**EMPOWERING WOMEN AGAINST AIDS (EWA): AN ANALYSIS OF HIV AND IPV AMONG YOUNG WOMEN IN SOUTH AFRICA AND A PROGRAM OPTION**

by

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University of Pittsburgh, 2016

**ABSTRACT**

**Background:** While the overall Human Immunodeficiency Virus (HIV) epidemic in South Africa has slowed due to national and international efforts, the population of young women ages to 15-24 still face high HIV incidence and prevalence rates. Young women account for 80% of new infections in young people making this issue a national crisis that needs to be addressed. HIV treatment and sexual education have been made widely available and are political and public health priorities for the country. Most young women are infected due to heterosexual contact and controlling HIV infection in young women remains a challenge due to intimate partner violence (IPV) a specific type of gender-based violence and a byproduct of gender inequality and cultural gender norms. In order to address the epidemic levels of HIV in young women, effective programs must be developed that do not view IPV and HIV in isolation, but instead focus on addressing both public health issues concurrently.

**Objective:** This essay aims to provide an analysis of the IPV and HIV connection in young women ages 15-24 living in South African and propose a program to address both of these issues through an intervention that combines a support group and microfinance lending models to increase social support for survivors of IPV, address HIV prevention and care and increase financial independence.

**Conclusion:** While there is an abundance of literature on the intersection of IPV and HIV in South Africa, no previous interventions have demonstrated success in both reducing women’s experience of IPV and incidence of HIV, nor has a support group model been tested. This essay summarizes important themes from the IPV/HIV literature and outlines a program to support young women and reduce risk for HIV and IPV.

**Public Health Relevance:** The rapid rate of HIV incidence in young women remains a major barrier to controlling the national HIV epidemic in South Africa. Addressing young women’s HIV risk however cannot be done unless the country is able to increase young women’s ability for safe sexual relationships and gender equity domestically, financially and socially. Ultimately, addressing gender violence and intimate partner violence in South Africa will likely reduce HIV and increase the health and quality of life for young women and the families and communities that they support.

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PREFACE

There are many people I would like to thank for helping finally reach this point in my graduate career. Firstly, the University of Pittsburgh Graduate School of Public Health faculty and staff, all of whom have inspired me to pursue HIV prevention as a career and passion. Thank you for continually sharing knowledge, providing an open door for questions and supporting me over the years. Thank you to Dr. Tony Silvestre, my advisor for the past three years for guiding me through the challenging process of balancing my school and work life. I would also like to thank the Dr. Jessica Burke for providing her expertise on intimate partner violence and HIV and taking the time to be on my essay committee. Lastly, I would like to my fiancé, family and friends for supporting me and encouraging me to reach my educational and career goals. Receiving my MPH has been an invaluable experience that has driven me to become a public health professional.

1.0 INTRODUCTION

 The HIV pandemic is more severe in Sub-Saharan Africa than in any other region in the world. 60% of all HIV cases worldwide are in Sub-Saharan Africa and it continues to claim the lives and affect the quality of life of millions men, women and children, every year. One of the most highly affected countries is South Africa, where 6.3 million people are estimated to be HIV positive (Avert, 2015). For comparison sake, that is roughly the entire population of the capital of the United States (Washington, DC). Young women, ages 15-24 have the highest new infection rates compared to other segments of the population, with HIV infection rates of 4 to 1 compared to men of the same age range (SANAC). There are a multitude of factors that increase their risk such as high rates of transactional sex, high rates of relationships with older men, low rates of condom usage and low rates of financial independence. Many of these factors are rooted in the country’s major problem with gender inequity and mores specifically intimate partner violence (IPV). An estimated 42% of young women in South Africa have experienced IPV at least once, and this is likely underreported behavior (Musariri, 20 June 2014).

 South Africa recognizes this connection between IPV and HIV on a political level and research has confirmed the relationship between IPV and HIV time and again. However, most interventions aimed at IPV as a risk factor for HIV have not yet been proven effective at HIV prevention. These interventions typically include educational workshops for women and couples about IPV, gender equality, sexual health and HIV risk; microfinance interventions to increase women’s financial independence and community mobilization efforts aimed at reducing the culture of gender violence. After reviewing the literature surrounding different interventions, I am proposing a unique combination intervention that involves a support group and microfinance component for young women who have experienced IPV and who may have HIV or are at risk for contracting HIV. Support groups have not been widely tested in an experimental manner, but social support has been shown to help women protect themselves in situations of IPV and is important in keeping women with HIV in care. This intervention called Empowering Women Against AIDS (EWA) aims to contribute to the literature on social support, IPV and HIV and hopefully develop a new and innovative way to tackle these two deeply integrated issues in order to slow the epidemic of HIV in young women living in South Africa.

2.0 BACKGROUND

 South Africa’s persistent epidemic levels of human immunodeficiency virus (HIV) have stabilized over the past four years, but the country still faces major challenges with certain segments of the population, including young women 15-24 years of age. In fact, young women account for 25% of new infections (Avert, 2015). Public health professionals and policy makers recognize this disparity and young women have been designated as a key population in the *National Strategic Plan on HIV, STIs and TB 2012-2016,* published every four years by the South African National Aids Commission (SANAC). New infection rates vary by province, with the peri-urban province of KwaZulu-Natal along the eastern coast having the highest rates for all genders and ages at 25.8%.



# Figure 1: Map of HIV Prevalence and Poverty Levels

Source: KwaZulu-Natal Research Institute <http://www.k-rith.org/>

 Addressing intimate partner violence (IPV) is crucial to slowing HIV infection in young women. IPV is defined as physical and/or sexual assault or threats thereof between married, romantically involved partners or former partners, but it may also include psychological abuse and manipulation (Campbell et al., 2008).

2.1 HIV IN SOUTH AFRICA

 HIV began in South Africa, as it did internationally, as a disease primarily affecting the men who have sex with men (MSM) community in the early 1990s. The first South African case was identified in two homosexual males in 1985; they had contracted the virus in California ("A history of HIV/AIDS in South Africa," 2011). Random sampling of homosexual men in Johannesburg followed and revealed that 12.8% were HIV positive ("A history of HIV/AIDS in South Africa," 2011). Policy makers then began to act adding HIV to the list of reportable communicable disease in 1987 and President P.W. Botha called for the first conference to address HIV as a public health threat. The disease disproportionately affects the black South African population and under the apartheid government, actions to control HIV were minimal. In 1990, random testing of pregnant women found that 0.8% of women were HIV positive; and the government established the National Aids Programme ("A history of HIV/AIDS in South Africa," 2011). By 1991, heterosexual infection equaled homosexual infection and has now surpassed homosexual infection as the leading cause of disease spread in South Africa (Avert, 2015).

2.2 IPV AND HIV

 IPV is a type of abuse that encompasses complex dynamics of gender equity and power balance within relationships. It is something that is experienced on the individual level, but is often rooted in cultural and societal norms. Approximately, every six hours a woman is killed by intimate partner violence in South Africa making it a foremost public health issue (Mathews, July 2008). Women are most often infected with HIV through heterosexual contact and the link between IPV and HIV is well-established in the literature and will be explored further. Basically, due to the power inequity in a relationship there is a higher likelihood of women being coerced into risky sexual behaviors such as unprotected sex, creating increased risk for HIV infection.

2.3 HIV AMONG YOUNG WOMEN IN KWAZULU-NATAL

 Kwazulu-Natal (KZN) is a peri-urban province in the southeast of South Africa where the HIV new infection rate among young people is high at 15.4% compared to the national average of 8.7%, with females accounting for 80% of new infections compared to males (Frohlich et al., 2014). Demographically, Kwazulu-Natal is 85% Black compared to the national average of 79% (Africa, 2014). In addition, the population is younger (percentage of pop. ages 15-24 is 12% compared to 10 % nationally) and more female compared to the national population (87.9 men/ 100 women compared to 91.7 men/ 100 women nationally) (Africa, 2014). The exact HIV infection rate in young women ages 15-24 for KZN is not specified, but based on the population demographics, there are approximately 1, 102, 572 young women ages 15-24 and over 130,000 will be newly infected with HIV every year (Calculated by assuming 80% of 15% new infection rate is 12% and 12% of young female population are annually infected). This is a segment of KZN’s population that demands intervention, but no interventions have focused specifically on this group.

2.4 HIV AND IPV IN KWAZULU-NATAL

The widespread South African issue of IPV is a major public health concern in KZN. The most comprehensive survey on violence towards women in KwaZulu-Natal was conducted by gender equity NGO called Gender Links in 2011. The Gender Based Violence Indicators Survey interviewed 1500 women and men ages 18+. Approximately 29% of women in KZN have experienced physical and emotional violence as perpetrated by an intimate partner, however only one in ten reported instances of physical violence to the police and one in five women report seeking medical care for physical injuries (Musariri, 20 June 2014). The same report also examined experiences of gender-based violence (GBV) including sexual harassment, rape and other emotional violence and estimate that 37% of women in KZN have been victims of GBV. As seen from the high rates of violence and low rates of care-seeking behavior, there is major underreporting of IPV. More than a third of IPV survivors in KZN are HIV positive. While these figures are not specific to the target age group of 15-24 year old young women, there is a high amount of overlap between the survey population young women. In fact over 50% of IPV incidences reported in the survey were among women ages 18-29 (Musariri, 20 June 2014). Thus the high prevalence of HIV among young women and the overlap of IPV reported indicates that there is a connection between IPV experienced and HIV infection among young women ages 15-24 in KZN.

3.0 LITERATURE SEARCH

 In order to understand the intersection of IPV and HIV, as well as interventions used to target IPV as a risk factor for HIV, a search of the current literature was conducted.

3.1 METHODS

3.1.1 SEARCH STRATEGY

 A review of the current literature included a search of three databases: PubMed, PsycInfo and Cochrane Reviews. The MeSH terms used to search the databases included variations of HIV/AIDS, intimate partner violence, domestic violence, social support, women, and adolescents (Appendix A). The initial search yielded 605 articles. 147 articles were removed as duplicates resulting in 458 unique articles.

3.1.2 DATA EXTRACTION AND MANAGEMENT

 Titles and abstracts among the 458 articles were extracted and examined for relevance. Deciding to keep or dismiss the article was done according to pre-determined inclusion and exclusion criteria. Articles were included in the literature based on the following:

|  |  |
| --- | --- |
| **Population of Interest** | Women of all ages, including women in target population ages 15-24. Included articles focusing on women ages 18+ and adolescent ages 13+. |
| **Setting** | Community-based. (Not rehab centers, clinics, incarceration centers).  |
| **Disease** | HIV/AIDS prevention |
| **Risk Factor** | Intimate Partner Violence  |
| **Date Range** | Last 10 years (2005-2016) |

# Figure 2: Inclusion/ Exclusion Criteria

 After the review of titles and abstracts, 325 articles were excluded based on the exclusion criteria. The date range was limited to the past ten years to focus on the HIV epidemic in South African during the time period in which heterosexual transmission has been the dominant mode of transmission ("A history of HIV/AIDS in South Africa," 2011). Of the remaining 133 articles, four were eliminated because full text was not available. 50 articles were further eliminated if the study focused on only women who were HIV positive, as this examination of the literature is focused on HIV prevention. The remaining 83 articles were a mix of articles examining the correlation between HIV and IPV, as well as targeting IPV and sexual risk reduction behaviors to prevent HIV. The majority of the 83 remaining articles were cross-sectional surveys examining a correlation between IPV and HIV in a given area, such as Nepal (Shrestha & Copenhaver, 2016). All studies found a positive correlation between HIV risk behaviors and history of IPV. There were 12 literature reviews and systematic reviews, including one meta-analysis and one negative review, which found no association between HIV and IPV in ten locations internationally (Harling, Msisha, & Subramanian, 2010). Six qualitative case control studies and two mixed methods studies were also included. There were also 5 articles categorized as Other which included reports on policy, commentary and one modeling study. Among the 21 articles published on interventions, these include multiple articles published on various outcomes and findings from intervention studies.

Records identified using PubMed, PsycINFO and Cochrane’s n = 605

Records after duplicates removed n = 458

Eliminated based on review of title and abstract n = 355321

Second examination of title and abstract

n = 103 321

Elimination based on HIV+ ONLY study population n = 50321

Inclusion in final review n = 53

Other n= 2

Mixed-methods n = 2

Qualitative case studies n = 1

Reviews

n = 7

RCTs and Cluster RCTs n = 16

Cross-sectional

n = 25

# Figure 3: Flow Chart of Literature Search

3.2 LIMITATIONS OF THE LITERATURE

 Much of the literature focuses on establishing a correlation between women who experience IPV and HIV, but includes a wide age range of women. None of the literature or interventions on IPV and HIV specifically targeted young women, ages 15-24. In addition, the studies conducted have ranged from large cross-sectional surveys of thousands of women to smaller qualitative studies. The depth of information gathered is not consistent and the setting of these studies varies greatly from rural to urban settings, and from economically disadvantaged to wealthier communities like New York City, as well as among various racial groups. Among interventions tested, the type and intensity of the program varied as well. It was important to include this diversity because it helps to inform where the state of current research is at globally in regards to HIV and IPV prevention.

3.3 RESULTS

Because of the diversity of the literature included, a thematic review provides a thorough summation of relevant issues that influence the topic of IPV and HIV.

3.3.1 ESTABLISHING INTERSECTIONALITY OF IPV AND HIV

 As previously mentioned, many of the studies included in the literature are establishing the prevalence of IPV as a risk factor for HIV. IPV is a risk factor for HIV because it leads women to engage in HIV-risk behaviors as seen in Nepal (Shrestha & Copenhaver, 2016), in Togo, West Africa (Burgos-Soto et al., 2014), in Tanzania (Prabhu et al., 2011), in the Ukraine (Dude, 2007) among African-America women in the United States (Manfrin-Ledet, Porche, & Westbrook, 2015), among low-income women of all races in the United States (McGrane Minton, Mittal, Elder, & Carey, 2016), among Hispanic women in the U.S. (McCabe, Gonzalez-Guarda, Peragallo, & Mitrani, 2015), among young women ages 16-29 in the U.S. (Abramsky et al., 2012), among young Filipino women (Lucea, Hindin, Kub, & Campbell, 2012) and globally as seen in multiple systematic reviews (Campbell et al., 2008), (McCabe et al., 2015) (Maxwell, Devries, Zionts, Alhusen, & Campbell, 2015) (Li et al., 2014) (Phillips et al., 2014) (Campbell, Lucea, Stockman, & Draughon, 2013) (Stockman, Lucea, & Campbell, 2013). HIV-risk behaviors include sex without a condom, multiple sexual partners, sexual partners more than 5 years older than a young woman, and transactional sex. The bi-directionality of this relationship is important to consider, and the more of these behaviors that a young woman engages in, the greater her HIV risk (Zembe, Townsend, Thorson, Silberschmidt, & Ekstrom, 2015).

 In addition, one study found that experiencing IPV even more than five years ago continues to increase HIV-risk behaviors (Fontenot, Fantasia, Lee-St John, & Sutherland, 2014). There was one study that reported negative results and found no association between HIV and IPV among women ages 15-49 (Harling et al., 2010) after adjusting for confounding variables like socioeconomic status. However, that finding was based on a pooled OR of 1.05 (95% CI: 0.90-1.22) and was not consistent across all ten countries evaluated, and in fact, was highest in the African countries of Mali (1.41) and Rwanda (1.04), as well as India where extensive research on heterosexual transmission of HIV has been conducted. In addition, the OR was still highest in countries with higher HIV prevalence.

3.3.2 CONDOM AND CONTRACEPTION USE

 As previously mentioned, one of the reasons that the experience of IPV increases HIV risk is because it limits the ability of women to negotiate for safe sex with a sexual-decision making dominant partner. Making decisions about condom usage and contraception usage often results in IPV even though it may decrease HIV risk (Fontenot et al., 2014). This was an unintended side effect of a microbicide trial conducted in South Africa (Stadler, Delany-Moretlwe, Palanee, & Rees, 2014). A qualitative examination of IPV in the study population was undertaken after women expressed hesitation to continue in the trial and discuss participation. Attempting to conceal microbicide use often led to strain in the relationship and tension that also led to IPV and describes a major ethical concern of conducting HIV prevention research in areas where IPV is highly prevalent like Kwazulu-Natal. It also raises questions over the acceptability of microbicide use if one does become commercially available. A 24-month longitudinal study on condom and diaphragm adherence and IPV was conducted as a sub-study to the Methods for Improving Reproductive Health in Africa and found that in both study arms the IPV prevalence rate was about 55% and that non-adherence to condom and diaphragm use was related to IPV after adjusting for age, number of sex partners and knowledge of male partner infidelity (Kacanek et al., 2013).

3.3.3 SUBSTANCE USE

 Substance use and abuse both by women and their partners also increases HIV risk in the context of IPV. Substance use, particularly alcohol, lowers inhibitions and leads women to be more likely to acquiesce to unsafe sexual practices. If the sexual encounter is transactional in nature, meaning sex in exchange for substances, money or other goods, this further limits women’s ability to negotiate condom usage. On the other hand, substance use also is leading factor in why men perpetrate violence against their partners. Evidence suggests that men who use alcohol and other drugs extensively are also more likely to engage in risky sexual behaviors that increase HIV risk for their partners like having concurrent partners, infrequent condom usage and paying for sex (Wagman et al.). Decreasing the use of alcohol around sex has been a key component of interventions like SHARE (Pronyk et al., 2006) and Stepping Stones (Jewkes et al., 2014). This dyadic relationship between IPV and substance abuse is not uniquely African, but in young women ages 15-24 in U.S. clinics, a statistically significant relationship was also found between injection drug use and HIV/STI risk behaviors during sex both by the woman (AOR 3.39, 95% CI 1.47, 7.79) and her partner (AOR 3.85, 95% CI 1.91, 7.75) (Decker et al., 2014). In addition, among female survivors of IPV, substance use is higher compared to women who have not experienced abuse (Abramsky et al., 2012). These three issues of substance use, IPV and HIV are obviously highly integrated, though the direction of these relationships is not well understood.

3.3.4 EDUCATIONAL WORKSHOPS

 The traditional strategy of delivering HIV prevention and education has been through workshops. Stepping Stones is the most widely implemented educational workshop (Jewkes et al., 2014). It began in rural Uganda and has since been adapted and implemented in over 50 countries worldwide. The program involves a 50-hour educational workshop targeted to both men and women and a number of HIV and IPV prevention issues like gender equity, relationship power and violence against women as well as contraception and condom usage. The adaptation of the program in South Africa has been shown to reduce incidence of HSV-2, but has not had an effect on rates of HIV. Many of these workshop and education interventions do not attempt to measure impact on HIV prevention rates as an intervention outcome, but rather look at reducing sexual risk behaviors as the main outcome.

 Another similar evaluation of couples-based HIV prevention education in Harlem, New York City showed that participation did not result in breaking up with abusive partners, but also did not trigger IPV (McMahon et al., 2015). Another workshop known as Couples Health Coop also demonstrated a positive effect on gender equity and reductions in relationship conflict, but the long-term impact on HIV incidence was not measured (Minnis et al., 2015).

3.3.5 SCHOOL-BASED EDUCATION

 Other similar HIV education workshops are targeted to schools in South Africa, and since 1995 education on HIV/AIDS has been a standard part of secondary school curriculum (SANAC). There are numerous problems with school-based programs, for example, there is not a standardized curriculum that must be implemented. All school programs vary but traditionally focus on education on HIV/AIDs prevention that emphasize abstinence, and do not specifically address related issues mental health, stigma and safe sexual practices (Thaver, 2012). Another issue is that the responsibility of providing this education falls on the teachers and not all teachers are comfortable providing HIV education (Jewkes et al., 2008). In addition, many parents or other caretakers will report conflicting information, rightly or wrongly to what their children learn in school creating even more confusion about HIV prevention and treatment

(Thaver, 2012). While school-based HIV classes take advantage of a captive audience, unfortunately it has not been shown to reduce HIV risk behaviors (Thaver, 2012).

3.3.6 BIDIRECTIONAL VIOLENCE

 Several studies asked about perpetration of violence by women against male partners as well and many studies found that while women are more likely to be the victim of IPV compared to their male partners, many survivors of IPV are also perpetrators. Bidirectional violence between partners has been demonstrated in a variety of places and settings from Harlem, New York City (McMahon et al., 2015) to Kwazulu-Natal, South Africa (Musariri, 20 June 2014). The cultural norms and acceptance of intimate partner violence are important to address to on a community level in order to stop the cycle of violence.

3.3.7 COMMUNITY MOBILIZATION

 Community mobilizations interventions aim to address gender inequalities as a mediator of the relationship between IPV and HIV (Jewkes et al., 2014). The SHARE project conducted in Rakai, Uganda focused on building an advocacy campaign across all levels of the community from government leaders, to police officers, to social workers to health-care providers, to teachers, to community volunteers. The project team got involved in community events like health fairs and church events. In addition, the intervention also provided IPV and HIV prevention services such as HIV pre-test counseling, IPV screening and gender-separated as well as couples-based relationship counseling focusing on skills like communication and conflict management. The studies main outcomes measured include number of experiences of IPV, HIV incidence, and certain sexual risk behaviors such as number of times participant engaged in condom-less sex. This intervention showed success at reducing experiences of IPV as reported by women, though interestingly did not reduce perpetrations of IPV as reported by men. There could be an influence of social desirability bias to these outcomes that creates this seemingly contradictory result. Throughout the course of the intervention, HIV infection rates were lower than expected, however this lowered rate was not sustained at an 18-months follow-up (Wagman et al.).

 The SASA! trial tested the effect of a community mobilization intervention in Rakala, Uganda alone across the socioecological model using advocacy, media and communication materials developed by the community. The intervention is quite similar to the community mobilization aspect of the SHARE intervention (Abramsky et al., 2012). The trial similarly included using community members and all the way up to engaging policy makers. The SASA! trial demonstrated a reduction in IPV experience but it was not statistically significant and the trial did not report an HIV outcome.

3.3.8 ECONOMIC EMPOWERMENT

 The gender and socioeconomic inequalities created by limited economic opportunities for men and women heighten risk for IPV and HIV (Pronyk et al., 2006) (Jewkes et al., 2014). A range of economic empowerment methods have been attempted to create relationship balance and financial opportunities for women. These methods include cash transfers (Jewkes et al., 2014), vocational skills training and numerous microfinance interventions that are typically combined with gender-based or couples-based HIV/IPV education workshops. A systematic review of global economic empowerment and HIV prevention studies found that ultimately evidence to support microfinance as a method of HIV prevention is inconclusive, but one caveat is that many of these studies have been rather small in scale and may not have adequate sample size to demonstrate significant results (Kennedy, Fonner, O'Reilly, & Sweat, 2014). The design of these studies varied, like microfinance, microfinance with health education and vocational training. These studies include SAGE4Health in Malawi (Weinhardt et al., 2014), which demonstrated significant changes in source of income and the IMEA project in Colombia (Arrivillaga, Salcedo, & Perez, 2014), which had a positive effect on HIV treatment adherences. A microfinance intervention in Mongolia (Witte et al., 2015) among women who engage in transactional sex (i.e, sex in exchange for goods, drugs, money, etc.) showed that women were less likely to engage in sex with paying partners and have protected sex with paying partners. In India (Spielberg et al., 2013), women and girls were more likely to report improved HIV education and discuss HIV and safe sexual practices with other women in their lives. Other trials have focused on increasing women’s savings to see if future financial planning could prevent HIV risk behaviors (Jennings, Ssewamala, & Nabunya, 2016). The impact of these interventions did not significantly reduce HIV incidence, and for many of these interventions that was not a main outcome measured.

3.3.9 SOCIAL SUPPORT

 There is very little research available on the experimental effects of support groups on either intimate partner violence and/or HIV. However, there is literature demonstrating the relationship between social support and improved disease outcomes.Many of the young women in South Africa find themselves confronted with everyday stressors like poverty, caring for their families and living in a high HIV-disease burden area. As stated in a 2014 review by Marisa Casale, “Populations most vulnerable to social and health stressors, such as HIV, poverty, and high caregiving burden, are also populations most at risk for mental health conditions” (Casale, 2015). Poor mental health contributes to poor physical health and mental health is further exacerbated for survivors of IPV. Resources and funding for mental health tend to be low even in wealthy countries ("Mental Health: What Foundations are Funding," September 2012), and definitely are less of a priority for developing countries (Skeen, Lund, Kleintjes, & Flisher, 2010).

 Without formal mental health care easily available, informal networks of family and community are extremely important in providing social support. Support groups are one mechanism in which to provide structured social support from peers and community. Young women in particular are more likely to participate in, and more likely to receive benefit from support groups when compared to men (Casale, 2015) or older women (Dageid, 2014).

4.0 PROGRAM PLAN

4.1 INTRODUCTION

 Findings of the literature review suggest that the relationship between IPV and HIV can be mediated through activating communities to reduce acceptability of IPV and increase HIV prevention behaviors. By using previous research on economic empowerment community mobilization and social support, this proposal outlines the development and testing of a program called Empower Women Against AIDS (EWA) that explores using support groups to empower communities of women and incorporate microfinancing to increase financial independence as a way to combat IPV. EWA is a structural intervention that specifically targets the environment of gender inequity, poverty and community viral load that puts women at risk for HIV and IPV. The four main aims of this project are:

 **Aim 1:** Provide a network of support for young women with past/current experiences of IPV

 **Aim 2:** Build a support system to increase HIV prevention behaviors

 **Aim 3:** Decrease sexual risk behaviors such as transactional sex and sex with older men

 **Aim 4:** Provide steps towards financial independence and economic empowerment with microfinance program

The program will be conducted in association with the University of Durban, in Durban, Kwazulu-Natal and in partnership with the Women’s Development Business Group, a local and well-established microlending and microcredit organization with 27 branches in South Africa.

4.2 TARGET POPULATION

 The target population for this intervention is young women ages 15-24, living in the peri-urban areas around Durban. They are eligible if they have experienced at least one incidence of sexual, violent or financial IPV and have previously participated in some form of HIV/AIDS and sexual health education program, with or without HIV. This program could have been the local Stepping Stones program, school-based or other community programs. The support groups will take place in community-designated sites and will enroll about 8-10 women each. Although women ages 15-24 may seem like a young target for microfinance, because women on average have 1.8 children before the age of 24 in KwaZulu-Natal this is a population in need of financial resources to provide for their families (Africa, 2014). The university is not far from the lower-income peri-urban communities providing an easy to reach population for his new intervention program. In addition, the city of Durban has been exposed to a large HIV/AIDs education program that ensures all women have a baseline knowledge regarding HIV risk and this is a community where that risk is recognized and politically supported. The peri-urban communities include some semi-formal settlements and exact data on the percentage of women infected with HIV or experiencing IPV is not known, but the regional data support this is a higher than average HIV prevalence area with about 15.4% of youth infected with HIV in KwaZulu-Natal. The proposed intervention is targeting women with some HIV education to help us better evaluate outcomes of the intervention and understand the effect of the support group/microfinance. We will aim to enroll 80 young women in the program to start. This sample size is a manageable size for a complicated and time intensive study design. Building community and social support takes time and trust and a smaller sample allows for more personal connection. The goal is to pilot this program in the peri-urban areas of Durban before expanding the program to more diverse setting. While we will not fully account for some young women at highest risk, for example in the more rural areas of Kwazulu-Natal or areas where school enrollment is lower than in Durban. However, the support group/microfinance model is new and this population is easily accessible for researchers. If successful, the program can be expanded to more rural areas of Kwazulu-Natal.

4.3 PROGRAM APPROACH

 The program will begin with building community partnerships and engaging stakeholders. We will work closely with community leaders, academics, HIV care clinics, antenatal clinics, women’s shelters, NGOs, and community health workers (CHWs).

4.4 THEORY

 The program design is based on three main theoretical constructs: Theory of Planned Behavior, the Theory of Gender and Power and Social Capital Theory.

 The Theory of Planned Behavior informs design by addressing the sexual health practices of young women in South Africa and how planned behavior can be influenced to increase self-efficacy in regards to safe sex. This theory states that behavior change depends on both intention and ability to do the intentional behavior ("Theory of Planned Behavior,"). The intervention’s behaviors of interest include using condoms and negotiating for safe sex, reporting and seeking treatment for IPV, and adhering to medication for HIV. Our support groups and micro-lending groups will all be used to understand social norms regarding sexual behavior and provide a mechanism (income) to change these behaviors. In addition, changing social norms around safe sex practices, including age of sexual debut as well as the social acceptability of intimate partner violence is a focus of this intervention. We aim to increase self-efficacy in regards to safe sex negotiations and medication adherence and help young understand the warning signs of a potential IPV situation.

 The Theory of Gender and Power is a theory based on three main tenets: the sexual division of labor, the sexual division of power, and the structure of cathexis (Wingood, Scd, & DiClemente, 2000). This theory is an overarching theory that looks at the community and societal levels of the HIV epidemic and can help address upstream determinants. South Africa has a major problem with gender inequality and intimate partner violence, as previously stated. While this intervention is not aimed at the societal level, this theory informs program design by addressing financial independence and power inequity in relationships through microfinancing.

 The Social Capital Theory informs the basis of the intervention because ultimately EWA wants to build social capital to support women in the behaviors needed to protect themselves against HIV and IPV. The social capital theory is integral to community health promotion and “suggests that collective actions requiring collaborative efforts are mediated be the presence or absence of trust, reciprocity and cooperation” (DiClemente, 2002). While this intervention is focused on a small scale of just 40 women, it is focusing on building up trust between the program facilitators and the participants and building trust between women.

4.5 EWA LOGIC MODEL

**Problem Statement: Young women ages 15-24 in KwaZulu-Natal South Africa experience disproportionate rates of HIV. Intimate partner violence and gender inequality are major risk factors for HIV infection.**

|  |  |  |
| --- | --- | --- |
| **Assumptions/Theoretical Constructs** |  | **External Factors** |
| The Theory of Planned Behavior The Theory of Gender and Power The Social Capital TheoryAssume existing network of CHWs and clinics are supportive of program.Assume times for workshop and meeting places recommended in focus group are suitable. | Because the age range is almost ten years from mid teens to early adulthood, experiences regarding sexuality and violence will vary.SANAC and WHO have specific policies outlined that designate young women as a special population of interest for HIV programming.Stigma and mental healthSupport of family, friends, caregivers and partnersTravel to and from support group |

|  |  |  |
| --- | --- | --- |
| **INPUTS** | **OUTPUTS** | **OUTCOMES** |
|  | Short | Medium | Long |
|  Meeting spaces (schools, churches, clinics, community centers)Existing programs for community partnership and fundingResearch base from local universities and NGOs HIV test kitsIPV/Domestic violence counselors | CHWs recruit 80 young women ages 15-24.CHWs enroll 40 young women in an 8-week support group.Each session will have surveys to measure baseline knowledge.Program facilitators provide HIV and pregnancy testing, counseling and connection to existing resources. Results returned to women by next support group session. | 70% of women will have attended at least 4 support group sessions. 95% of women who test positive for HIV are enrolled in care.80% of women will report a 70% increase in feeling confident about the ability to negotiate safe sex with partners during 90% of sexual encounters.80% of women will schedule at least one individual session with IPV counselors70% of women will report a 30% increase in HIV knowledge | 50% of women will attend all support group sessions.80% of women will report encouraging other women in their life to know their HIV status. 70% of women will report a 60% increase in condom usage.60% of women will report a 90% decrease in experiences of IPV60% of women experiencing IPV are connected to local IPV resources such as shelters and mental health counselors | 60% decrease in IPV incidences experienced by young women85% of HIV+ women will be virally suppressed.60% decrease in incidence of HIV among young women 50% of women continue with microfinance businesses at 24 months. |

# Figure 4: EWA Logic Model

4. 6 SPECIFIC AIMS

4.6.1 AIM 1: PROVIDE A NETWORK OF SUPPORT FOR YOUNG WOMEN WITH PAST/CURRENT EXPERIENCES OF IPV.

 EWA wants to bring women who have experienced IPV with past or current partners together and help them build a support system. Because IPV is highly stigmatized it can be hard to talk about with family members or friends. Our goal is allow a safe space for women to begin to talk about IPV and how it has affected them both as survivors and perhaps as perpetrators. A program facilitator and an IPV counselor will guide the conversation and provide professional assistance and begin to build rapport with the young women. Screening for IPV will take place during recruitment using the Abuse Assessment Scale (AAS) IPV experiences will also be surveyed at -8 weeks, -12 weeks and -12 months.

4.6.2 AIM 2: BUILD A SUPPORT SYSTEM TO ENCOURAGE HIV PREVENTION BEHAVIORS.

 Social support is also crucial to encourage women to take preventative measures such as condom usage and create new norms in sexual behavior. The group will also look to define natural leaders within the support group and encourage them to become accountability partners that are available for encouragement outside of the weekly meetings. Even though this is not an education based program, HIV education will be measured with:

* Baseline questionnaires
* Follow-up questionnaires at -4, -8, and -12 weeks

 Long-term evaluation will be described further, but will include HIV testing for all women who initially tested negative at 12-months after intervention enrollment.

4.6.3 AIM 3: DECREASE SEXUAL RISK BEHAVIORS.

 The program facilitator will reinforce education and safe sexual practices that may have been learned in previous HIV education. The goal is to implement these lessons within the natural support group conversation rather than a “workshop” in order to maintain rapport with the young women and create a candid environment that is not preachy or top-down in nature. The sexual risk behaviors we are aiming to decreasing are transactional sex and sex with older men. In addition, by having these conversations within the environment of the support group we aim to help young women understand the link between these behaviors and IPV. The informal support group setting is also a positive environment in which to discuss changing norms around sexual behavior among peers rather than from an authority figure. In addition, the CDC-recommended sexual risk behaviors questionnaire KABB will be administered at -4, -8, and -12 weeks**.**

 Long-term evaluation will be described further, but will include administering the KABB at 12-months after intervention enrollment to monitor long-term change in behavior.

*4.6.4 AIM 4: PROVIDE STEPS TOWARDS FINANCIAL INDEPENDENCE AND ECONOMIC EMPOWERMENT WITH A MICROFINANCE PROGRAM.*

 The microfinance component of the program involves a group-lending model with five women each. The loans are small, individual loans to support small business ventures, but the women are responsible for group repayment and only eligible for further loans if all payments have been made. Making an individual income and having the support of a group has been shown to increase social capital (Pronyk et al., 2006) and empower women reducing their risk of intimate partner violence. In addition, the participating women learn to depend on each other and support each other in a concrete way be being responsible for the group loans, which can translate into support through difficult situations like HIV and IPV.

5.0 PROGRAM DESIGN

# Figure 5: EWA Program Design

 EWA will consist of a basic randomized control trial design with the women randomized in the control group offered a chance to participate in the intervention after 12-weeks because ethically we do not feel it is appropriate to deny women in the control group the opportunity to build a social support network or provide financially for themselves and their families.

5.1 RECRUITMENT METHODS

 The program aims to start with 80 young women during the first rollout. Women will be recruited from healthcare clinics, churches, schools, stores frequented by women and via community healthcare workers.

 Recruitment will be both passive and active. Flyers, brochures and other marketing materials will be posted asking for young women to participate in a program centered on health, wellness and developing loving relationships. Active recruitment will include program facilitators visiting clinics, schools and other places to provide “elevator speeches” or short presentations about the program. In addition, CHWs will be asked to talk about the program during home visits and encourage their clients to participate. Information will be provided in both Zulu, the dominant language and English. Intimate partner violence will be screened using the CDC-recommended Abuse Assessment Scale .

5.2 PHASE 1, YEAR 1: COMMUNITY ASSESSMENT

 The pre-intervention phase will consist of a community needs assessment to understand the magnitude and determinants of intimate partner violence in Durban, KwaZulu-Natal and assess current IPV screening and resource referral services. Necessary information about where women seek help for IPV and their feedback about existing resources is crucial to providing adequate IPV assistance during the intervention phase. In addition, this is the phase where the program will build relationships with community partners and stakeholders such as HIV care clinics, antenatal clinics, secondary schools, NGOs, microfinance lenders, community health workers (CHWs) and, of course, engage feedback from young women about the services they receive. This includes talking to women who may be HIV positive and do not engage in care as well as women who may not have been tested.

5.3 PHASE 2, YEAR 2: INTERVENTION

8-week Support and Microlending Group

 The intervention program will consist of 8 weeks of 1-2 hour support and microlending group sessions one day per week. These sessions will be held in local church halls, school gyms or other gathering places identified during the Phase 1 focus groups. Workshops will be held during off-hours such as evenings and weekends. Childcare will be provided as well as snacks and beverages.

 This will be an informal support group run by a facilitator with mental health and IPV counseling experience. The goal is simply to provide emotional and mental support for women confronting delicate issues such as stigma and IPV in a safe judgmental-free environment. The group is meant to be educational in a conversational way, but its main objective is to foster community and promote social mobilization around HIV and IPV. Young women are more likely to participate in support groups for HIV care than any other demographic (Dageid, 2014).

 Before the first session a short 15-question survey will ask and assess baseline HIV knowledge. During the first session, baseline surveys will be administered and will ask about knowledge, attitudes and beliefs regarding sex, power equity in relationships, social support and HIV medication adherence. This survey will also be administered at Weeks -4, -8 and after the intervention is completed at -12 weeks. Completion of the survey will be reimbursed with a $15 cash payment.

 In groups of five, women will apply for individual microfinance loans to support entrepreneurial activities. In the group-lending model, the women are responsible for each other’s businesses in that if one woman has a hard time paying back the loan one month, the other group members are then responsible for her payment. The small size of the group allows for loans to be under $1000, a manageable size for young women with little business experience that does not put them at adverse risk for debt and just slightly less than the average individual microloan size of $306 USD (Gardner, 2008). The lender provides small business training before the loan is paid out. This model has been widely adopted in South Africa through a local bank called Womens Development Businesses as well as the Development Microfinance Association. The element of peer pressure and the training of the group contribute to the success of group member’s businesses.

5.4 PHASE 3, YEAR 3-?: SUSTAINABILITY AND LONG-TERM EVALUATION

 After the initial intervention, the goal will be to sustain the program using existing resources and maintain any positive outcomes and continue to minimize risk for HIV and IPV. The women who participate in the program will be encouraged to continue with the support group as resources allow and discuss their experience and provide referrals to continue to expand the program. Former participants will also be encouraged to become community health workers and spread the EWA message of social capital and empowerment to other women and families in their communities. Long term evaluation will continue for as long as funding is available in order to assess changes that will take time to evolve, for example changes in HIV incidence rates and norms around IPV.

6.0 PROGRAM EVALUATION PLAN

6.1 QUALITATIVE DATA:

6.1.1 SUPPORT GROUPS

 The support groups will all be audio recorded. Participants will be informed about audio recording during the consent process and provide permission in order to participate. The audio will be transcribed and analyzed for themes with ATLAS.ti software. The support group data will be examined to answer the following questions:

* Where do you seek social support?
* If HIV+, do they feel supported in their HIV care?
* Do you talk to other women in your life about HIV prevention?
* Did you tall to anyone about your IPV experience?
* Other themes that naturally occur in conversation

6.1.2 EXIT INTERVEWS

 At the conclusion of the study we will ask all 80 women to participate in an exit interview. These will include individual interviews that will ask about experiences in the study in a non-judgmental or leading way. This will simply allow for feedback and provide qualitative context to the quantitative outcome data.

6.2 QUANTITATIVE DATA:

6.2.2 BASELINE AND FOLLOW-UP QUESTIONNAIRES

 The Baseline and Follow-up Questionnaires will consist of validated instruments at the following time points: Baseline, -4 weeks, -8 weeks, -12 weeks and -12 months. If resources allow, we will also administer these questionnaires to the study participants at -18 months and -24 months as well. The composite questionnaire is known as the EWA Questionnaire in the evaluation plan in **Figure 7.**

|  |  |
| --- | --- |
| **Study Objective** | **Validated Instrument** |
| HIV knowledge on prevention and treatment | AIDSCAP/WHO/CAPS Counseling and Testing Survey (Coates T J, 2000) |
| Sexual risk behaviors | Knowledge, Attitudes, Belief, and Behaviors Survey (Ekstrand ML, 1996) |
| Experiences of IPV | Abuse Assessment Scale (Basile KC, 2007) |
| Social Support | Multidimensional Scale of Perceive Social Support (Zimet GD, 1988) |

# Figure 6: Validated Instruments

6.2.3 REVIEW OF SURVEILLANCE DATA

 We will monitor and routinely test for HIV within our study population and compare HIV incidence rates, as well as viral load and CD4 count between the intervention and control groups. We will also review annual surveillance data of Kwazulu-Natal and compare HIV data within the study population to the local population. If possible, we will also compare rates of reported IPV, but this data does not seem to be reliably reported and available.

6.3 DISSEMINATION PLAN

 It is extremely important to report data from the study to participants and to the community it affects. After study activities are over and data analysis is complete, we will contact all study participants and provide them with a 1-2 page summary of results. We will encourage the participants to share their experiences with other women in their community. We will also contact local media and share results on television and newspapers that are readily available in the community. In addition, to share study results with the global HIV and women’s health communities by publishing in peer-reviewed journals and presenting findings at relevant conferences such as the South Africa AIDS conference and the International Conference on HIV, STDs and STIs, is extremely important and potentially extremely valuable to HIV prevention efforts worldwide.

| **Evaluation Question** | **Indicator or Performance Measure** | **Method** | **Tool or Data Source** | **When/How often?** | **Responsibility** |
| --- | --- | --- | --- | --- | --- |
| **Short** |  |
| 80 women randomized to intervention or control group | Women recruited; participants consented  | Informed Consent Forms | Informed Consent Forms | Baseline | Community Health Workers |
| 70% of women will have attended at least 4 support group sessions.  | Women recruited  | Sign-in sheets | Sign-in sheets | Every session | Program Facilitator |
| 80% of women will report a 70% increase in feeling confident about the ability to negotiate safe sex with partners during 90% of sexual encounters. | Decrease in sexual risk behavior | Surveys | EWA Questionnaire  | * Baseline
* 4-week follow-up
* 8-week follow-up
* 12-week follow-up
* 12-month follow-up
 | Program Facilitator |
| 80% of women will schedule at least one individual session with IPV counselors | IPV support system | IPV counselor schedules | IPV counselor schedules | Every woman screened; follow-ups individually scheduled | IPV Counselor |
| 70% of women will report a 30% increase in HIV knowledge | Increase adherence to HIV care and/or prevention | Surveys | EWA Questionnaire | * Baseline
* 4-week follow-up
* 8-week follow-up
* 12-week follow-up
* 12-month follow-up
 | Program Facilitator |
| **Medium** |  |
| 50% of women will attend all support group sessions. | Women recruited  | Sign-in sheets | Sign-in sheets | Every session | Program Facilitator |
| 80% of women will report encouraging other women in their life to know their HIV status. | Increase adherence to HIV care and/or prevention | Surveys | EWA Questionnaire | * Baseline
* 4-week follow-up
* 8-week follow-up
* 12-week follow-up
* 12-month follow-up
 | Program Facilitator |
| 70% of women will report a 60% increase in condom usage. | Decrease sexual risk behaviors | Surveys | EWA Questionnaire | * Baseline
* 4-week follow-up
* 8-week follow-up
* 12-week follow-up
* 12-month follow-up
 | Program Facilitator |
| 60% of women will report a 90% decrease in experiences of IPV | IPV support system | Surveys | EWA Questionnaire | * Baseline
* 4-week follow-up
* 8-week follow-up
* 12-week follow-up
* 12-month follow-up
 | Program Facilitator |
| 60% of women currently experiencing IPV are connected to local IPV resources such as shelters and mental health counselors  | IPV support system | IPV counselor sessions  | Feedback from IPV counselor sessions | Every woman screened; follow-ups individually scheduled | IPV Counselor |
| **Long** |  |
| 60% decrease in IPV incidences experienced by young women | IPV support system | Surveys | EWA Questionnaire | * Baseline
* 4-week follow-up
* 8-week follow-up
* 12-week follow-up
* 12-month follow-up
 | IPV Counselor |
| 85% of HIV+ women will be virally suppressed. | Increase adherence to HIV care and/or prevention | HIV rapid blood tests | HIV rapid blood tests | * Baseline
* 12-week follow-up
* 12-month follow-up
 | Program Facilitator |
| 60% decrease in incidence of HIV among young women  | Increase adherence to HIV care and/or prevention | HIV rapid blood testsHIV surveillance | HIV rapid blood testsHIV prevalence estimates from surveillance data | * Baseline
* 12-month follow-up
 | Program FacilitatorData Manager |
| 50% of women continue with microfinance businesses at 24 months. | Financial independence and economic empowerment  | Surveys | EWA QuestionnaireSurvey microfinance staff | 12-month follow-up surveySurvey microfinance staff | Program FacilitatorData Manager |

# Figure 7: Program Evaluation Diagram

7.0 PROGRAM BUDGET

The following is an estimated annual budget using salary information from the Wage Indicator Foundation and material costs from Amazon’s South African website. All costs have been converted from South African Rand to US Dollars at a foreign currency conversion rate of 15.45 R to 1 USD.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **LINE ITEM** | **Name** | **Annual Salary** | **Level of Effort(FTE)** |  **Funder Request**  |
| **Personnel**  |  |  |  |  |
| Project Director: Responsible for establishing community partnerships. Oversees grant management including meeting grant deadlines, fiscal reporting and budget management. Meets weekly with Program Facilitators to assure that EWA operations are continually meeting outcomes. Reports updates to community partners.  | D. Farias  | 15,000.00 | 0.600 |  $9000.00  |
| Program Facilitators (4): Facililates 8-week support and microfinance group. Routinely tests for HIV. Provides pre- and post- test counseling. | To be hired | 13,750.00 | 1.000 |  $13,750.00  |
| Program Evaluator: Meets weekly with program facilitators to evaluate program for implementation consistency. | To be hired | 14,000.00 | 1.000 |  $55,000.00  |
| Child Care Provider (4): Provides child care during8-week program. | To be hired | 630.00 | 0.270 |  $680.40  |
| IPV/Domestic Violence Counselor (6): 4 counselors will facilitate 8-week support group. 2 counselors will attend support groups, but provide individual counseling to participant-survivors of IPV. | To be hired | 14,500.00 | 0.750 |  $10,875.00  |
| Data Manager: Maintains database of all data collected during workshops as well as evaluation data. Meets bi-weekly with program evaluator and and program managers to discuss data quality.  | To be hired | 1,800.00 | 0.500 |  $900.00  |
| **Personnel Wage Subtotal** |   |   |   |  **$90,205.40**  |
| **Fringe Benefits**Calculated at 38% of applicable salary for employee health insurance, FICA, Workers Compensation, Life Insurance, Long-term Disability, and Unemployment Insurance.  |   |   |   |  **$34, 278.05**  |
| **TOTAL PERSONNEL** |   |   |   |  **$124,483.45**  |
| **Travel** |   |   |   |   |
|  Local TravelTransportation Reimbursement (avg. cost of gas is $0.83/gallon)= $0.83 X 50 miles per week during 80-week program |   |   |   |  $498.00  |
|  **TOTAL TRAVEL**  |  |  |  |  **$498.00**  |
|  **Equipment**  |  |  |  |  |
|  Computer Server (EWA Database)  |   |   |   |  $315.00  |
|  **TOTAL EQUIPMENT**  |  |  |  |  **$315.00**  |
|  **Supplies**  |   |   |   |   |
|  Mobile Phones (10 for program managers and faciltators) 10 phones @ $80 = $480 Data plan= $31/month x 12 months= $372  |   |   |   |  $852.00  |
|  Office Supplies= $30/month x 12 months= $1452  |   |   |   |  $1,452.00  |
|  Computers (4) @ $693= $2772  |   |   |   |  $2,772.00  |
|  **TOTAL SUPPLIES**  |  |  |  |  **$5,076.00**  |
|  **Contractual:Outside Employees from Community Partners**  |  |  |  |   |
| Research Director: Provide research support and perform Needs Assessment as described in progran plan. Dr. X is employed by the University of KwaZulu-Natal and will participate at 0.35 FTE | Dr. X | 78,000.00 | 0.350 |  $27,300.00  |
| Microfinance Lending Officers (2): Employed by local microfinance banks, they will attend support group sessions for 30-60 mins/week and provide microfinance guidance | To be hired | 2,646.00 | 0.250 |  $1,323.00  |
| IPV Training Expert: Will provide education on intimate partner violence screening, and counseling to program managers and program faciltators. | To be hired | 2,658.00 | 0.200 |  $531.60  |
| Community CHWs (10): Recruits program participants  | To be hired | 15,000.00 | 0.100 |  $15,000.00  |
|  **TOTAL CONTRACTED**  |  |  |  |  **$44,154.60**  |
|  **Other**  |  |  |  |  |
| HIV Rapid test kits $7.80 per test X 80= $624 |   |   |   |  $624.00  |
| Safe Sex materials: condoms $6.50 per 3 pack x 160 = $1040 |   |   |   |  $1,040.00  |
|  Food for workshops: $40 per workshop over 8 weeks for 8 groups= $2560  |   |   |   |  $2,569.00  |
| Toys and games for child care: $100 |   |   |   |  $100.00  |
|  Printing: Workshop materials,Pre- and Post- Surveys, Promotional materials= 8000 x .40  |   |   |   |  $3,200.00  |
|  Pregnancy tests $5.50 x 80= $440  |   |   |   |  $440.00  |
|  Survey reimbursement= $15 x 4 groups x 10 participants per group x 5 surveys  |   |   |   |  $3,000.00  |
|  **Total Other**  |  |  |  |  **$10,973.00**  |
|   |   |   |   |   |
|  **Total Direct Charges**  |  |  |  |  **$185,499.45**  |
|  **Indirect Cost**  |  |  |  |  |
|  **TOTAL COSTS**  |  |  |  |  **$185,499.45**  |
|  |  |  |  |  |
| **Unit Cost Per Person:**  |  |  |  |  **$2318.74** |
| **Wage information from** [**http://www.mywage.co.za/main/salary/minimum-wages**](http://www.mywage.co.za/main/salary/minimum-wages) |

8.0 CONCLUSIONS

 The previous research on HIV and IPV indicates that a social support and microfinance intervention can empower young women to decrease their risk for IPV and HIV. This intervention is the first of its kind to examine support groups in an experimental fashion and to measure HIV incidence as one of its main outcomes. Previous HIV and IPV interventions have not had a significant effect on HIV incidence and focus on the most vulnerable population of young women. We want to fill in the research gap regarding young women and develop an intervention that provides the community support and financial resources that young women need to reduce their exposures to IPV and HIV and maintain HIV treatment. We hope to contribute to the research that is necessary to reduce HIV and IPV risk for heavily affected young women of South Africa.

APPENDIX: SUMMARY OF MeSH TERMS USED IN LITERATURE SEARCH

|  |
| --- |
| **SUMMARY OF MeSH TERMS USED IN LITERATURE SEARCH** |
|

|  |  |
| --- | --- |
| HIV/AIDS | "HIV AIDS (Auckl)"[Journal] OR "hiv/aids"[All Fields] |
| adolescents | "adolescent"[MeSH Terms] OR "adolescent"[All Fields] OR "adolescents"[All Fields] |
| domestic violence | "domestic violence"[MeSH Terms] OR ("domestic"[All Fields] AND "violence"[All Fields]) OR "domestic violence"[All Fields] |
| intimate partner violence | "intimate partner violence"[MeSH Terms] OR ("intimate"[All Fields] AND "partner"[All Fields] AND "violence"[All Fields]) OR "intimate partner violence"[All Fields] |
| social support | "social support"[MeSH Terms] OR ("social"[All Fields] AND "support"[All Fields]) OR "social support"[All Fields] |
| women | "women"[MeSH Terms] OR "women"[All Fields] |

 |

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