by sex: Older females scored higher than younger females (mean rank 266.4 vs. 185.1, median 5.0 vs. 2.0, p=.000), and older males scored higher than younger males (mean rank 192.2 vs. 145.6, median 3.0 vs.2.0, p=.000), but there were no statistically significant differences between younger males and females, or older males and females. Overall knowledge of contraceptives was low in this group, with the overall median being 4 out of 10. Between the pretest and the posttest, only the younger groups of students (groups 1 and 3) showed improvement, as seen in Table 3:

Table 3: Contraceptive Methods Known to Students

Group	Pre			Post			P
	N	Mean Rank	Median	N	Mean Rank	Median	
Younger Females	269	238.67	2.00	262	295.18	5.00	.000
Older Females	161	237.93	5.00	343	259.3	5.00	.12
Younger Males	186	150.6	2.00	154	194.6	4.00	.000
Older Males	145	161.7	3.00	163	148.11	3.00	.178

The largest reported median change was for younger girls; 3 points or 30% of total.

Familiarity with Sexually Transmitted Infections (STIs)

Students were also asked if they had ever heard of any sexually transmitted infections, and to circle the ones that they had heard of out of a list. These included: Gonorrhea, Syphilis, Herpes, HIV, Genital Warts, Pelvic Inflammatory Disease, Hepatitis B, Candidiasis, Chlamydia, Trichomoniasis, and Human Papilloma virus. Students were also asked to select ways that they could avoid STIs, and asked to circle answers. The options were: Avoid penetrative sex, use a condom, and avoid commercial sex workers.

Finally they were asked if one could tell if someone had an STI by looking at them (Chronbach's alpha for combination =.76).

Taken together, familiarity with STIs and knowledge of ways to avoid STIs yielded the following results, out of a possible maximum score of 15: In the pretest, there were differences by both age and sex: Older females scored higher than younger (mean rank 230.9 vs. 185.6, median 4.0 vs. 3.0, p=.000), as did older males over younger (mean rank 172.7 vs. 137.6, median 5.0 vs. 4.0, p=.001). Young males scored higher than young females (mean rank 237.4 vs. 199.0, median 4.0 vs. 3.0, p=.001), as did older males over older females (mean rank 155.8 vs. 127.4, median 5.0 vs. 4.0, p=.003). Note that the median scores in this section are generally low, ranging from between 3 to 5 out of 15 for the various groups. 5 out of 15 represents only 33% of the total possible high score.

The differences between pretest and posttest are shown in Table 4:

Table 4: STI knowledge of Students

Group	Pre			Post			P
	N	Mean Rank	Median	N	Mean Rank	Median	
Younger Females	253	221.1	3.0	246	279.8	4.0	.000
Older Females	151	199.7	4.0	299	238.5	5.0	.003
Younger Males	175	149.5	4.0	140	168.6	5.0	.06
Older Males	129	122.8	5.0	118	125.4	5.0	.772

Here, there are slight improvements in the females; 1 point or 7% of the total, but no statistically significant improvements in the males. This section represents the smallest changes between pre and post median for any of the subject groupings.

HIV/AIDS

In addition to the questions on STIs, there were questions on the survey that pertained specifically to HIV/AIDS. In this section, students were asked to circle all of the ways that they believed they could get AIDS. There were 5 "correct" choices, and two incorrect ones. The "correct" choices were: Sexual intercourse, sharing needles, blood transfusions, during birth, and through breast milk[8]. Students were also asked if they knew of any ways to avoid getting HIV. They were presented with 9 choices and asked to circle what a person could do. The choices were abstain, be faithful, encourage partner to be faithful, avoid contaminated blood, use condoms, avoid sharing needles, avoid prostitutes, avoid casual sex, and avoid circumcision in unauthorized places.

Ways to avoid HIV and HIV transmission were combined, along with a question on whether a healthy looking person could have HIV, and a separate question on whether using a condom during sexual intercourse can prevent HIV[9] for a total possible score of 16 (Chronbach's alpha=.88).

In the pretest, older students scored better than younger students, for both females (mean rank 202.6 vs. 178.7, median; 6.0 vs. 5.5, p= .039), and for males (mean rank 156.1 vs. 122.2, median; 7.0 vs. 5.0, p=.000), though there was no sex difference.

There were significant improvements, however, between pretest and posttest (see table 5). In the pretest, the overall median was 6 out of 15 or 40% of total, thus knowledge was overall low.

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[8] It would have been ideal so test whether the students also correctly recognized whether a transmission route was wrong. However, because of the way the question was asked, there was no way to differentiate between those who recognized a route was incorrect and missing data.

[9] Though condoms is also a choice in the section on how one can avoid HIV, I included this specific question on condoms and HIV because of the importance of condoms as one of the only ways to prevent HIV infection during sexual intercourse. So in effect, knowledge of condoms is counted twice.

Table 5: HIV Knowledge of Students

Group	Pre			Post			P
	N	Mean Rank	Median	N	Mean Rank	Median	
Younger Females	236	177.4	5.5	218	281.7	9.0	.000
Older Females	138	147.0	6.0	280	240.3	9.0	.000
Younger Males	157	125.0	5.0	134	170.6	8.0	.000
Older Males	115	98.6	7.0	111	129.0	9.0	.000

This section on HIV yielded some of the biggest improvements pre to post, especially young females, who saw a median rise from pre to post of 3.5 points, a shift of 23%. Even older males, the group that has shown the least improvements throughout, showed a two point improvement between pretest and posttest.

Total Scores

In order to get a more complete picture of the effects of age, sex, and the intervention on the knowledge of students, the four scores discussed above were combined into a total overall score. Cronbach's Alpha for the total score was .75. The total score was used as a dependent variable in an ordinal regression, with age, sex, and type of survey (pretest or posttest). The results are reported in Table 6, below.

Table 6: Overall Knowledge Score

Pseudo R-Square=.179	Estimate	P value
Age	.251	.000
Sex (female or not)	.116	.323
Pretest (Y/N)	-1.011	.000

The median score for the pretest was 18, while the median score for the posttest was 24 (Total possible = 52). As the above table shows, age and survey type both had

statistically significant predictive value on overall score. According to the estimates, older students scored higher. In addition, surveys from the pretest were negatively correlated with improvements in scores; therefore students did better on the posttest than on the pretest. The improvement, however, of 6 points pre to post, equals a 12 percent change of the total. This result, similar to the scores that made it up, represents a small change in knowledge.

ASRH Activities Attended vs. Total Score

The posttest included additional questions about individuals' experiences at Safe Harbor. Part of this section asked students what activities they had attended there. The total number of events was tallied for each student and used in an ordinal regression as an independent variable, along with age and sex. The events and attendance are listed in the Table 7, below:

Table 7: List of Safe Harbor Activities and Attendance

	Younger Females %	Older Females %	Younger Males %	Older Males %
Blood Typing	19.1	26.5	21.4	17.8
Family Planning Forum	11.1	14.3	19.5	11.7
Counseling	11.8	23.0	11.0	12.3
Information	25.6	46.9	26.6	23.3
Hangout	13.4	14.9	18.8	10.4
See PORTER	11.1	16.3	18.8	12.3
LEAD Training	9.5	6.1	18.2	6.7
Painting	2.3	1.2	10.4	4.3
Tae Kwon Do	3.1	1.7	11.7	4.9
Facilitator Training	4.6	4.1	13.0	6.1
Fun day	14.5	9.6	25.3	9.8
Small Group Discussions	16.4	23.9	18.8	19.0

The dependent variable used was total score. Results are listed in Table 8, below.

Table 8: Number of Activities Attended vs. Knowledge Score

Pseudo R-Square=.145	Estimate	P value
Age	.182	.000
Sex(female or not)	.230	.051
Number of events attended	.335	.000

Here it can be seen that the number of events attended was positively correlated with increases in total posttest scores, indicating a dose response effect between greater attendance and higher scores.

Social Relations and Norms

The pre/post surveys contained sections that asked about attitudes towards gender and sexual roles. Students were presented with 37 statements, and then asked whether they agreed or disagreed with them. Of 37 statements, 20 dealt with topics that were part of the Safe Harbor intervention and are listed in Table 9, below, followed by the variable code that was used in the factor analysis, and the cluster the variable belongs to, as represented in the factor loadings plot, Figure 1.

Table 9: Gender Roles and Gender Equity

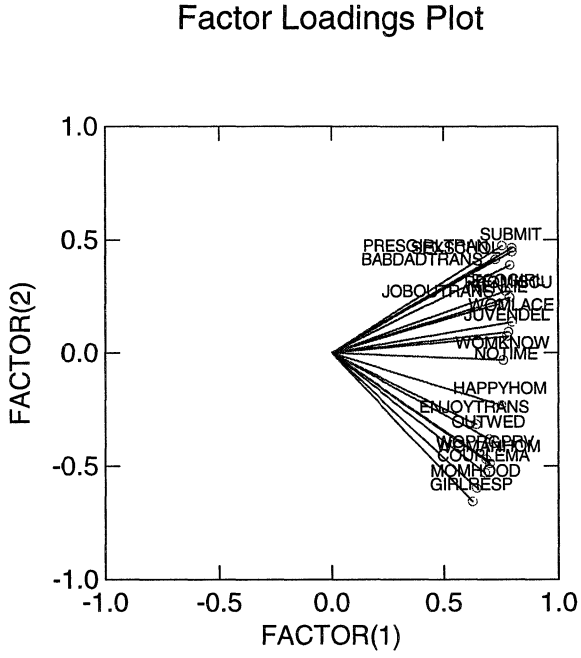
Statement	Variable Name	Factor Analysis Cluster
A woman's place is in the home, not in the office or workplace	WOMPLACE	1
A wife who carries out her full family responsibilities doesn't have time for outside employment	NOTIME	2
The employment of wives leads to more juvenile delinquency	JUVENDEL	2
It is much better for everyone if the man is the achiever outside the home and the woman takes care of the home and the family	*WOMANHOM*	*1*
Women are much happier of the stay at home and take care of their children	*HAPPYHOM*	*1*
A woman can hold a job and take care of the household	JOBOUTRANS	2
If a young couple has sexual intercourse they should get married	*COUPLEMA*	*1*
A young man should not pressure his girlfriend to have sex	PRESGIRLTRANS	2
A man will say he loves a woman, even if he does not, in order to have sex with her	MENLIE	2
It is the woman's responsibility to wait to have sex until she is married	*GIRLRESP*	*1*
If a woman knows about sex, it makes her less worthy in the eyes of her partner	WOMKNOW	2
Women enjoy sex as much as men	*ENJOYTRANS*	*1*
The woman should be the one responsible for	*WOMPRGPRV*	*1*

preventing pregnancy		
The father of a baby should be responsible for the economic welfare of the child	BABDADTRANS	2
A woman just cannot get along economically without a man	ECOGIRL	2
Being a mother is the most important thing a woman does in her life	*MOMHOOD*	*1*
It is wrong to have children without being married	*OUTWED*	*1*
A woman should always do what her husband or boyfriend tells her	SUBMIT	2
If a young person is desperate for school fees, it is OK to have an adult pay for the education in exchange for sex from the young person	SEXSCHOL	2
Young peoples knowledge of contraception encourages them to have sex with many people	PROMISCU	2

Most of the statements listed above are more "conservative". In other words, we would want to see students disagreeing with them. Ones that were not were transformed, so that they reflected this conservatism. These variables have the suffix "trans" above. Factor analysis was performed on these variables, using simple matching, since it is appropriate for binary data. The eigenvalue for the first factor was 10.899, the second was 2.998, and the third was .725. Thus the eigenvalue for factor one is three times the value of two, but only barely so. And the second is three times the third. This indicates that factor two is exerting a sizable influence on the data.

The factor loadings plot, Figure 1, likewise, shows two separate clusters of variables.

Figure 1: Factor Loadings Plot of Gender Attitudes



One of the main differences between these two clusters is frequency of agreement. Many fewer students agreed with the variables in the uppermost cluster (cluster 2). Here the percentage of students who agreed with the statements ranged from 13% to 39%. The lower cluster (which corresponds to cluster 1 in table 6) included the variables that had higher levels of agreement; from 53% to 91%. Since the variables in cluster 1 grouped together, and overall had higher numbers of students who agreed with them, the eight variables in this cluster were used in further analysis. These variables were OUTWED (wrong to have children outside of marriage), ENJOYTRANS (women

enjoy sex as much as men), COUPLEMA (if couple has sex they should get married), WOMANHOME (it is better if the woman stays home), HAPPYHOM (women are happier at home), WOMPREGPRV (it is the woman's responsibility to prevent pregnancy), MOMHOOD (motherhood is the most important thing a woman does) , GIRLRESP (it is the girl's responsibility to wait until marriage to have sex). These variables were added together to create an overall score out of 8. These scores were then used in the gender attitude analysis. In this case however, a lower score is more favorable than a higher score, since a movement towards lower scores indicates that fewer students agree with the conservative statements. In the pretest, there were both age and sex differences. Older females scored lower (less conservative) than younger females (mean rank 172.8 vs. 199.2, median; 6 vs. 7, p= .02), as did older men vs. younger men (mean rank 124.6 vs. 150.8, median 5.0 vs. 6.0, p=.006). There were sex differences as well between younger males and females (mean rank 172.5 vs. 216.5, median; 6.0 vs. 7.0, p=.000), with men scoring less conservative; and older males and females (mean rank 11.5 vs. 146.00, median 5.0 vs. 6.0, p=.000). Again, males scored less conservative than females.

Results between pre and posttest are shown below in Table 10:

Table 10: Gender Attitudes of Students

Group		Pre		Post			P
	N	Mean Rank	Median	N	Mean Rank	Median	
Younger Females	239	250.2	7.0	215	202.3	6.0	.000
Older Females	139	221.6	6.0	272	198.0	6.0	.052
Younger Males	158	148.7	6.0	119	126.1	5.0	.017
Older Males	120	112.4	5.0	103	111.5	5.0	.914

With respect to gender attitude, there were improvements in the younger students, but not in the older students. The differences here for both groups that improved were a change in one point between pre and post test medians, a 12% change.

Since the older students started out less conservative and did not change, an ordinal regression was performed on this data to test whether the older age of the posttest grouping was a confounding factor. The results are shown below, in Table 11,

Table 11: Number of Activities Attended vs. Knowledge Score

Pseudo R-Square=.042	Estimate	P value
Age	-.006	.515
Sex (female or not)	.639	.000
Pre (yes or no)	.470	.000

Here, overall, age was not a factor in overall score changes, but sex and type of survey (pretest or posttest) were factors. Being female equated with higher conservatism, as did a survey being from the pretest sample.

Discussion

Knowledge

At baseline, it appears as though age was a much more important factor in knowledge scores than was sex. All four scores varied statistically by age at baseline, but in only one instance (that of STIs) did the scores vary statistically by sex at baseline. Not surprisingly, in all cases, the older students knew more and scored better than the younger students. In the one case where a sex difference was evident, with STI knowledge, the males scored higher than the females. This was unsurprising since during the formative research the team discovered that it was common for males to be sexually active (which

was not the case for females) and to visit commercial sex workers. Given the risks males encounter, it is not a surprise that they knew more about STIs.

Older male students benefited the least from the intervention, with older males showing a pre to post improvement in only two of the four sections. Younger males followed with improvements in three out of four sections. Females showed improvement in all four sections. From these results it appears that the intervention was least effective with males (especially older ones) and more effective with females. Though the nature of the data makes it difficult to statistically compare medians, it is important to note that the young women had the highest change in median score between pre and post for all of the four groups. It also should be noted that older males, the group that showed the least improvement, also had the smallest sample sizes, which may have influenced the tests for significance.

Overall, the results are characterized by consistent statistically significant improvements in knowledge between the pretest and the posttest. The changes in median scores, however, show that overall improvement tended to be slight. The largest shift in medians occurred in the section on HIV/AIDS, where young females showed a median shift equal to 35% of the total possible score. Ironically, the knowledge tests for the other STIs, showed the smallest improvements in knowledge, with the highest median shift representing 7% of the total score.

Since age is an important factor in knowledge, and the posttest group was statistically significantly older than the pretest group, a question arises as to whether the changes seen above are because of the confounding effect of age. The regression helps to settle that question. Since, in the regression, age is controlled for, and the posttest group

still did significantly better than the pretest group, it can be concluded that students improved on the posttest regardless of age. Moreover, since the survey was given to the same school population 10 months apart, having an older student population at posttest was unavoidable.

The dose response relationship seen between the number of SH events attended, and improvement in knowledge further establishes the link between the efforts of the intervention and knowledge improvements in students.

Thus, overall, we can conclude that the Safe Harbor Program led to increases in ASRH knowledge and gender equity for the groups tested. Although overall improvements are small, SH must be acknowledged for improving the knowledge and gender equity views of students that were targeted for the intervention.

Gender Attitudes

With respect to the questions on gender attitudes, the older students started out less conservative and did not show improvement. The younger students, however, did show improvement between pretest and posttest, exhibiting lower scores, and thus a shift from more conservative to less conservative. The regression, however shows age not to be a factor overall in scores. Why this differs from the Mann-Whitney U test results is unknown. Sex and type of survey were factors, however, again showing that students were less conservative after the intervention.

Limitations

The way that the data for were survey was collected, as well as the structure of some of the questions posed serious limitations on how the data could be analyzed and the conclusions that can be drawn from it.

One of the main limitations concerns the sampling methods: The biggest "push" of Safe Harbor in the schools was for the University of Bohol and UB High School. There were, however, two other schools sampled. The level of programming at these schools was not at the level that it was at UB. We do not, however, know which students came from which schools, so it was not possible to look at the students from the school most targeted by the intervention separately. There may be a large number of students in the posttest sample who had no contact with the Safe Harbor Center, or the intervention. This would make the changes between pretest and posttest seem smaller than they actually were, since the posttest (intervention) sample would include many people who were not actually exposed to the intervention. The comparison between overall score and number of events attended, however, does address this issue to some extent, since it takes into account the number of events attended. There are events, however, not included here especially in relation to the program at UB; video showings, and work on academic theses are two that spring to mind. Another limitation is that the in-school interventions, while a large part of the Safe Harbor program, were not the only part. There were also programs carried out with the out-of-school youth. Any impact that these programs may have had is not addressed in this study.

Another problem is that there is no way to tell how many students who took the pretest are represented in the posttest, since this information was not recorded. Therefore

we are not certain whether the base-line knowledge was the same for the students who were represented in the pretest, and those who would be ultimately represented in the posttest. This type of error could either inflate the posttest results (if this group knew more that the pretest group) or hide positive results (if this group knew less than the pretest group).

Another set of limitations concerns the survey itself and the questions used. Most of the questions were chosen before the details of the intervention were known, and thus not extensively tailored to the intervention. This may mean that the survey did not capture well the knowledge gained by the participants, since they may have learned information not represented on the survey, or there may be information on the survey that was not representative of what they learned. The survey was also quite long. While performing the data entry, many of the enterers noted the large amount of missing data.

Conclusions/Recommendations

The goal of this evaluation is ultimately to determine whether or not the Safe Harbor program contributed to positive changes in youth knowledge about sexuality and the promotion of more equitable attitudes towards relationships and the role of gender in their society. The results show consistent, small improvements between the pretest and the posttest. It is safe to conclude that the Safe Harbor program is having a positive impact on the community. Introducing adolescents to knowledge is a vital step, but it is only an initial one. Equipping them with the skills to use this knowledge in a way that leads to consistently more positive behavioral outcomes is a long term goal of those associated with this project. In an ideal world, this would be followed by evaluations

that examine behavior outcomes, since what students *say* they know and say they *should* do may be very different that what they *actually* do.

As of this writing, the future of the Safe Harbor project is uncertain. This is unfortunate, since guiding youth towards healthy sexual choices and more equitable attitudes towards gender is unquestionably an ongoing process; especially since there are always new young men and women reaching the age of sexual maturity. From December 2004 to March 2005, the Diocese of Tagbilaran mounted a fairly aggressive offensive against the Safe Harbor program. The program was demonized in weekly sermons, and the center has been accused (with no basis for the accusation) of being funded through illegal abortion money. In addition, at least one person was asked to choose between their position at one of the catholic schools in Tagbilaran and their involvement with Safe Harbor Radio. In this climate, the end of the project would mean that only organizations opposed to promoting healthy sexuality among youth would have a voice. This would not bode well for the youth of Tagbilaran, especially since the results of this evaluation indicate that they have been very receptive to learning about ASRH, and with continued support have a chance to become the healthy, empowered Boholanos envisioned by the Safe Harbor project.

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Appendices

Appendix 1: List of Questions Used in Score Creation

Sexual Education	Max Score=11	Actual Range=0-11
Questions:		
Where do or did you get most of your information on sexual matters?		
Books		
Videos/Movies		
School		
Peer Counselors		
Health Care Providers		
What was the content [of formal sex education]?		
Biology		
Anatomy		
Relationships		
Family Planning		
STI		
HIV		

Contraceptive Methods	Max Score=10	Actual Range=1-10
Questions:		
Which contraceptive methods do you know of?		
Condoms		
Withdrawal		
Spermicides		
Pills		
Diaphragm		
Injections		
Withdrawal		
Rhythm/Natural Family Planning		
Vasectomy		
IUD		

STIs	Max Score=15	Actual Range=0-15
Questions:		
Which ones [STIs] have you heard of?		
Gonorrhea		
Syphilis		
Herpes		
HIV/AIDS		
Condyloma		
Pelvic Inflammatory Disease		
Hepatitis B		
Candidiasis		
Chlamydia		
Trichomoniasis		
Human Papilloma Virus		
Is there anything a person can do to avoid getting STIs?		
Non penetrative sex		
Use condom		
Avoid commercial sex workers		
A person can always tell by looking than another person has an STI (For this question, answering no was 1 point)		

HIV AIDS	Max Score=16	Actual Range=0-12
Questions:		
A healthy looking person can be infected with HIV (y/n)		
Please Circle all of the ways in which you believe a person could get HIV?		
Sexual Intercourse		
Sharing needles		
Blood transfusions		
Mother to child during birth		
Through breast milk		
What can a person do [to avoid AIDS]?		
Avoid having sex completely		
Stay faithful to partner		
Encourage partner to stay faithful		
Avoid contaminated blood		
Use condoms for every act of sexual intercourse		
Avoid sharing needles		
Avoid commercial sex workers		
Avoid casual sex		
Avoid circumcision in unauthorized places		
Does the use of a condom during sexual intercourse reduce the risk of HIV? (Y/N)		

Appendix II: Time Line

Formative Research

- Summer 2002
  - Focus Group Discussions with youth on gender roles and sexual behavior
- November 2002
  - Dissemination of findings of formative research to -Tagbilaran community
- January 2003
  - Project planning meeting in Baguio Philippines

Intervention

- March 2003-October 2003
  - Refurbishing of center/training of staff (delayed because of funding difficulties)
- October 2003
  - PORTER training
  - LitMus II
- December 2003
  - Pretest intervention survey in schools
  - Candle lighting for World AIDS Day
  - Gender forum at Holy Name University
  - Youth health and development forum
- January 2004
  - Ribbon cutting ceremony for center
- January 2004
  - Intervention programs running
    - Ongoing-video showings
    - Ongoing- Forums
- February 2004
  - Fun Run
- March 2004
  - Beginning of Small group discussions
  - Orientation of UB teachers and stakeholders
- April 2004
  - LEAD training
  - Karate Class
- June 2004
  - Beginning of clinical services
  - HIV story telling
- August 2004

- Safe Harbor radio begins

- October 2004
  - Post-intervention survey
- December 2004
  - Dissemination of findings
- December 2004
  - End of funding from Melon Foundation

Appendix III: Survey

Part I

YOUTH SURVEY OF SEXUAL AND REPRODUCTIVE KNOWLEDGE, ATTITUDES, AND BEHAVIOR

Ang kining "survey" mangutana kung unsa ang imong nahibal-an ug ang imong panglantaw kabahin sa pakipaghilawas (sex); contraception (ang artipisyal nga pamaagi sa pagpugong sa panganak sama sa condom); Sexually Transmitted Diseases (sama sa Tulo, Sira ug uban pang sakit nga makuha pinaagi sa pakighilawas) ug ubang pangutana kabahin sa imong edad, gender, edukasyon ug uban pa. Hinumdumi nga dili ka angay mo-sulat sa tinuod nimo nga pangan. Ang gi-apas niining survey ay ang makahibalo kung unsa ang gi-huna-huna ug gibuhat sa mga batan-on kabahin sa sex ug reproduction.

[This survey asks about your knowledge and attitudes about sex, contraception, STDs, reproduction, and some basic demographic characteristics (for example, age, sex, education, etc.). Most of the questions are about knowledge and attitudes. Some of the questions ask about your behavior. Please remember that this survey is anonymous. We do not want you to put your name on it. The purpose of the survey is to understand how young people your age think and what they do about sex and reproduction.]

We will begin by asking some background information questions.

Palihug lingini ang numero sa inyong tubag. [Please circle your answers when applicable.]

1. Ikaw ba ay usa ka [Are you?]
   Babaye [Female] 1
   Lalaki [Male] 2
2. Pila ang imong edad sa nilabay nimong adlaw natawhan?
   [How old are you since your last birthday?] _____
3. Ikaw ba usa ka Boholano?
   [Are you a Boholano?]
   Oo [Yes] 1
   Dili [No] 0

3.a Kung dili ka Boholano, unsa man ka? Isulti: 66
[If you are not a Boholano, how would you identify yourself?]

_____

4. Unsa ang imong pinakataas nga nahuman sa pag-eskuwela?
[What is the highest grade you have completed?]
Isulti kung unsa: [Other; specify]
_____ 66

5. Unsa ang imong adlaw-adlaw buluhaton/trabaho?
[What is your major activity/occupation?]
Lingini tanang angay[Circle all that apply]

Wala/way trabaho	[None/unemployed]	1
Estudyante; Isulti kung:	[Student]	1
Full time_____		
Part time_____		
Uban pa _____		
Nagtrabaho; Isulti kung unsang klaseng trabaho	[Working; specify what type]	1
_____		
Asawa sa panimalay	[Housewife]	1
Uban pa; isulti kung unsa:	[Other; specify]	1

_____

6. Asa man ka kasagaran magpakonsulta kung masakit ka?
[Where do you usually get your health care?]

a. Pampubliko	[Public]	1
b. Pribado	[Private]	2
c. Mananambal	[Indigenous Healers]	3
d. Hilot	[Lay midwives]	4
Uban pa; isulti kung unsa:	[Other, specify]	66

_____

7. Unsa ang imong relihiyon?
[What is your religion?]
Lingini ang tanang angay. [Circle all that apply]

[Romano Katoliko [Roman Catholic]		1
Protestante	[Protestant]	2
Uban pa; isulti kung unsa:		66

_____

7.a Kapila ka muapil sa mga relihiyosong kalihukan? (sama sa pagsimba, pagnovena, etc.) [How often do you attend religious rites?]

Labaw pa sa usa ka semana	[More than once a week]	1
Kausa sa usa ka semana	[Once a week]	2
Ubos pa sa kaupat sa usa kabulan	[Less than four times a month]	3
Uban ; Isulti kung unsa	[Other; specify]	66

_____

8. Unsa ang imong 'marital status'?
[What is your current marital status?]

Wala nagminyo sukad-sukad	[Single, never married]	1
Minyo	[Married]	2
Bulag	[Separated]	3
Balo	[Widowed]	4
Uban pa; isulti kung unsa	[Other; specify]	66

_____

☞ Kung wala pa ka naminyo, adto sa 8.a:
[If you are not married, go to 8.a:]

8.a Aduna na ba kay uyab?
[Do you have a boyfriend/girlfriend?]

Oo, adto sa 12.d	[Yes]	1
Kung "Wala", ayaw na padayon	[No]	0

8.b Unsa imong ika-sulti sa inyong relasyon karon?
[How would you describe your present relationship?]

Naa ko'y gina-date nga dili seryoso nga usa sa pagkakaron.	[I am currently dating one person casually]	1
Naa ko'y usa ka tawo nga seryosong gina-date sa pagkakaron.	[I am currently dating one person seriously]	2
Kaslunon na ko sa pagkakaron	[I am currently engaged to be married]	3
Nakigpuyo ko sa usa ka tawo sa pagkakaron	[I am currently living with someone]	4
Uban pa; Isulti kung unsa: _____	[Other; specify]	66

8.c Pila ang edad sa imong pares? _____ ka-tuig
How old is your partner? _____ years

Part II

YOUTH ATTITUDES TOWARD GENDER ROLES AND FAMILY RESPONSIBILITIES

Kining ikaduhang parte sa survey nangutana sa inyo kabahin sa imong papel o katungdan bilang babaye ug lalaki. Palihug butangi ug "check" ang "mo-uyon ka" na kolumna kung uyon ka sa saysay. Ug ubos sa "dili ko mo-uyon" nga kolumna kung dili ka uyon sa saysay.

[This survey asks you some questions about gender role and family responsibilities. Please put a check in the column under agree if you agree with the statement and under disagree if you do not agree with the statement.]

	Saysay [Statements]	Mo-Uyon [Agree]	Di li ko Uyon [Dis-agree]
1.	Ang babaye angay lang sa panimalay, dili na siya angay manarbaho. [A woman's place is in the home, not in the office or work place.]		
2.	Ang asawa nga nag-atiman ug maayo sa iyang mga responsibilidad sa pamilya, wala nay panahon sa pagpanarbaho sa uban. [A wife who carries out her full family responsibilities doesn't have time for outside employment.]		
3.	Ang pagpanarbaho sa mga asawa mao'y hinungdan sa pagdaghan sa mga badlungon na anak. [The employment of wives leads to more juvenile delinquency.]		
4.	Mas maayo sa tanan kung ang bana mao'y manarbaho gawas sa panimalay ug ang asawa ang mag-atiman sa panimalay ug sa pamilya. [It is much better for everyone if the man is the achiever outside the home and the woman takes care of the home and family]		
5.	Mas malipayon ang mga babaye kung sila anaa lang sa panimalay ug mag-atiman sa ilahang mga anak. [Women are much happier if they stay at home and take care of their children.]		

	Saysay [Statements]	Mo-Uyon [Agree]	Di li ko Uyon [Dis-agree]
6.	Mahimo sa babaye ang mag-atiman sa iyang pamilya ug manarbaho pa gyud gawas sa panimalay. [A woman can hold an outside job and care for her household.]		
7.	Ang magulang kinahanglan motabang sa mga gastuson sa iyang mga manghod [One should help economically with the support of younger brothers and sisters.]		
8.	Ang mga edaran nga ginikanan kinahanglan magpuyo uban sa ilang mga pamilya/paryente. [Aging parents should live with their relatives.]		
9.	Kung ang tawo adunay problema, siya makasiguro sa tabang sa iyang kaparyentehan. [When one has problems one can count on the help of relatives.]		
10.	Kadaghanan sa gabuhaton sa anak nga babaye kinahanglan buhaton niya kini para sa kalipay sa iyang ginikanan. [Much of what a daughter does should be done to please her parents.]		
11.	Ako kinahanglan motabang kung ang akong paryente mi-sulti sa ako na siya anaa sa pinansyal nga kalisod. [I should help if a relative tells me that she/he is in financial difficulty.]		
12.	Kung ang tawo adunay problema, siya makasiguro sa tabang sa iyang mga higala. [When one has problems, one can count on the help of friends.]		
13.	Ang mga anak kinahanglan mo-suporta sa ilang mga ginikanan sa ilahang pagkatigulang. [Children should support their parents in their old age.]		

14.	Ang usa makasiguro sa tabang sa iyang mga paryente sa pag-solbad sa kadaghanan sa iyang mga problema. [One can count on help from his or her relatives to solve most problems.]		

	Saysay [Statements]	Mo-Uyon [Agree]	Di li ko Uyon [Dis-agree]
15.	Kadaghanan sa gabuhaton sa tawo, kinahanglan buhaton kini para sa kalipay sa iyang mga higala. [Much of what a person does should be done to please his or her friends.]		
16.	Ako motabang sa akong higala/barkada nga gi-ingon sa ako na siya anaa sa pinansyal na kalisod. [I would help a friend who told me that he or she was in financial difficulty.]		
17.	Kinahanglan kauban niya kanunay ang iyang mga paryente kung wala siyay buhaton. [One should spend most of his or her free time with relatives.]		
18.	Ang tawo makasiguro sa tabang sa iyang mga higala/barkada sa pag-solbad sa kadaghanan sa iyang problema. [One can count on help from his or her friends to solve most problems.]		
19.	Kinahanglan kauban niya kanunay ang iyang mga amigo/amiga kung wala siyay buhaton. [One should spend most of his or her free time with friends.]		

Part III

YOUTH SURVEY ON KNOWLEDGE, ATTITUDES AND
SEXUAL AND REPRODUCTIVE BEHAVIOR

Ang kining "survey" mangutana kung unsa ang imong nahibal-an ug ang imong panglantaw kabahin sa pakipaghilawas (sex); contraception (ang artipisyal nga pamaagi sa pagpugong sa panganak sama sa condom); Sexually Transmitted Diseases (sama sa Tulo, Sira ug uban pang sakit nga makuha pinaagi sa pakighilawas). Ug mangutana pud kining survey sa imong mga opinyon kabahin niining mga butanga.

[This section asks about sex education and your knowledge of contraceptive methods, HIV/AIDS and other Sexually Transmitted Diseases (gonorrhea, syphilis,etc.) It also asks you of your opinions about these topics.]

☞ Palihug adto sa pikas nga page.
[Please go to next page.]

Mga impormasyon kabahin sa panghilawas. [Information about sexual matters.]

1. Asa ka nagkuha/gakuha sa kadaghanan imo nahibaw-an mahitungod sa panghilawas? [Where do or did you get most of your information about sexual matters?] Lingini ang numero sa inyong tubag [Circle yes or no for each item]

		Yes	No
a. Mga higala/barkada	[a. Friends/Peers]	1	0
b. Mga libro	[b. Books]	1	0
c. Mga magasin	[c. Magazines]	1	0
d. Mga salida sa sine	[d. Videos/Movies]	1	0
e. Sa internet	[e. Internet]	1	0
f. Sa telebisyon/TV	[f. Television/TV]	1	0
g. Sa uyab	[g. Girlfriend/ boyfriend]	1	0
h. Sa ginikanan	[h. Parents]	1	0
i. Sa ubang paryente: isulti kung kinsa) _____	[i. Other relatives: specify]	1	0
j. Eskuwela; Kang kinsa?	[j. School; from whom?]	1	0
k. Sa tigtambag	[k. Peer counselors]	1	0
l. Health providers (doktor, nars, midwife, barangay health worker)	[l. Health providers: doctor, nurse, midwife, barangay health worker]	1	0
m. Sa simbahan/mga gintudlo sa simbahan	[m. Church/church teachings]	1	0
n. Uban pa, isulti: _____	[n. Others, specify]	1	0

2. Nakig-istorya na ba ka kabahain sa panghiwalas sa kang bisan kinsa?
[Have you ever discussed sexual matters with anyone?]
Lingini ang numero sa inyong tubag [Circle your answer]

Oo, adto sa 3	[Yes, go to 3]	1
Dili, go to 4	[No, go to 4]	0
Uban pa, isulti kung unsa:	[Others, specify]	66

_____

3. Kung ang imong tubag kay 'Oo', kang kinsa ka nakig-istorya ani? [If Yes, with whom?]
Lingini ang numero sa imong tubag. [Circle yes or no for each item]

		Yes	No
a. Inahan	[a. Mother]	1	0
b. Amahan	[b Father]	1	0
c. (mga) igsoong babaye	[c.Sister(s)]	1	0
d. (mga) igsoong lalaki	[d. Brother(s)]	1	0
e. (mga) higala	[e. Friends]	1	0
f. (mga) uyab nga lalaki	[f.Boyfriends]	1	0
g. (mga) uyab nga babaye	[g. Girlfriends]	1	0
h. (mga) tigtambag	[h. Counselors]	1	0
i. (mga) health providers	[i. Health providers]	1	0
j. Uban pa; isulti kung kang kinsa pa	[Others; specify]	1	0

_____

4. Aduna na ba kay pormal nga eduakasyon mahitungod sa panghilawas (sa eskuwelahan o uban pa)?
[Did you ever had formal sex education?]

Oo, adto sa 4.a	[Yes, go to 4.a]	1
Wala pa, adto sa 5	[No, go to 5]	0
Uban pa, isulti kung unsa _____	[Others; specify]	66

4.a Kung 'Oo' imong tubag, diin man ka nakat-on ani?

[If yes, where?]	[Circle all that apply]	Yes
Sa eskwelahan	[School]	1
Sa mga relihiyosong organisasyon	[Religious based organizations]	1
Sa mga health care facilities sa gobyerno	[Government health care facilities]	1
Sa mga non-government organizations	[Non-governmental organizations]	1
Uban pa, isulti kung unsa _____	[Others, specify]	1

4.b Asa bahin inyoong nakat-unan?
[What was the content?]
Lingini tanang angay. [Circle all that apply]

Biology		1
Anatomy		1
Mga relasyon	[Relationships]	1
Mga relihiyosong pamatasan	[Religious/moral values]	1
Pagplano sa pamilya (sama sa natural o artipisyal nga mga pamaagi, pag lat-ang sa mga anak)	[Family planning including natural and artificial methods, birthspacing]	1
Mga sakit na makuha sa pakighilawas (sama sa tulo, sira	[Sexually transmitted diseases: gonorrhea, syphilis, etc.]	1
HIV/AIDS	[HIV/AIDS]	1
Uban pa, isulti kung unsa:	[Others, specify]	1

_____

5. Sa imong tan-aw, angay bang makadawat ug ingon-aning mga impormasyon mahitungod sa seks ang atong mga kabataan?
[Do you think people should receive information about sex?]

Oo, adto sa 5.a	[Yes, go to 5.a]	1
Dili, adto sa 6	[No, go to 6]	0
Uban pa, isulti kung ngano	[Others; specify]	66

_____

5.a Kung Oo, ang imong, kinsa man ang angay manghatag ug impormasyon mahitungod sa panghilawas sa mga kabataan?
[If yes, which of the following should provide information about sex to young people?
Lingini ang numero sa imong tubag.[Circle yes or no for each item]

		Yes	No
a. Pamilya	[a. Family]	1	0
b. Mga higala/barkada	[b. \Friends/peers]	1	0
c. Eskuwelahan	[c. School]	1	0
d. Simbahan	[d. Church]	1	0
e. Media	[e. Media]	1	0
f.NonGovernment Organizations	[f. NGOs]	1	0
g. Health services	[g. Health services]	1	0
h. Local government	[h. Local government]	1	0
i. Youth program	[i. Youth program]	1	0
j. Uban pa, isulti kung unsa pa	[j. Others; specify]	1	0

_____

6. Kanus-a angay magka-uyab ang usa ka batan-on?
[When do you think it is alright for a young person to have a boyfriend/girlfriend?
Lingini ang numero sa imong tubag..[Circle yes or no for each item]

		Yes	No
a. Kung nahigugma na siya	[a. When she falls in love]	1	0
b. Kung ga-trabaho na siya	[b. When she/he works]	1	0
c. Kung naa pa siya sa high school	[c. When she/he is in highschool]	1	0
d.Kung nag-inusara siya sa balay ug walay ginikanang nagbantay	[d. When she/he lives alone without parental supervision]	1	0
e. Kung naa na siya sa college	[e. When she/he is in college]	1	0
f. Kung minyo na siya	[f. When she/he is married]	1	0
g. Kung buwag na sila	[g. When she/he is separated]	1	0
h. Wala ko kahibalo	[h. Don't know]	1	0
i. Uban pa, isulti kung unsa: _____	[i. Others, specify]	1	0

7. Sa imong tan-aw, kanus-a angay magsugod makipag-seks ang mga batan-on?
[When do you think it is alright for a young person to have a sexual relationship?]
Lingini ang numero sa inyong tubag.[Circle yes or no for each item]

		Yes	No
a. Kung naa na siya'y uyab	[a.When she/he has a boyfriend /girlfriend]	1	0
b. Kung nahigugma na siya	[b.When she/he falls in love]	1	0
c. Kung ga-trabaho na siya	[c. When she/he works]	1	0
d. Kung naa pa sa high school	[d. When he/she is in high school]	1	0
e. Kung nag-inusara siya sa balay ug walay ginikanang nagbantay	[e. When he/she lives alone without parental supervision]	1	0
f. Kung naa na siya sa college	[f. When he/she is in college]	1	0
g. Kung minyo na siya	[g. When he/she is married]	1	0
h. Kung buwag na sila	[h. When he/she is separated]	1	0
i. Wala ko kahibalo	[i. Don't know]	1	0
j.Uban pa; Isulti kung unsa pa	[j.Others; specify]		

_____

8. Pila ka porsiyento sa imong mga amigo/amiga ang nakasuway na ug panghilawas?
[What percentage of your friends do you think have had sex?]

a. Mga amigo	[Male friend]	
Wala	[None] (0%)	1
Naay uban	[Some] (25%)	2
Tunga sa ila	[Half] (50%)	3
Kadaghanan sa ila	[Majority than 50%]	4
Tanan sila	[All 100%]	5
b. Mga amiga	[Female friend]	
Wala	[None 0%]	1
Naay uban	[Some 25%]	2
Tunga sa ila	[Half] (50%)	3
Kadaghanan sa ila	[Majority than 50%]	4
Tanan sila	[All 100%]	5

SOCIAL INFLUENCES

9. Nagtoo ba ka nga usa sa imong amiga naka-agi pagbaligya sa iyang pagkababaye o pagka-boring?
[Do you think that any of your friends have gone to a commercial sex worker/GRO?]

Oo	[Yes]	2
Dili	[No]	1
Uban pa; Isulti kung unsa	[Others; specify]	66

_____

10.

Naa ba kay suporta gikan sa imong mga barkada o amiga nga hulaton gyud nga ma minyo sa dile pa makighilawas?
[Is there support among your friends/barkada for you to wait until marriage before having sexual intercourse?]

walay suporta	[no support at all]	0
gamay lang nga suporta	[a little support]	1
	[a moderate amount of support]	2
	[A lot of support]	3

11.

Aduna bay kusog nga tukmod gikan sa imong mga barkada aron ka makighilawas?
[Is there pressure from your friends/barkada for you to have sexual intercourse?]

[no pressure at all]	0
[a little pressure]	1
[a moderate amount of pressure]	2
[A lot of pressure]	3

12.

Babag ba sa pamatasan sa atong ginikanan ang makighilawas sa dile pa kasado nga batan-on?
[It is against my parents values for me to have sexual intercourse while I am an unmarried teenager]

[Strongly disagree]	0
[Disagree]	1
[Not sure]	2
[Agree]	3
[strongly agree]	4

13.

Sa asang panahona sa binulan nga cycle sa babaye ang
[During which part of the monthly cycle does a woman have the greatest chance of becoming pregnant?]

[Circle all that apply]

During her period	1
In the middle of her cycle	1
Right after her period	1
Just before her period begins	1
Other---- specify	1
Don't know/ Don't remember	1

14.

Mahimo bang mabuntis ang babae sa unang pakighilawas lamang?
[Can a girl get pregnant the first time she has sex?]

Oo	[Yes]	1
Dili	[No]	0
Wala kahibalo	[Don't Know]	77

15.

Mahimo bang mabuntis ang babae kung makighilawas ka usa ka higayon?
[Can a girl get pregnant if she has sex just once?]

Oo	[Yes]	2
Dili	[No]	1
Wala kahibalo	[Don't Know]	77

CONTRACEPTIVE KNOWLEDGE AND ATTITUDES

16. Unsa ang "safe sex" ang pagsabot nimo?
[What does " safe sex" mean to you?]
[Circle all that apply]

dile pakighilawas	Abstaining from sex	1
Paggamit ug condom	Using condom	1
Paglikay pakighilawas sa daghang sa kalain-laing tawo	Avoiding multiple sex partners	1
Paglikay pakighilawas sa mga boring	Avoiding sex with prostitutes	1
Paglikay pakighilawas ginamit ang lubot	Avoiding anal sex	1
Uban---isulti	Others---- specify	1
Wala kahibalo/ wala kahinumdum	Don't know/ Don't remember	1

17. Naa ba kay nahibaw-an nga klase sa contraception?
[Do you know any contraceptive methods?]

Oo	[Yes]	1
Wala, adto sa 14	[None, go to 14]	0
Uban pa; Isulti kung unsa	[Others; specify]	66

_____

18. Unsa man nga klase sa contraception and imong nahibaw-an?
[Which contraceptive method do you know of?]
Lingini ang numero sa imong tubag. [Circle each method you know of]

a. Condoms	1
b. Foam	1
c. Spermicides	1
d. Pills	1
e. Diaphragm	1
f. Injections	1
g. Withdrawal	1
h. Rhythm/natural family planning	1
i. Vasectomy [pagpakapon sa lalaki o permanenteng pagputol sa tubo sa lalaki aron di siya makamabdos.]	1
j. IUD	1
k. Uban pa; isulti kung unsa:[Others; specify] _____	1

19. Mo-angay ba ka o dili sa paggamit ug contraception para sa:
[In general do you approve or disapprove of contraceptive use for:]
Lingini ang tumero sa imong tubag. [Circle the number of your answer.]

		Approve	Disapprove
a. Paglikay sa pagmabdos	[a.Pregnancy prevention]	1	0
b.Mga kabataang wa pa naminyo pero nakighilawas na	[b. Unmarried sexually active youth]	1	0
c. Mga kabataang minyo na ug makighilawas	[c. Married sexually active youth]	1	0

20. Sa imong tan-aw, kanang mga kabataang wa pa nangaminyo, kinahanglan ba sila mogamit ug contraception?
[Do you think two sexually active young people who are NOT married should use contraceptives?]

Oo	[Yes]	1
Dili	[No]	0
Uban pa; isulti kung unsa _____	[Others; specify]	66

21. Kinsa man ang mopili sa klase nga contraception nga angay gamiton?
[Who should decide what contraceptive method to use?]

Ang ulitawo	[The young man]	1
Ang daga	[The young woman]	2
Silang duha	[Both]	3
Uban pa; isulti kung kinsa _____	[Others; specify]	66

SEXUALLY TRANSMITTED DISEASES

22. Nakadungog na ba ka kabahin sa STD?
[Have you ever heard of sexually transmitted diseases (STDs) or sexually transmitted infections (STIs)?]

Oo	[Yes]	1
	[No]	0
	Don't know	77

_____

23 Kung ang tubag nimo 'Oo', asa ani ang imong nahibaw-an?
[If yes, which ones have you heard of?]
Lingini ang tanang angay. [Circle all that apply]

a. Tulo/Sira [Gonorrhea]	1
b. Syphilis	1
c. Herpes	1
d. HIV/AIDS	1
e. Condyloma (genital warts)	1
f. Pelvic Inflammatory Diseases (PID)	1
g. Hepatitis B	1
h. Candidiasis	1
i. Chlamydia	1
j. Trichomoniasis	1
k. Human Papilloma virus	1
m. Uban pa; Isulti kung unsa	1

[Others; specify]

_____

24.
Ang tawo makasulti kung ang usa ka tawo dunay STD pina-agi sa pagtan-aw lamang
[A person can always tell by looking that another person has a sexually transmitted infection]

Oo	[Yes]	1
Kung "Wala"	[No]	0
Wala kahibalo	[Don't Know]	77

_____

25.

Duna bay mahimo ang tawo paglikay nga matakdan ug STD?
[Is there anything a person can do to avoid getting STIs?]
[Circle all that apply]

	Non penetrative sex	1
Paggamit ug condom	Use condom	1
	Washing/ Douching	1
Paglikay sa mga boring	Avoiding commercial sex workers	1
	Using herbs	1
	Don't Know	1
	Others; specify	1

_____

HIV/AIDS KNOWLDEGE AND ATTITUDES

26.

Ang himsog nga tan-awon nga tawo mahimong matakdan ug HIV
[A healthy looking person can be infected with HIV]

Oo	[Yes]	1
	[No]	0
	Don't know	77

27.

Palihug ug lingin sa mga paagi nga imong gitouhan nga ang tawo makakuha ug AIDS
[Please circle all the ways in which you believe a person can get AIDS] [Circle all that apply]

	Sexual intercourse pakighilawas	1
Pag puli-puli ug gamit ug dagom/ hugaw nga gamit	Sharing needles/ unclean medical equipment	1
	Blood transfusions	1
Panahon sa pagbuntis	During pregnancy	1
Gikan sa mama ngadto sa anak panahon sa pag panganak	Mother to child during birth	1
Pina-akan sa lamok	Mosquito or other insect bites\	1
Pinaagi sa pag-pasuso	Through breast milk	1
	Casual contact with infected person	1
	Don't know	1
	Others; specify	1

28.

Duna bay mahimo ang tawo paglikay nga matakbuyan sa AIDS?
[Is there anything a person can do to avoid getting AIDS?]

Oo	[Yes] go to question 28.a]	1
	[No]	0
	Don't know	77

28.a Kung duna, unsa ang mahimo sa tawo?
If yes, What can a person do? [Circle all that apply]

Paglikay pakighilawas	Avoid having sex completely	1
Pabiling pagka matinud-anon sa kapikas	Stay faithful to their –partner	1
Pagdasig sa kapikas nga mag-matinud anon	Encourage partner to stay faithful	1
	Avoid contaminated blood	1
Paggamit ug condom kada pakighilawas	Use condoms for every act of sexual intercourse	1
Paglikay ug puli-puli ug dagom	Avoid sharing needles	1
Paglikay ug mga boring	Avoid commercial sex workers	1
	Avoid casual sex	1
	Avoid circumcision at unauthorized places	1
	Don't Know	1
	Others; specify	1

29. Maka us-os ba ug risgo sa HIV/AIDS ang paggamit ug condom panahon nga makighilawas?
[Does the use of a condom during sexual intercourse reduce the risk of HIV/AIDS?]

Oo	[Yes]	1
	[No]	0
	Don't know	77

30 Kung ang batan-on sa imong pangidaron dunay problema sa reproductive health o dunay mga pangutana, kinsa ang iyang pwede doulan ug tabang?
[If a person your age had a reproductive health problem or question, where could he/she go for help?] [Circle all that apply]

	Yes
Clinic/hospital	1
Health worker	1
Peer counselor	1
Youth center	1
Friend	1
Parent	1
Relative	1
Teacher	1
Lying In Center	1
Barangay worker	1
Don't Know	1
Other; specify	1 _____

Part IV

Code	_____

YOUTH SURVEY ON ATTITUDES TOWARD SEXUAL RELATIONSHIPS AND FAMILY RESPONSIBILITIES

Kining parte sa survey mangutana sa imong opinyon kabahin sa mga sekswal nga relasyon ug pag-anaka . Palihug butangi ug "check" ang "mo-uyon ka" na kolumna kung ayon ka sa saysay. Ug ubos sa "dili ko mo-uyon" nga kolumna kung dili ka uyon sa saysay.

[This survey asks you some questions about your feelings about sexual relationships and child-bearing. Please put a check in the column under agree if you agree with the statement and under disagree if you do not agree with the statement.]

1. Sa imong opinion, unsa ang pinakasakto nga edad para sa babaye para sa pakighilawas sa kinaunahan nga higayon?
   In your opinion, what is the ideal age for a girl to have sex for the first time?

edad	Age	_____
Human magminyo	After marriage	1
	Don't know	77
	[Other; please specify]	66
_____		

2. Sa imong opinion, unsa ang pinakasakto nga idad sa lalaki aron makighilawas sa unang higayon?
   In your opinion, what is the ideal age for a boy to have sex for the first time?

	Age	_____
	After marriage	1
	Don't know	77
	[Other; please specify]	66
_____		

3. Sa imong opinion, unsa ang pinaka saktong idad sa babaye nga magminyo?
In your opinion, what is the ideal age for a girl to marry?

Age	_____
Don't know	77
[Other; please specify]	66

_____

4. Sa imong opinion, unsa ang saktong edad sa lalaki para mag minyo
In your opinion, what is the ideal age for a boy to marry?

Age	_____
Don't know	77
[Other; please specify]	66

	Saysay [Statements]	Mo-Uyon [Agree]	Dili ko Uyon [Disagree]
5.	Dili angay makighilawas ang usa ka babaye kung wala siya nahigugma sa iyang paris. [A woman should not have sexual intercourse unless she is in love.]		
6.	Kung ang batan-ong magti-ayon nakighilawas kinahanglan mauli kini sa kaminyoon [If a young couple has sexual intercourse, they should get married.]		
7.	Dili angay nga pugson sa lalaki ang iyang uyab nga makighilawas sa iya. [A young man should not pressure his girlfriend to have sex.]		
8.	Ang unang tawo nga imong gihigugma ang para gyud sa imo. [Your first love is the one for life.]		
9.	Ang lalaki mo-ingon nga gihigugma niya ang babaye bisan wala aron mo-sugot ang babaye nga makighilawas sa iya. [A man will say he loves a woman, even if he doesn't, in order to have sex with her.]		

	Saysay [Statements]	Mo-Uyon [Agree]	Dili ko Uyon [Disagree]
10.	Responsibilidad sa babaye ang maghuwat hangtod nga magminyo siya usa siya makighilawas. [It is the woman's responsibility to wait to have sex until she is married.]		
11.	Kung ang babaye adunay nahibal-an mahitungod sa pakighilawas kini maka-menos sa respeto kaniya sa iyang uyab. [If a woman knows about sex, this makes her less worthy of respect in the eyes of her partner.]		
12.	Kung unsa kaganahan ang mga lalaki makighilawas, mao usab ang mga babaye. [Women enjoy sex as much as men.]		
13.	Naa sa babaye ang responsibilidad nga maglikay sa pagmabdos. [The woman should be the one who is responsible for preventing pregnancy.]		
14.	Ang amahan sa bata maoy responsable sa mga gastuson para sa kaayuhan sa iyang anak. [The father of a baby should be responsible for the economic welfare of the child.]		
15.	Ang babaye dili mabuhi kung wala'y suporta sa lalaki. [A woman just cannot get along economically without a man.]		
16.	Ang pagkahimong inahan mao ang pinaka-importanteng butang sa kinabuhi sa babaye. [Being a mother is the most important thing a woman does in her life.]		
17.	Ang mga babaye kasagaran ang mohimong responsable sa ilang mga anak. [Most of the time, women end up being the		

	ones responsible for their children.]		

	Saysay [Statements]	Mo- Uyon [Agree]	Dili ko Uyon [Disagree]
18.	Kung dili ka maminyo, dili angay na ikaw magka-anak. [It is wrong to have children without being married.]		
19.	Daghan nang nahitabo nga kulatahon sa lalaki ang iyang asawa or uyab. [It is common for a man to hit his wife or girlfriend.]		
20.	Ang babaye, kinahanglan mo-sunod kanunay sa tanang i-sulti sa iyang bana o uyab. [A woman should always do what her husband or boyfriend tells her to do.]		
21.	kung ang batan on [If a young person is desperate for school fees or to learn a trade, it is OK to have an adult pay for the education in exchange for sex from the young person (ex- sugar daddy or sugar mommy).]		
22.	Ang mga nahibalo Young people's knowledge of contraception encourages them to have sex with many people]		

23. Do you think it is easy or difficult for people your age to obtain contraceptive methods?

Easy, (please stop)	1
Difficult (If difficult please continue to question 23.a)	2
Don't know	66

23. a Why is it difficult for people your age to obtain contraceptive methods? [circle all that apply]

Money	1
Difficult to find	1
Provider/seller disapproves	1
Parents/elders disapprove	1

Naa pa ba kay maikasulti sa amo kabahin niani? [Is there anything else you would like to tell us?]

_____

_____

_____

_____

Daghang salamat sa paghatag ug panahon sa niining pangutana. Ang imong pag-apil niining proyekto makatabang gyud ug dako sa among pagtuon.

Thank you very much for taking the time to answer these questions. Your participation in this project will help us understand young people's sexual and reproductive knowledge, attitudes, and behavior better.