

## **Enhancing health, social and economic capabilities of highly vulnerable adolescents for protection against HIV and adverse SRH outcomes**

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This research presents baseline findings from an intervention randomized at the classroom level in peri-urban secondary schools within the Durban metro area of KwaZulu-Natal, Province, South Africa – the “Siyakha Nentsha” program. The intervention is designed to provide vulnerable young people residing in poor, HIV/AIDS-affected communities with increased capabilities for building health, social and economic assets over the lifecourse. The strategic skills proposed are geared to help offer protective strategies against HIV and early pregnancy and to build economic assets. As the vast majority of adolescents in South Africa attend secondary school, this is an effective and replicable strategy for reaching a representative group and reducing the possibility of selection bias.

In South Africa, socially and economically disadvantaged young people, especially females, are at the highest risk for HIV, early pregnancy and parenthood, premature school leaving and severe lack of livelihood skills and opportunities. With sharp rises in prime-age mortality due to AIDS, many already at-risk adolescents face the prospect of falling even further behind – educationally, socially, economically and health-wise - due to the loss of one or both parents, teachers and other key adults. It is crucial to look beyond the national data to understand the areas and populations at highest risk and in greatest need. The risk factors these adolescents face are likely to have persistent effects over the lifecourse and impact negatively upon reproductive health, health-related quality of life, and life expectancy, as well as on future marriage prospects, labor force participation and accumulation of savings and other assets.

In South Africa, disparities in HIV prevalence rates begin to emerge early in life. During adolescence, these differences are highest among African (black) females residing in poor locales and in KwaZulu-Natal (KZN) Province: approximately one in five poor young African females in KZN is living with HIV (Shisana et al., 2005). Teen childbearing is high—34 percent of 15-24 year-olds have been pregnant (Pettifor et al., 2004). Orphanhood rates are greatest for Africans, residents of KZN, and those living in informal neighborhoods (*ibid*). National population-based studies of young people within KZN find that being female, poor, orphaned or having low levels of social capital contribute substantially to the risk of a number of unsafe sexual behaviors (Hallman 2005, 2008a, 2008b, 2008c) and teenage pregnancy (Grant and Hallman, 2008). The latter found that one-third of 18-19-year-old females in the Durban metro area had already given birth; three quarters of those births were reported as unwanted and the vast majority of those young women had neither completed secondary school nor returned to school after the birth of their child.

Programs to build the capacity of young people with regard to their health, social and economic futures are sorely lacking. The many who reside in impoverished communities lack access to skill building programs, recreational opportunities, job and saving mechanisms and are at higher risk for early sexual initiation, coerced sex and exchange of sex for money or gifts (Shisana et al., 2005; Hallman, 2005; Campbell, 2003; Gregson et al., 2004). The majority of youth-oriented HIV and RH programs lack focus on the most at-risk and their special circumstances which include poverty, orphanhood, race, gender, and low social connectedness. Formal financial services do not reach large sections of the population and this has helped fuel the view that instruction in economic and financial matters is seen as beyond the grasp of the most disadvantaged (ECIAfrica, 2004). This sad stereotype impedes young people’s ability to become fully functioning members of their families and society.

The common thread tying together personal health risks (specifically HIV and RH) and economic disadvantage is the need to increase personal knowledge and skills and build social networks. Young people's lives are multidimensional and bundling topics of interest and benefit to them, and which have shared underlying skills building aspects, sets the stage for an intervention that is both efficient to deliver and well-received by youth. Work that has been done by the authors in KZN gives a strong indication that it is possible to develop such educational materials and deliver them to at-risk youth. This study team developed an educational program that has been piloted and is accredited by the South African Qualifications Authority (the national government body that accredits education and training curricula). The goal of the program was to provide context-specific strategies to enhance the social capital, financial skills, HIV/AIDS and RH knowledge and future life options of participants. The primary target in the pilot was out-of-school young people in poor, peri-urban AIDS-affect communities on the periphery of the Durban area. Participants met weekly in safe community spaces (e.g., schools after school hours, crèches, community centers) in groups of 10-12 persons under the guidance of a young adult facilitator/mentor. The six modules of the pilot program were entitled: 1. Making Life and Work Choices; 2. Collecting, Recording and Interpreting Data; 3. Personal and Household Financial Management; 4. Awareness of Household and Business Productive Activities 5. Personal Income Tax and Payslip Education; and 6. Sexuality, Sexually Transmitted Infections, Reproductive Health and HIV/AIDS Education. Early assessments clearly indicate the desirability and effectiveness of these elements, although more remains to be learned before such a program would be widely adopted.

Findings from the quantitative survey we did at baseline for the pilot study indicate (to high statistical significance) that among out-of-school 16-24 year-olds:

- Females had less social capital (e.g. social networks and friends they can rely on) than males ( $p=0.01$ ). Among females less social capital was associated with lower exposure to media-based HIV messages ( $p=0.001$ ), more sexual partners in the year before the survey ( $p=0.05$ ), and a lower likelihood of having had an HIV test ( $p=0.05$ ). Females had less knowledge of social grants than males even though females had greater eligibility.
- Females were less likely to have financial goals than males ( $p=0.001$ ). Having a financial goal was associated with (a) greater female exposure to media-based HIV messages ( $p=0.001$ ), (b) more realistic HIV risk perceptions among females ( $p=0.001$ ), and (c) greater male knowledge of HIV transmission modes ( $p=0.01$ ).

In December 2006 we conducted separate qualitative assessments with our out-of-school participants and others associated with the project. Results show the economic skills were particularly highly valued by both participants and their guardians. Female participants also reported feeling much more free to discuss sexual and reproductive health (SRH) and HIV issues in this setting than in the classroom or with parents and sexual partners. All participants valued the safe space to meet and the camaraderie found in the weekly group meetings.

As post-apartheid education curricula are only slowly transforming to strike a balance between theory (formerly emphasized) and practicable knowledge and experience, supplemental programs such as the one we are undertaking are being sought and viewed as desperately needed to help bridge this gap (Rule, 2006). Inventories our team undertook of existing school (Magnani et al., 2005) and non-school-based (Swan and Hallman, 2003) programs for youth in the Durban metro found that virtually none had both economic and health skills building components. Most programs had either weak or non-existent monitoring and evaluation.

**Project aims and objectives:** The fundamental concepts and tools that were initially established for use with out-of-school youth (aged 18-24 years) and are being applied to a somewhat younger population of 10th and 11th graders who are currently attending school. The study design emphasizes the need to assess the impact of the intervention through randomization at the classroom level into the intervention. It is clear that young people who are still in school need to develop these skills to help them navigate the social, health and economic challenges of the transition into adulthood. We already had clues that this program would be appealing to this younger group since younger siblings and friends of the pilot program participants wanted the information and skills the program offered, so began meeting in groups at the school grounds after school hours and on weekends. Program staff from our project took on the extra work of mentoring these newly formed groups because the enthusiasm and commitment of the new participants was so strong. This speaks to the potential sustainability of the approach. Further to this, we are employing local young adult participants as mentors to the in-school groups for the proposed project, adding further to the stock of human capacity within the study communities.

Specifically we are:

1. Refining and implementing a government-accredited multi-session randomized intervention targeted to 10th and 11th grade learners that focuses on:

- (a) developing skills to manage personal and familial resources; access existing education and training opportunities; plan and aspire for the future; and build assets over time;
- (b) building and strengthening bonding and bridging social capital;
- (c) increasing knowledge of HIV/AIDS and pregnancy prevention behaviors and available services for prevention, treatment, and care;

2. Evaluating the impact of the intervention on adolescent:

- (a) formation of aspirations and self-identity; economic skills, in particular the ability to plan and manage personal and familial finances, identify and access available services and benefits, and articulate a plan for pursuing future livelihood-enhancing opportunities;
- (b) social capital, in particular social networks, including adult role models and individuals/groups who can assist with crisis management and accessing training opportunities;
- (c) HIV/AIDS and RH knowledge, prevention behaviors, and adoption of safer sex strategies (e.g., condom use, abstinence).

The long-term objective of the research is to improve lifelong functional capabilities and wellbeing of adolescent females and males who are currently facing high risks of HIV, teenage pregnancy, school dropout, and unemployment, coupled with the actual or potential loss of one or both parents. This project will provide quantifiable evidence about a program that could be adopted into a school or community-project setting.

This study and the data from it will be unique. We are aware of only one other randomized control trial of a livelihoods support intervention for young people in sub-Saharan Africa: the SHAZ! program in Zimbabwe that targets orphaned adolescent girls and emphasizes microcredit. Early lessons from this program indicate that context-specific vulnerabilities may not have been paid sufficient attention for the intervention to be effective or replicable (IPPF/UNFPA/YOUNG POSITIVES, 2007). Questions, therefore, remain as to how such programs should be operationalized with young people in different social, economic, and cultural settings—particularly those characterized by rapid economic, demographic, and family change as in southern Africa.

**Study design:** The intervention targets students in grades 10-11 and is randomized to secondary school classrooms in several peri-urban communities in the Durban metro area. The study has three arms: adolescents in one set of schools will receive economic skills, social capital building activities, and HIV/AIDS-SRH education; those in the second arm will receive only social capital building and HIV/AIDS-SRH education; while those in the third arm will not receive an intervention at this time and serve as controls. The program is randomized to 7 secondary schools. The study is 36 months in duration, beginning in February 2008. The intervention activities will last for eighteen months, with longitudinal measures on individuals and their households at baseline and eighteen months post-baseline. (Our plan is to follow this group further into the future with additional funding we hope to secure at a later time.)

**Methods and measures:** Findings from our pilot study (quantitative and qualitative) inform our data collection approach. Care has been exercised to ensure that measures are appropriate for the age group, the context, the intervention, and data collection method. We are conducting a longitudinal survey, assessing target outcomes and determinants thereof. The outcomes include:

- economic literacy, skills and aspirations;
- social capital (networks and support);
- HIV/AIDS and RH knowledge, skills, and preventive behaviors;

We will also conduct a few focus groups with participants, their guardians, and with project mentors to assess the acceptability and comprehension of the intervention components, feasibility of where and when the intervention was delivered, and beliefs regarding the efficacy of the intervention for the desired outcomes. The study team already has an excellent reputation in and good relations with the schools and communities. Program staff met with students, explained the project and introduced the informed consent forms (student and parent/guardian) that were needed. All such discussions were held in private and data are kept in strict confidence. Baseline interviews were conducted with 1033 male and female learners. Data that are collected are kept in locked cabinets. The protocol for the project and the consent forms have passed through ethical review.

The intervention is based on our pilot curriculum and draws on lessons we have learned from implementing it, and include financial literacy, social skills, information about jobs and job training possibilities, HIV/AIDS information, knowledge of contraceptives, pregnancy, etc., and most especially interpersonal skills to assist young people to continually acquire such information and specifically how to make use of it in their daily lives – today and throughout their lives.

### **Findings:**

Our sample of 1,029 learners ranges in age from 12-28, with a mean age of 17.5(17.8 males, 17.2 females). 98% come from isiZulu-speaking households, with the rest speaking primarily isiXhosa. The study population is a quite vulnerable group: Over half the sample describes their household as being very poor (either not having enough money for food, or having some money for food but for no other basics). Additionally almost half of both males (44%) and females (41%) have lost at least one of their parents, with nearly 9% of males and females having lost both parents. The young people in the sample lack the basic building blocks for a successful transition to adulthood: Only about half of eligible males and females (those aged 18 or older) have a South Africa identification card, and only about two-thirds of the total sample even has a birth certificate; these forms of identification are frequently required to access social benefits, open a bank account and to compete for formal sector employment. Females have smaller social networks than males (a mean of 2.6 friends compared to 3.2 friends for males [p=0.01]). Many young people have actively searched for paid work (41% of females and 61% of males [p=0.05]) and a sizable number have tried to start their own income-generating activities (about 22% of males and

females) but very few (20% of males and 10% of females [ $p=0.01$ ]) have ever actually worked for pay. Less than one-third of either males or females reported at baseline that they were saving money.

One-fifth of females and one-third of males report ever having had sex, with the average age of sexual debut being 15 for males and 17 for females ( $p=0.01$ ). Males report a mean of 4.2 partners in their lifetime compared to 1.3 for females ( $p=0.01$ ). Males also report double the number of partners (2) in the last year compared to females ( $p=0.01$ ). Males have partners who are on average half a year younger than them, while most females have partners who are nearly 3 years older. Fifteen percent of females who have had sex have also been pregnant. Sex is sometimes a fraught experience for these young people; 17% of females describe their first experience as tricked or forced. Additionally almost 20% of both males and females who reported having sex also said they had experienced unwanted sexual touching. Very few learners in the sample (less than 20% of females and less than 10% of males) have ever had an HIV test.

Even in our preliminary analysis we have found many interesting statistically significant associations between economic status/behaviors and adolescent sexual and reproductive health/HIV risk behaviors. Females in poorer households have more sexual partners. Orphaned females are much less likely to use condoms regularly, but likelier to have talked to their last sexual partner about avoiding or delaying sex. Some factors appear protective, such as having savings, friends, and belonging to an organization. Females who are saving are more likely to have heard of family planning methods and to know that you can get pregnant if you only have sex once. Males with savings have greater chances of having talked with their sexual partners about avoiding or delaying sex and to have tested for HIV. Females with more friends have fewer sexual partners and males with more friends have more confidence in their ability to use condoms correctly. However, having friends who pressure you to have sex strongly predicts whether or not both females and males have ever had sex. Belonging to an organization seems to confer more confidence for both males and females in their ability to use condoms. We acknowledge that saving and social capital are endogenous regressors and we will attempt to find instruments for these in our ongoing multivariate analysis.

### **Potential impact:**

The project offers the opportunity to develop robust data testing a strategy to enhance positive social networks, offer financial skills education, and address HIV and early pregnancy risk factors among vulnerable young people. Large and growing numbers of youth face risks from HIV, poverty and other social disruptions. By testing this intervention among grade 10 and 11 learners, this could provide an approach that could reach the large numbers of youth making the transition from school.

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