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Assessing the Efficacy of Sexual Health Education in Tanzania

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Abstract

Although primary education for girls in poor nations has received increasing support in recent years, governments and major funders have devoted inadequate attention to sexual and reproductive health education. Thus, many local and regional women's rights non-governmental organizations (NGO's) have intensified their efforts on such issues. The primary purpose of this study is to evaluate the efficacy of a sexual health workshop series created and run by a women's NGO working in Tanzania and Kenya. The classes were designed to educate young girls in their communities about sexual health and puberty in order to eliminate barriers that keep them from attending and doing well in school. Now implemented in over 29 communities in East Africa, the workshop series is run by local mentors who are trained to share this information and engage girls in dialogue about their reproductive health. Girls who participated in the Tanzania program during 2013 were given surveys to measure impact on several dimensions, including gain of knowledge (about HIV, pregnancy, bodily changes during puberty, etc.) changing of opinions, confidence level, behavioral changes, and level of self-esteem. Pre-survey and post-survey data were collected from 13 different schools for a sample size of 303 participants. Comparison of data collected prior to and after the workshops indicate that the program is highly effective.

Keywords: Sexual Health, Reproductive Health, East Africa

1. Introduction

The task of getting sexual and reproductive rights to be recognized as human rights has proven very difficult. For years, women across the world have been met with resistance when advocating for sexual and reproductive rights. Progress has been difficult and slow, from Margaret Sanger's foundation of the first birth control clinic in the United States in 1916 to the legalization of abortion in 1973.[1] The situation is even more dire in poor countries. Structural forces and violence against women contribute to a lack of attention to sexual and reproductive health education (SRHE) in developing countries, where there is still room for economic and social advancement. According to the UNFPA (specific to East Africa with age ranging from 15-29), as of 2015 20% of girls are married and 5% are unmarried and sexually active. Between ages 15-19 for every 1000 girls, 113 of them experience live birth in East Africa, compared to 17 in developed countries.[2] Tanzania alone experiences 128 births per 1,000 women (aged 15-19). Kenya follows closely behind at 101 births per 1,000 women.[3] These birth rates reflect inadequate attention to SRHE that stems from the devaluation of women, and as Marilyn Waring asserts, "In a sane world, it would seem, humankind would place a high value on life and those able to provide."[4]

One of the largest structural barriers in obtaining access to sexual and reproductive rights is the inability of girls to receive a quality education. Less than 1% of girls in Tanzania are projected to complete secondary education. In comparison to their male counterparts, young girls are almost twice as likely to miss school in East Africa. Doubt,

fear, and lack of education make parents reluctant to send their girls to school.[5] Another crucial factor in understanding this education based approach is to understand that SRHE gives girls autonomy to be able to make decisions about their own bodies, which in turn is a monumental component to women's equality: "reproductive control is both a reflection and a determinant of women's equality...it greatly affects women's health."[6]

Many NGOs attempt to address girls advancement. What's different about the programs referenced in this research is that they teach beyond primary and secondary education. They take into account less visible factors that affect agency over girls' bodies and agency in their communities. The Wezesha program implemented by Asante Africa, which is the focus of this research, includes a well thought-out curriculum that addresses those invisible factors in their approach to SRHE. This model could be implemented on a larger scale in other developing countries.

This study discusses the conditions that often lead to poor SRHE in developing countries, while simultaneously identifying aspects of intervention programs that seek to navigate those challenges. Using Asante Africa's Wezesha Program as a case study, this research identifies approaches that address both cultural and social barriers to health which contribute to more successful health outcomes for girls. Key themes that emerge from analysis of pre and post-survey results are identified, and the multi-dimensional success of the Wezesha Program is discussed in detail.

2. Literature Review

In 2000, the United Nations established a framework for "Millennium Development Goals" (MDGs) which would, in theory be acheived 2015. These goals were set with the intention of fighting global poverty and eradicating barriers that hinder development progress. Among these eight goals are six that are directly related to girls' and women's advancement: eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower women, reduce child mortality, improve maternal health, and combat HIV/AIDS, malaria and other diseases.[7] These goals pertain to SRHE both directly and indirectly via structural forces that increasingly inhibit proper access to such education. Particularly looking at data provided in Sub-Saharan Africa for the scope of my research, the 2015 progress chart reflects mostly fair to good progress. Results are categorized by two routes: progress and development. In terms of progress, they are measured by poor progress or deterioration, fair progress, good progress and target met or excellent progress. In terms of level of development, they are categorized under low, moderate and high. As of 2015, access to reproductive health still fell under fair progress with a present level of development at low access. Under the goal of achieving universal primary education, fair progress has been made with moderate enrollment. Concerning equal girls' enrollment in primary school, fair progress was made with the level of development at close to parity.[8] It is important to note that since the expiration of the MDGs in 2015, Sustainable Development Goals (SDGs) have been adopted. The SDGs set goals of "to end poverty, protect the planet, and ensure prosperity for all" are projected to be met by 2030.[9]

The link between the MDGs goals of ending poverty, hunger, HIV/AIDS and empowering women are inextricable to that of Sexual and Reproductive Health Services, however Sexual and Reproductive Health is not explicitly listed as an MDG. A few countries recognize this absence and take it upon themselves to make it a priority.[10] The International Conference on Population and Development (ICPD) in 1994 was a landmark event recognizing the importance of women in the role of population politics and development.[11] The ICPD Programme of Action declares that "information and services should be made available to adolescents to help them understand their sexuality and protect them from unwanted pregnancies, sexually transmitted diseases and subsequent risk of infertility. This should be combined with the education of young men to respect women's self-determination and to share responsibility with women in matters of sexuality and reproduction."[12] Rather than targeting specific demographics, the Programme of Action recognizes the need for sustainable development goals.[13]

Over the last 2 decades, many programs targeting girls education including SRHE have been developed. However, more research needs to be done in regards to program design, implementation, and evaluation. Hindin and Adesegun note the continued need:

> *"Gaps still exist within programs that target both knowledge and behavior change in the sexual activities of adolescents. Programs need to go beyond HIV and focus on broader topics in sexual and reproductive health-- currently, in many programs, other STIs and pregnancy prevention are conspicuously absent. In addition, gender differences need greater attention. Given gender differences in behavior as well as in some of the consequences of sexual activity, communication from any reliable source on sexual and reproductive health needs not only to be gender-sensitive, but to empower adolescents, particularly young women, to negotiate behavior on the basis of accurate information."*[14]

Many programs, while finding it easy to affect changes in knowledge and attitude regarding HIV/AIDS via programs in school, find that there are not significant long-term behavior changes with regard to sexual risk behaviours.[15] This demonstrates a significant need for carefully thought out programs that consider a broader scope of structural factors that affect access to SRHE. Within this broader scope fits the need for specific approaches designed around themes of gender and power. Haberland's study reviews evaluation studies that address SRHE. Her findings support the association between addressing 'gender and power in sexuality education curricula' and better health outcomes.[16]

Adenike Esiet shares a holistic approach to SRHE that echoes the goals of Asante Africa.[17] This approach accounts for not only biological needs that are associated with sexual and reproductive health, but also the social, cultural, economic and political needs that are fundamental in creating an environment in which equal access to sexual and reproductive health is respected and valued. Esiet elaborates, "Failure to ensure access to sexuality education violates such widely recognized rights as the right to the highest attainable standard of health and the freedom of access to information."[18] Despite the negative climate in Nigeria surrounding girls' and women's sexual health, substantial progress has been made by organizations and partnerships that developed programming to address a broader view of sexual health education needs. Action Health Incorporated worked with the Federal Ministry of Education and Nigerian Educational Research and Development Council tirelessly to legally secure curriculum in Nigeria that would promote a particular sexuality health education. Their work resulted in the curriculum entitled "National Family Life and HIV/AIDS Education" that is legally implemented statewide.[19]

Much like the Wezesha Program, the curriculum in Nigeria aims to foster positive beliefs, attitudes, and values for young women. As previously mentioned, a broader scope beyond the biological is appreciated and necessary within this approach including psychological, sociocultural, and spiritual facets of human sexuality. Sociocultural factors, as outlined by the World Health Organization (WHO), refer to the following:

- unequal power relationships between men and women;
- social norms that decrease education and paid employment opportunities;
- an exclusive focus on women's reproductive roles;
- potential or actual experience of physical, sexual and emotional violence.[20]

The curriculum is organized around 6 themes: human development, personal skills, sexual health, relationships, sexual behavior, and society and culture. A key to their methodology was also having adequate teacher training that guided student learning, accessible materials, and community support. What can be learned from Nigeria? According to Eist, there are 5 points that are imperative in the universal advancement of sexuality education; advocacy in support of sexuality education, upholding basic guidelines for content and approach, capacity-building for teachers and and education administrators, development of resource materials and scale-up is key to success.[21] The Wezesha program implemented by Asante Africa uses a similar approach to SRHE in Tanzania and Kenya.

3. Overview of Asante Africa

Charged with the mission to "educate and empower the next generation of change agents, whose dreams and actions transform the future for Africa and the world," Asante Africa addresses and responds to structural barriers that inhibit the education of youth in East Africa. This organization uses root cause analysis to develop solutions that have meaningful impact based on three major issues they have identified as barriers to the success of youth. Those issues are defined as the lack of professional development for teachers, the lack of training and jobs for youth, and the marginalization of girls. Their success is outlined by the following: "Over 1600 teachers and over 40,000 students have directly benefited from access to education, quality learning in the classroom, and preparation for life beyond the classroom. Our success and continued growth is due to our reliance on local knowledge and expertise to develop solutions that are viable and sustainable in the communities and cultures where we work."[22]

Erna Grasz, Emmy Moshi, and Hellen Nkuraiya established the Asante Africa Foundation in 2006. In the past 10 years, these women have transformed a program that started out in two villages into a regional partnership with over 35 villages in Kenya and Tanzania, with current goals in seeking other partnerships in East Africa.[23] Although Kenya has one of the most developed economies in East Africa, there is a huge economic disparity that leaves over half of their population below the poverty line. Tanzania, with a lower ranking of 159th out of 187 countries on the UNDP Human Development Index, compared to Kenya (147th), is a lower income country than Kenya. According to the Human Development Reports, the expected years of schooling in Kenya is 11 years, while in Tanzania it is only 9.2.[24]

Both countries present challenging social, economic, and political environments that inhibit youth from reaching their potential. Improving the quality of teaching using a learning centered approach versus a teacher centered approach is paramount to Asante Africa. That approach ensures that students are developing leadership potential and an aptitude for decision-making, rather than only focusing on retention and enrollment, which is a one-dimensional solution. This focus on quality of education and teaching will in turn have overarching benefits to youth in terms of creating educated workers, attaining job skills, and entrepreneurship. Although girls make up over half of the work force, the devaluation of women has led more young women to become child brides rather than finishing the eighth grade. In order to forward the advancement of girls, Asante Africa initiates programming that is geared towards building confidence, providing life skills and tools, and providing knowledge, which is their key to self autonomy.

This research evaluates one of Asante Africa's programs, Wezesha Vijana, which is aimed specifically at girl's advancement. Wezesha Vijana in Swahili means "Empower Ourselves," which is exactly how they approach the issue of SHRE, through empowerment. As their mission states,"Wezesha Vijana uniquely targets girls through tailored workshops that educate, empower and elevate their attendance and retention in school. These intended impacts are organized into three areas of a solution; Health Assets, Financial Assets and Social Assets."[25]

4. Methodology

In order to assess the efficacy of the Wezesha Program, girls who participated in the Tanzania program during 2013 were given surveys to measure impact on several dimensions. The surveys aimed to investigate gain of knowledge, changing of opinions, confidence level, behavioral changes, and level of self esteem by posing categorical, close-ended, and open-ended questions. Pre and post-survey data were collected from 13 different schools using a convenience sample size of 303 (n=303) girls who completed both pre and post-survey questions. Volunteers and staff of the community partner developed a codebook and used Excel to analyze data. After sorting the responses, data were sent to the researcher to evaluate themes and trends.

For the purposes of the evaluation research, the author was asked by the community partner to focus on certain parts of the survey: knowledge acquisition, self esteem indicators, behavior, and participant satisfaction. Indicators such as children's rights, bodily changes during puberty, sex, menstruation, pregnancy prevention, etc., were used to measure knowledge acquisition. Indicators such as school attendance and sexual behavior was used to measure change in behavior. Indicators of personal worth/value and feelings of inadequacy were used to measure both changes in positive and negative self esteem. Indicators of knowledge acquisition, understanding of ideas, etc., were used to measure participant satisfaction. The full instrument and codebook with specific question from the survey are available from the author upon request. Using descriptive statistics of the pre-survey and post-survey data, coding (detailed in the codebook) was used to interpret the data and discern the efficacy of the Wezesha Program. Tables were used to display the data.

5. Results

5.1. Knowledge Acquisition

The figures below show pre-test and post-test responses in percentages and demonstrate the impact that the Asante Africa's Wezesha program has had on girls' overall knowledge about their health.

Table 1. Knowledge Acquisition

Perceived Knowledge of:	Pre-survey			Post-survey			% Change
	Nothing	Some	Alot	Nothing	Some	Alot	
Children's Rights	8%	68%	24%	0%	15%	85%	+61%
Bodily Changes During Puberty	24%	60%	16%	0%	15%	85%	+69%
Sex	83%	13%	4%	5%	22%	73%	+69%
Menstruation	24%	60%	16%	0%	15%	84%	+68%
Healthy Relationships	74%	21%	5%	0%	20%	80%	+75%
Teenage Pregnancy	49%	36%	15%	0%	11%	88%	+73%
Pregnancy Prevention	55%	31%	14%	0%	14%	85%	+71%
STI's	18%	52%	30%	0%	12%	88%	+58%
STI Prevention	20%	48%	32%	0%	8%	92%	+60%

As shown in the figure above, on all measures of self-reported knowledge (dealing with children's rights, body changes during puberty, menstruation, sex, healthy relationships, pregnancy, and STIs), respondents reported tremendous gains between the pre-test and the post-test. Self-reported knowledge levels from the pre-test were rather low. After participating in the Wezesha workshops, in 10 of the 11 knowledge categories, less than 1% of respondents said they knew "nothing" about the topic. In the above figure, we see a dramatic increase from "some" knowledge about menstruation and puberty to "a lot." We also see an almost disappearance of the zero category, meaning that most if not all girls came out of the program with more knowledge about menstruation and their periods than before. In all categories, a minimum of 67% of participants said that they knew "a lot" about the topic after the workshop.

Both before and after the workshops, participants were asked to respond to a series of questions assessing their objective knowledge on issues such as pregnancy and children's rights (These data are not included in this table). Gains were observed across all measures. Positive changes were also observed on measures of knowledge about pregnancy, but the improvements were less dramatic, largely because initial levels of knowledge were reasonably high. The most significant improvements occurred on the law/rights dimensions, in part because initial levels of knowledge were quite low. For example, while only 2% of pre-test participants demonstrated knowledge that the legal marriage age for girls is 14, 76% of the post-test participants answered the question correctly, for a change of +74%. Both before and after the workshops, participants were asked to respond to a series of questions assessing their objective knowledge on issues surrounding HIV/AIDS. Gains were also observed across all measures.

5.2 Self Esteem Indicators

After the workshops, participants reported far higher agreement with positive statements about their worth/value (e.g., "I take a positive attitude toward myself"), and far higher disagreement with negative statements (e.g., "At times I think I am no good at all"). Measures of self-esteem improved across the board. This change in disposition is illustrated in the figure below.

Table 2. Self Esteem Indicators

Question	Pre-Survey				Post-Survey				% Change
	Strongly Disagree	Disagree	Agree	Strongly Agree	Strongly Disagree	Disagree	Agree	Strongly Agree	
Personal Worth/ Value	7%	17%	48%	**27%**	1%	1%	34%	**64%**	**+37%**
Personal Qualities	3%	14%	44%	**39%**	0%	3%	38%	**59%**	**+20%**
Abilities	5%	18%	45%	**33%**	1%	1%	33%	**64%**	**+31%**
Satisfactio n with Self	8%	13%	40%	**39%**	1%	6%	30%	**63%**	**+24%**
Positive Attitude	9%	13%	38%	**40%**	1%	6%	26%	**67%**	**+27%**
Feeling of Failure	8%	**27%**	43%	21%	10%	**43%**	30%	18%	**-16%**
Self Doubt	16%	**40%**	30%	13%	12%	**44%**	18%	26%	**-4%**
Negative Worth/ Value	13%	**29%**	40%	17%	16%	**44%**	20%	20%	**-15%**
Feeling of Inadequacy	9%	**21%**	46%	24%	32%	**45%**	12%	12%	**-24%**

Table 2. It is important to note that in the last 4 rows a numerically negative change denotes a change in attitude that is substantively positive . 'Strongly disagree' represents a higher self-esteem and a higher score in this case.

5.3 Behaviors

Table 3. Behaviors

	Pre-survey	Post-survey	% Change
Sexual Behavior			
I don't know	16.9%	1.7%	-15.2%
No	25.4%	6.4%	-19.0%
Yes	**56.5%**	**91.6%**	**+35.1%**
School Attendance			
I don't know	16.7%	0.68%	-16.2%
No	33.1%	5.4%	-27.2%
Yes	**46.8%**	**93.2%**	**+46.4%**

Table 3. Note that negative and positive percentages denote a positive change.

Regarding behavior, two patterns were found in the data: school attendance and sexual behavior. Responses to the following statement both before and after the program "I attend school when I have my monthly period," show significant growth in figure 4 with a change of +35.1% in yes answers. Responses to "When I am mature enough to make decisions about sex, I will feel comfortable saying 'NO' to my partner if I don't want to have sex,"also reflect significant growth of +46.4%.

5.4 Participant Satisfaction

Feedback questions were only asked on the post-data surveys to help determine the efficacy of the program. Questions ranged from gain of knowledge from attending, quality of instruction, level of difficulty surrounding the program, as we well as ability to synthesize the information and sharing it with others. The data were gathered/organized by level of agreement: strongly disagree, disagree, agree, strongly agree.

Table 4. Participant Satisfaction

Participant Satisfaction with:	**Post-survey**			
	Strongly Disagree	Disagree	Agree	Strongly Agree
Knowledge Acquisition	0%	0%	**31%**	**68%**
Understanding of Ideas	0%	1%	**36%**	**63%**
Facilitators	0%	0%	**35%**	**65%**
Ability to Share Knowledge	0%	1%	**50%**	**49%**

68.3% of participants indicated *strong* agreement that they learned a lot from the workshops. Nearly 100% indicated at least agreement that they learned a lot. 64% of participants indicated *strong* agreement that what they learned in the workshops was very useful. Only 3% disagreed. Nearly 100% of participants agreed or strongly agreed that the facilitator was well prepared and helpful. Nearly 100% of participants agreed or strongly agreed that they would be able to use and tell others about what they learned in the workshops. The data are clearly illustrated in Table 4.

6. Discussion and Conclusion

By evaluating the pre and post-survey data and contextualizing this data, this research assesses the efficacy of a program like Wezesha and how that model can be effective beyond East Africa. The results of the 2014 evaluation data indicate that Wezesha Vijana was highly successful in producing positive changes on multiple measures of knowledge, self esteem, and behaviors associated with health and well-being. There was no area in which these measures stagnated or decreased after the workshops. Importantly, positive changes – in many cases, substantial ones – were observed on both indirect and direct knowledge measures (i.e., what the participants claim to know and what the participants show they know). Participants reported very high satisfaction with the program. There is strong evidence that most aspects of the program are working, but there is room for reflection, particularly around the pace of the workshops.

Wezesha empowers girls in their communities by addressing various health, financial, and social assets in their programming. This research demonstrates a positive outcome for program design that addresses less visible factors that affect girls' agency over their bodies. In order to promote substantial change, more research needs to be done in order to address those factors, with a genuine focus on not only the biological needs of girls, but also the cultural and social context that can empower them to be agents of change. Future research should focus more on how the particular assets, outlined by Asante Africa, demonstrate learning outcomes and how these learning outcomes affect girls later on in their life.

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