

Evidence Assessment: Summary of a Systematic Review

Who is this summary for?

Administrators and head teachers of schools, and the stakeholders involved in HIV prevention.

School-based interventions for preventing HIV, sexually transmitted infections, and pregnancy in adolescents

Key findings

- Educational programmes alone probably have no effect on the number of young people infected with human immunodeficiency virus (HIV) during adolescence.
- Giving monthly cash, or free school uniforms, to encourage students to stay in school may have no effect on the number of young people infected with HIV during adolescence.
- Giving an incentive such as a free school uniform combined with a programme of sexual and reproductive health education may reduce (sexually transmitted infections) STIs in young women, but no effect was detected for HIV or pregnancy

Background

Sexually active adolescents in many countries, particularly young women, are at high risk of contracting HIV and other STIs. Early unintended pregnancy can also have a detrimental impact on young people's lives.

The school environment plays an important role in the development of children and young people, and curriculum-based sexuality education programmes have become popular in many regions of the world. While there is some evidence that these programmes improve knowledge and reduce self-reported risk taking, this review evaluated whether they have any impact on the number of young people that contracted STIs or on the number of adolescent pregnancies.

Questions

What are the effects of school-based sexual and reproductive health programmes on sexually transmitted infections (such as HIV, herpes simplex virus, and syphilis), and pregnancy among adolescents?

School-based interventions for preventing HIV, sexually transmitted infections, and pregnancy in adolescents in Cameroon. According to the 2011 Demographic and Health Survey, HIV prevalence among young people aged 15-24 years is 1.7%. The rate of infection is slightly higher among young women living in urban areas (2.9%) than in rural areas (2.6%). Reproductive health courses are given to adolescent in school. This intervention could help to prevent HIV, sexually transmitted infections, and pregnancy in adolescents.

Table 1: Summary of the systematic review

| | What the review authors searched for | What the review authors found |
|---|---|---|
| Studies | Randomized controlled trials | Eight cluster-randomized trials met the inclusion criteria |
| Participants | Adolescents (defined as 10 to 19 year olds) attending primary, middle, or high (secondary) school at the time of the intervention. | Adolescents (defined as 10 to 19 year olds) attending primary, middle, or high (secondary) school at the time of the intervention. |
| Interventions | We included any intervention that aimed to reduce the risk of HIV or other sexually transmitted infections (STIs) or pregnancy among adolescents, and was primarily conducted in schools or linked to schools or school attendance, with or without a community component. Some were curriculum-based educational interventions primarily delivered by adults (teachers, or other adults) or peers (peer educators), or included additional features to change the school or community environment (for example, by changing school policies or improving health services). | Seven of the eight trials included a specific sexual and reproductive health educational component in the intervention and were based on a range of theoretical frameworks. These interventions focused specifically on changing knowledge, attitudes, behaviours, and norms related to sexual and reproductive health. The educational component ranged in intensity from three, one hour sessions in one school year to 36 sessions of 40 minutes over three school years. Three trials incorporated trained peer educators into their intervention, two incorporated nurse or health worker training to encourage participants, and one included a parental training component. Drama (including video dramas), games, or role play were incorporated into five of the intervention programmes. Four of the seven trials reported some mention of gender roles. Condoms were not given freely to participants in any of the trials, but were demonstrated to students in two trials, and sold and marketed to young people in one trial. |
| Controls | Placebo, control vaccines or no intervention | <ul style="list-style-type: none"> • Combined incentive and educational programmes • No intervention |
| Outcomes | <p>Clinical/biological outcomes:</p> <ul style="list-style-type: none"> • HIV prevalence; • STI prevalence; • Pregnancy prevalence. <p>Behavioural self-reported outcomes:</p> <ul style="list-style-type: none"> • Use of male condoms at first sex; • Use of male condoms at most recent (last) sex; • Incidence of sexual initiation (sexual debut). | <ul style="list-style-type: none"> • HIV incidence • HIV prevalence • Pregnancy • Use of male condoms at first sex; • Use of male condoms at most recent (last) sex; • Incidence of sexual initiation (sexual debut). |
| Date of the most recent search: 7 April 2016. | | |
| Limitations: This is a high quality systematic review, AMSTAR =11/11 | | |
| Citation: Mason-Jones AJ, Sinclair D, Mathews C, Kagee A, Hillman A, Lombard C. School-based interventions for preventing HIV, sexually transmitted infections, and pregnancy in adolescents. Cochrane Database of Systematic Reviews 2016, Issue 11. Art. No.: CD006417. DOI: 10.1002/14651858.CD006417.pub3. | | |

Table 2: Summary of findings

| Educational programmes to reduce HIV, STIs, and pregnancy in adolescents | | | |
|---|---------------------------------|-------------------------------------|--|
| Patient or population: adolescents. | | | |
| Settings: schools and communities | | | |
| Intervention: sexual and reproductive health educational interventions delivered through schools | | | |
| Control: no intervention | | | |
| Outcomes: HIV, STI's or pregnancy confirmed biologically by blood or urine test | | | |
| Outcomes | Relative effect (95% CI) | No of Participants (studies) | Quality of the evidence (GRADE) |
| HIV prevalence Follow-up: 18 months to 3 years | 1.03 [0.80-1.32] | 14 163 (3) | Low |
| HSV 2 prevalence Follow-up: 18 months to 3 years | 1.04 [0,94-1,15] | 17688 (3) | Moderate |
| Syphilis prevalence Follow-up: 18 months to 3 years | 0.81 [0.47-1.39] | 6977 (1) | Low |
| Pregnant at end of trial Follow-up: mean 3 years | 0.99 [0.85-1.16] | 8280 (3) | Moderate |

**HIV=human immunodeficiency virus; HSV= herpes simplex virus; STI=sexually transmitted infection*

Applicability

The trials were conducted in Chile (1), England (2), Malawi (1), Zimbabwe (1), Kenya (1), South Africa (1), Tanzania (1). These interventions may be applied in other low resources settings such as Cameroon.

Conclusions

There is currently little evidence that educational programmes alone are effective at reducing STIs or adolescent pregnancy.

Prepared by

M. Vouking, C.D. Evina, L. Mbuagbaw, P. Ongolo-Zogo: Centre for the Development of Best Practices in Health, Yaoundé, Cameroon. Available at www.cdbph.org

Contact:

Email: camer.cdbpsh@gmail.com

Site web: www.cdbph.org

Observatoire du Médicament au Cameroun: www.newsinhealth.org

Téléphone: +237 242 08 19 19