1.1 DISCUSSION PAPER

Ensuring education benefits girls to the full: Synergies between education, gender equality, HIV and sexual and reproductive health

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The linkages between education, gender equality, HIV prevention, and sexual and reproductive health – all prominent global development goals – are increasingly and explicitly recognised.[1] However, a review of recent findings suggests far deeper synergies than previously realised. For example, while it is well understood that girls' access to schooling can improve gender equality and sexual and reproductive health outcomes, the importance of gender and power in schooling and in HIV and sexuality education, particularly for girls, has been less well appreciated. Other synergies have also been under-explored; for example, the potential for different teaching approaches to foster better health, equality and education outcomes.

Moreover, programme investments in schooling, sexual and reproductive health, and gender equality have not always been designed in the most synergistic manner. Drawing on the evidence base about the interaction between gender, schooling, and sexual and reproductive health and HIV, this paper identifies ways that programming in these areas can reinforce each other more effectively and maximise the impact of investment. More coherent and synergistic approaches can not only turn the tide for girls, who suffer most of the negative consequences of harmful gender norms and practices, but can also have benefits for boys.

WHAT ARE THE LINKAGES?

Education is a cornerstone for building human capital. Schooling increases knowledge, provides vital literacy and numeracy skills, connects young people to peers and mentors outside the family and, ideally, builds critical thinking and decision-making skills. All of these contribute to the development of individuals who can thrive in a rapidly changing world.

For girls in particular, formal schooling also has added benefits for sexual and reproductive health. Schooling delays first sex, marriage and childbearing, and decreases risk of HIV infection (Gulemetova, 2011; Hargreaves *et al.*, 2008; Lloyd and Young, 2009; Pettifor *et al.*, 2008; Soler-Hampejsek *et al.*, 2009.) Unfortunately, many adolescents never complete primary school, and, in most developing country settings, girls' school-leaving rate is higher than boys'. Girls in Africa and Asia who drop out of school have few options aside from marriage and childbearing. Indeed, for girls who leave school, pregnancy and/or marriage often quickly follow. While marriage and pregnancy are more often the result than the cause of girls' leaving school, pregnancy and marriage can result in the end of schooling for girls. In contrast, they are rarely a threat to boys' schooling.

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There are other direct returns to girls of schooling. Recent findings from the World Health Organization (WHO) Multi-country Study on Women's Health and Domestic Violence show that secondary school completion has a protective effect on females' risk of intimate partner violence (Abramsky *et al.*, 2011).[2] Schooling can also foster gender equality. For example, it enhances girls' social status and decreases the disparity in domestic work between girls and boys (Lloyd and Young, 2009).

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1 Including in the Millennium Development Goals (MDGs) and strategies and statements of UNFPA, UNESCO, UNICEF and the US President's Emergency Plan for AIDS Relief (PEPFAR), among others.

2 "Results suggesting increased protection when both women and their partners complete secondary education, and those pointing towards increased intimate partner violence (IPV) risk where there is disparity in educational attainment, confirm the importance of promoting equal access to education for boys and girls…".

There are ripple effects produced by education as well. For example, schooling plays a role in delaying age at marriage and increasing gender equality. In turn, age of marriage and the degree of gender equality also affect a wider constellation of interrelated outcomes. For example, early marriage (marriage before the age of 18) marks sexual initiation for the majority of sexually active girls in the developing world and is associated with a range of adverse gender and sexual health outcomes. Analysis of data from Africa, Asia and Latin America shows that delayed marriage is associated with a smaller age gap between spouses, which is suggestive of greater gender equity within marriage (Mensch *et al.*, 1998). In India, Santhya and colleagues found that, after controlling for confounding variables, girls who marry later have greater spousal interaction and are less likely to have experienced physical or sexual violence compared to girls who married before the age of 18. (Santhya *et al.*, 2010)

Sexual and reproductive health outcomes are also more positive when marriage is delayed. For example, a synthesis of recent evidence from developing countries shows that early marriage is correlated with unintended pregnancy, pregnancy-related complications, pre-term delivery, foetal mortality and violence within marriage (Santhya, 2011).

Similarly, gender equality is a good in its own right. In addition, more equitable gender norms are also correlated with lower rates of intimate partner violence (Gomez *et al.*, 2011) and greater condom and contraceptive use. For example, among a cross-sectional nationally representative sample of young people in Ghana, after controlling for other factors, egalitarian gender role attitudes were associated with higher rates of reported condom use for both males and females (Karim *et al.*, 2003). A study in India found that couples in which the husband held conservative gender norms were significantly less likely to use a modern method of contraception (Stephenson *et al.*, 2006).

Another contextual indicator – power in sexual relationships – is similarly associated with sexual and reproductive health outcomes. Cross-sectional studies have found that women with more equal power in their intimate relationships are less likely to have unintended pregnancies or HIV (Dunkle *et al.*, 2004; Jewkes *et al.*, 2001). A recent longitudinal study reports a causal relationship between power inequity in relationships and HIV incidence (Jewkes *et al.*, 2010).

Despite the direct and indirect benefits of schooling,[3] in most developing countries outside Latin America less than 50 per cent of girls finish primary school; far fewer girls complete secondary school (Lloyd and Young, 2009). In most of these settings, girls are more likely to drop out of school than boys. The most vulnerable girls – girls at risk of child marriage, girls in HIV-affected families, those not living with parents, ethnic minorities, rural girls, the poorest girls – are at particularly high risk of dropping out (Hallman *et al.*, 2007). Just as schooling during adolescence provides especially strong returns for girls, the consequences of school drop out may also disproportionately affect girls. Recent findings from a longitudinal study in Malawi indicate that girls who drop out are significantly more likely than boys who drop out to lose the literacy skills they had acquired (Soler-Hampejsek, 2011).

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> *The link between intimate partner violence and sexual and reproductive health outcomes has been found to be causal in relation to contraceptive use and to HIV incidence.*

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3 In addition to the direct and indirect benefits of education to the girl herself, a girl's education also benefits her community and future children and family. More educated girls will provide their future children with better health and hygiene, and more resources for health and education (Lloyd and Young, 2009). Education – particularly education that fosters critical thinking and agency – can lay the groundwork for meaningful citizenship that benefits communities and nations. Schooling delays marriage and childbearing; and delaying marriage and childbearing decreases population growth (Bruce and Bongaarts, 2009). Indeed, delaying childbearing past adolescence could decrease projected population size by 18 per cent (Bongaarts, 2011).

SYNERGIES IN PRACTICE:
EVIDENCE FROM INTERVENTIONS EXAMINING THE INTERRELATIONSHIP BETWEEN EDUCATION, GENDER, HIV AND SEXUAL AND REPRODUCTIVE HEALTH

Education, sexual and reproductive health, HIV and gender equality are clearly interrelated. The following section examines emerging evidence from programme-related literature that either purposefully addressed these intersections or evaluated outcomes across these domains. Four programmatic areas are examined: access to school; the school environment; the content of the school curriculum; and teaching quality and approaches.

Keeping girls in school

While great strides have been made in getting girls into school, more needs to be done to keep them in school throughout their adolescence, as many of the benefits of education for girls are dependent on secondary school attendance (Bruce and Hallman, 2008; Hargreaves and Boler, 2006; Lloyd and Young, 2009; Pettifor *et al.*, 2008; Temin and Levine, 2009).

Offsetting the costs of education to girls and their families through mechanisms such as scholarships, stipends and cash transfers has proven successful in increasing the number of girls in school (Lloyd and Young, 2009) and – whether directly or indirectly – in improving their sexual health outcomes. A cash transfer programme in Malawi, for example, is showing promising results. Providing girls and their families with financial resources had significant positive effects not only for school enrolment, but also for sexual and reproductive health indicators such as age at marriage, childbearing and HIV infection (Baird *et al.*, 2010; Baird *et al.*, 2012).[4]

Providing social support for vulnerable girls to stay in school also shows promise as an intervention. In Zimbabwe, orphaned girls received fees, uniforms and a school-based helper (a female teacher) to monitor attendance and resolve problems (Halifors *et al.*, 2011). As a result, school drop-out rates decreased by 82 per cent and early marriage rates decreased by 63 per cent.

A number of studies have shown that having trained female teachers in schools is another factor that positively affects school enrolment and retention for girls (Lloyd and Young, 2009). However, training and deployment of adequate numbers of female teachers is a challenge in many settings (United Nations, 2011). Teacher deployment to rural areas is a widespread problem, and it is particularly an issue with female teachers (Kelleher, 2008; Mulkeen *et al.*, 2007; Mulkeen, 2010).

However, simply getting girls into school and keeping them in school is not enough. Outcomes for girls are also influenced by school quality, including dimensions such as the school environment, curriculum and teaching quality. The following section examines lessons in each of these areas.

Improving the school environment

The school environment can be a force for social change or it can reinforce traditional gender attitudes and gender inequality. While a non-discriminatory environment – where all students are encouraged and there are no biases in how students are treated in the classroom – is important for all young people, it is particularly important for those who typically experience discrimination. For example, in Kenya, school environments that were more gender equitable had lower drop-out rates for girls, whereas there was no effect on boys' school leaving (Lloyd *et al.*, 2000). Again, benefits also accrued for girls' sexual and reproductive health. Girls who attended more gender equitable schools were more likely to delay the onset of sexual activity (Mensch *et al.*, 2001).

More overt actions against girls – such as sexual harassment, coercion and violence – by male students, teachers or other school staff, undermine girls' school retention and achievement, as well as violating their rights and perpetuating harmful gender norms. A cross-sectional study of adolescents and young people in KwaZulu-Natal,

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4 See discussion paper on cash transfers, education and HIV in section 2.3 of this publication for specific findings from the Malawi study and more detailed discussion of the topic of cash transfers.

South Africa found that, after controlling for confounding variables (including age, poverty and orphan status), girls' experience of non-consensual sex was significantly associated with lack of school progression (Hallman, 2007). In the United States, a recent national survey found high levels of sexual harassment in schools (Hill and Kearl, 2011). Over half (56 per cent) of girls and over one third (40 per cent) of boys in Grades 7-12 experienced some form of sexual harassment at school in the previous school year. One in 10 boys and one in seven girls stayed home from school, and one quarter of the boys and one third of the girls reported difficulty studying as a result of harassment. Programmes to foster safe schools in a variety of settings show promise but, as yet, their impact is unproven (Lloyd and Young, 2009).

Strengthening the curriculum

Curricular content also influences gender equality, girls' empowerment, and sexual and reproductive health. 'Life skills' or sexuality and HIV education is a particularly relevant element of the curriculum.[5] Many people believe that young people have a right to comprehensive sexuality education, derived from the right to education and the right to health. While all young people benefit from better knowledge about sexual and reproductive health, adolescent girls are particularly vulnerable to adverse outcomes (for example, incident ratios of HIV cases in sub-Saharan Africa among 15-24 year olds are typically 3:1 female to male), and suffer greater consequences, including unintended pregnancy and maternal mortality and morbidity.

Emerging evidence again highlights the synergies between education, gender and sexual health. Preliminary findings from an analysis of rigorously evaluated sexuality and HIV education programmes strongly suggest that curricula that engage learners in reflecting about gender norms and power in intimate relationships are more likely to demonstrate positive health outcomes, for example, reduced rates of pregnancy or sexually transmitted infection (STI), than those that are 'gender blind' (Haberland, 2010b). For example, a randomized controlled trial of the Stepping Stones programme, which seeks to improve sexual health by fostering more gender equitable relationships, found that it reduced HSV-2 incidence by 33 per cent (Jewkes *et al.*, 2008).[6] In another randomized controlled trial, adolescent girls participating in the Horizons programme, which is based on the Theory of Gender and Power and on Social Cognitive Theory, had a 35 per cent lower risk of acquiring chlamydia than non-participants (DiClemente *et al.*, 2009). Another randomized controlled trial found that a targeted programme to increase girls' understanding of the risks of intergenerational sex achieved a 28 per cent decrease in pregnancy (Dupas, 2011). Two resources are now available to support integration of a gender perspective into sexuality education curricula: *It's All One Curriculum*[7] and *International Technical Guidance for Sexuality Education*.[8]

A second relevant element is the curriculum content of other subjects, such as social studies, civics, literature and ethics. These subjects offer the potential to address gender norms, gender-based violence, discrimination, equality and human rights.[9] Others have noted the importance of related improvements in curricula, such as eliminating gender biases in teaching objectives, subject choices offered and teaching materials (Leo-Rhynie, 1999).

Improving teaching quality and pedagogy

While teacher supply and distribution are important and have generated significant improvements in enrolment, more schooling cannot be assumed to lead to more learning, just as good curricula cannot be assumed to be taught well. Analysis of data from Africa, Asia and Latin America shows that, in most countries, fewer than 50 per cent of girls could read a simple sentence aloud in their chosen language by the end of Grade 3; in half of the African countries, fewer than half of girls had achieved this basic literacy even by the end of Grade 5 (Lloyd and Young, 2009). Such findings are troubling in and of themselves, but also have gender and sexual and reproductive health (SRH) dimensions. In Malawi, for example, a study among adolescent girls found that prevalence of the herpes simplex virus (HSV-2, a sexually transmitted infection) was lower among those girls who were literate and

5   Life skills/sexuality and HIV education is included, for example, in the Education for All strategies (UNESCO, 2000) and UNICEF Education Strategy (UNICEF, 2007).
6   See Discussion Paper on Stepping Stones in Section 3 of this publication for further analysis of the approaches and results of the Stepping Stones programme.
7   International Sexuality and HIV Curriculum Working Group, 2009. It's All One Curriculum: Guidelines and Activities for a Unified Approach to Sexuality, Gender, HIV, and Human Rights Education. Eds. Nicole Haberland and Deborah Rogow. Population Council (www.itsallone.org).
8   UNESCO, 2009. International Technical Guidance on Sexuality Education: An evidence informed approach for schools, teachers and health educators. (http://unesdoc.unesco.org/images/0018/001832/183281e.pdf).
9   For example, much of the content and sample activities from It's All One Curriculum (www.itsallone.org) are relevant for literature or social studies classes and contribute to achieving learning outcomes in these subject areas. Lessons from Literature (http://www.lessonsfromliterature.org/index.html), while developed for a US audience, provides guidance for teachers on connecting literature with lessons on power, control, violence and IPV.

numerate, whereas for adolescent boys the association between learning outcomes and HSV-2 infection was weak or non-existent (Mensch *et al.*, 2012).

The World Bank's new education strategy 2020 places a clear emphasis on improving learning outcomes (World Bank, 2010).[10] This implies, among other interventions, improving the quality of teaching. An analysis of data from the United States by Chetty, Friedman and Rockoff (2011) found that students who spend one year between Grades 4-8 with high-quality teachers (as measured by a teacher's average test-score gain for his or her students, adjusted for confounding variables) are more likely to attend college, earn higher incomes, and live in better neighbourhoods. These long-term impacts of teacher quality were slightly larger for females than for males. In addition, there were positive effects in terms of reproductive health. Female students who had a high-quality teacher were less likely to have children as teenagers.[11]

Pedagogy matters across all subjects and has implications for gender and sexual health. First, we know that pedagogic approaches that are participatory, learner-centred and skills-based are more effective for sex and HIV education (Crepaz *et al.*, 2009; Kirby *et al.*, 2007). Second, fostering critical thinking and reflection are vital for transformative education[12] (Freire, 1970) and enable young people to question the social context, attitudes and behaviours that undermine their health, well-being and rights. An open culture in the classroom, where students can freely express themselves in a supportive environment, is also linked with positive attitudes about gender equality (Pettersson, 2003).[13] Finally, education that involves young people in action for social change builds agency (International Sexuality and HIV Curriculum Working Group, 2009) and may result in greater positive behaviour change (Barker, 2011). Further research on the relationship between pedagogy, learning outcomes, gender norms and sexual health outcomes is needed.

This evidence raises an important question. How can school systems, with poorly trained teachers already overburdened with large classes and inadequate facilities and supplies, implement such changes? The answer is that we cannot afford not to. Business as usual is not working, and it is particularly not working for girls. If there is a commitment to improving education, health and equality outcomes, we need to implement proven strategies and undertake rigorous studies to test new innovations.

To teach gender-transformative and rights-based sex and HIV prevention education in schools, for example, takes more than rolling out a revised curriculum. While changes are required at multiple levels, teachers certainly need training and ongoing support – from pre-service training to the classroom. The content and methods of pre-service and in-service training can incorporate gender sensitivity and impart skills in the use of participatory, learner-centred methods even in large classes. For example, in Nigeria, Girls' Power Initiative (GPI) provides training to teachers in several southern states on gender- and rights-based sexuality education. Teachers report comfort and success using the new methods and content and use participatory, learner-centred methods in subjects including health education, social studies and basic science (Madunagu and Osakue, 2011).[14] Supporting teachers in the classroom with trained young adult mentors from the local community who teach these topics and use these methods during the regular school day is another strategy being tested, for example by the Siyakha Nentsha programme in Durban, South Africa (Hallman and Roca, 2011; Hallman *et al.*, 2011).

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10 "The new strategy focuses on learning for a simple reason: growth, development, and poverty reduction depend on the knowledge and skills that people acquire, not just the number of years that they sit in a classroom. At the individual level, while a diploma may open doors to employment, it is a worker's skills that determine his or her productivity and ability to adapt to new technologies and opportunities. Knowledge and skills, including those that are learned in the classroom, help improve a person's ability to have a healthy and educated family and engage in civic life."

11 Teenage births were measured among females only.

12 Transformative education helps the learner question their assumptions, perspectives and beliefs in order to grow and mature intellectually, ethically and personally, and to contribute to building a better world.

13 The scale for classroom climate was based on six items. "These ask how often (never, rarely, sometimes, and often) the following happens in one's school: The students feel free to disagree with their teachers about political and social issues; the students feel free to make up their own minds about issues; the teachers respect the students' opinions and encourage them to express them; the students feel free to express opinions even when these differ from most of the other students; and the teachers present several sides of an issue when they explain it in class."

14 See also www.gpinigeria.org

RECOMMENDATIONS

This paper has described the clear links between gender, schooling, HIV prevention and sexual and reproductive health. It highlights inequalities that leave girls starting at a deficit (for example, fewer girls in secondary school in most settings; higher exposure to harassment and intimate partner violence), and that investments in girls' education have especially strong returns (for example, in terms of schooling outcomes and sexual and reproductive health). Thus, while education is unarguably important for all, these recommendations focus especially on eliminating gender disparities – a goal that will benefit girls and boys alike.

Many questions still need to be answered – for example, identifying behavioural pathways that underlie the links between education, gender, HIV prevention and sexual and reproductive health. Yet recent policy and programme research suggests that coordinated interventions can have synergistic effects that improve a broad array of outcomes across these inter-related areas.

Key actions required include:

Policies and programmes

- Keeping girls in school throughout adolescence, or, at a minimum, to age 16. Boys should also stay in school, but special efforts and investments are required to give girls a fair chance and to eliminate gender disparities in primary school completion and secondary school enrolment.

- Defraying the costs of schooling to girls and their families through scholarships, stipends, cash transfers, etc.

- Complementing these interventions with social support, especially for the most vulnerable girls. For example, provide access to mentors and membership in groups that build social, health and economic assets to empower girls and increase their chances of staying in school, protecting their health and delaying marriage.

- Providing training and opportunities for women to become teachers and stay in teaching, including in rural and under-served areas.

- Implementing and testing interventions to foster safer and more gender equitable schools.

- Improving the capacity of teachers to use pedagogical methods that are participatory and learner centred, and that foster critical thinking.

- Implementing and testing sex and HIV education curricula that place a central emphasis on gender and rights.

- Testing interventions that integrate gender and rights education into social studies, civics, history, language and ethics classes.

- Connecting through the education system and curricula with community and social change movements by fostering girls' agency, advocacy and civic participation.

- Investing in non-formal education. Formal education programmes can contribute significantly to adolescent girls' empowerment, but many girls and boys are outside the formal education system. It is therefore vital to support and evaluate non-formal education, including improving its content and quality and its links with formal education, to enable adolescents to re-enter the formal system.

Research

- Conducting rigorous research to improve understanding of causality, as well as issues such as pedagogy and learning outcomes, and programme impact. Longitudinal studies that explore the behavioural pathways underlying the associations between schooling, gender, sexual and reproductive health and HIV are needed in particular.

- Disaggregating data by sex in programme monitoring and in programme evaluation. This is critical to improving programme planning and measurement of impact, for example, to identify the different needs of adolescent girls and boys, to ensure that programmes reach the most vulnerable, and to identify the different effects of programmes on adolescent girls and boys and the different pathways through which intervention elements operate. Further disaggregation by marital status, wealth quintile and geographical area would provide additional important insights.

- Assessing a broader range of variables and outcomes in research. Most sex and HIV education evaluations focus on indicators such as knowledge, condom and contraceptive use, timing of first sex, frequency of sex, number of partners, and self-efficacy for condom use. Schooling studies usually measure enrolment and attainment. While these are important, additional variables that can provide insights into individual and structural risk and protective factors, the context of sex, behavioural pathways, and interactions between education, gender, sexual and reproductive health and HIV, should also be measured. These could include critical thinking skills, learning outcomes, age at entry into school, grade repetition, gender norms, harassment and bullying in school, teaching quality and methods, gender attitudes, girls' agency, measures of civic participation, power in sexual relations,[15] transactional sex, sexual coercion and intimate partner violence. These can also be outcomes that programmes aim to improve in their own right through interventions to improve school quality, curricular content on gender and rights, participatory teaching methods, and gender-transformative sex and HIV education.

These recommendations, many of which have been made by others as well,[16] can build on each other and the hyper-concentration of synergies that run through them. There are linkages both in inputs and outputs. With inputs, for example, sex and HIV education – which has for some time emphasised learner-centred, participatory teaching approaches – has much to share with teacher training programmes. Putting gender and rights at the centre of sex and HIV education can be a first step to integrating issues such as gender inequality, violence against women, discrimination and harassment into other subjects taught in schools, such as languages, arts, social studies, etc. With outputs, for example, keeping girls in school will improve educational outcomes, reduce early marriage, improve girls' sexual and reproductive health, and help to reduce HIV and gender-based violence. Training teachers to use participatory teaching methods and to address gender and rights can contribute to more gender equitable schools and more effective sex and HIV education, and may also improve learning outcomes.

Finally, it is likely that there are many further synergies that remain to be uncovered by rigorous research and evaluation. The myriad connections between education, gender equality, HIV prevention, and sexual and reproductive health provide opportunities for multiple, interrelated payoffs, for achieving the MDGs, and for giving the next generation of girls the chance of a better life.

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15 See Pulerwitz *et al.* (2000), for the Sexual Relationship Power Scale, which has been used and adapted in several different contexts.
16 Including: Austrian, 2011; Barker, 2011; Bruce and Joyce, 2006; Halifors *et al.*, 2011; Hargreaves and Boler, 2006; International Sexuality and HIV Curriculum Working Group, 2009; Jewkes *et al.*, 2010; Leach and Mitchell, 2006; Lloyd and Young, 2009; Pettifor *et al.*, 2008; Rogow and Haberland, 2005; Temin and Levine, 2009.