SEXUAL HEALTH IN YOUNG PEOPLE

International research summaries and Swedish experiences of preventive work

MARGARETA FORSBERG 2007

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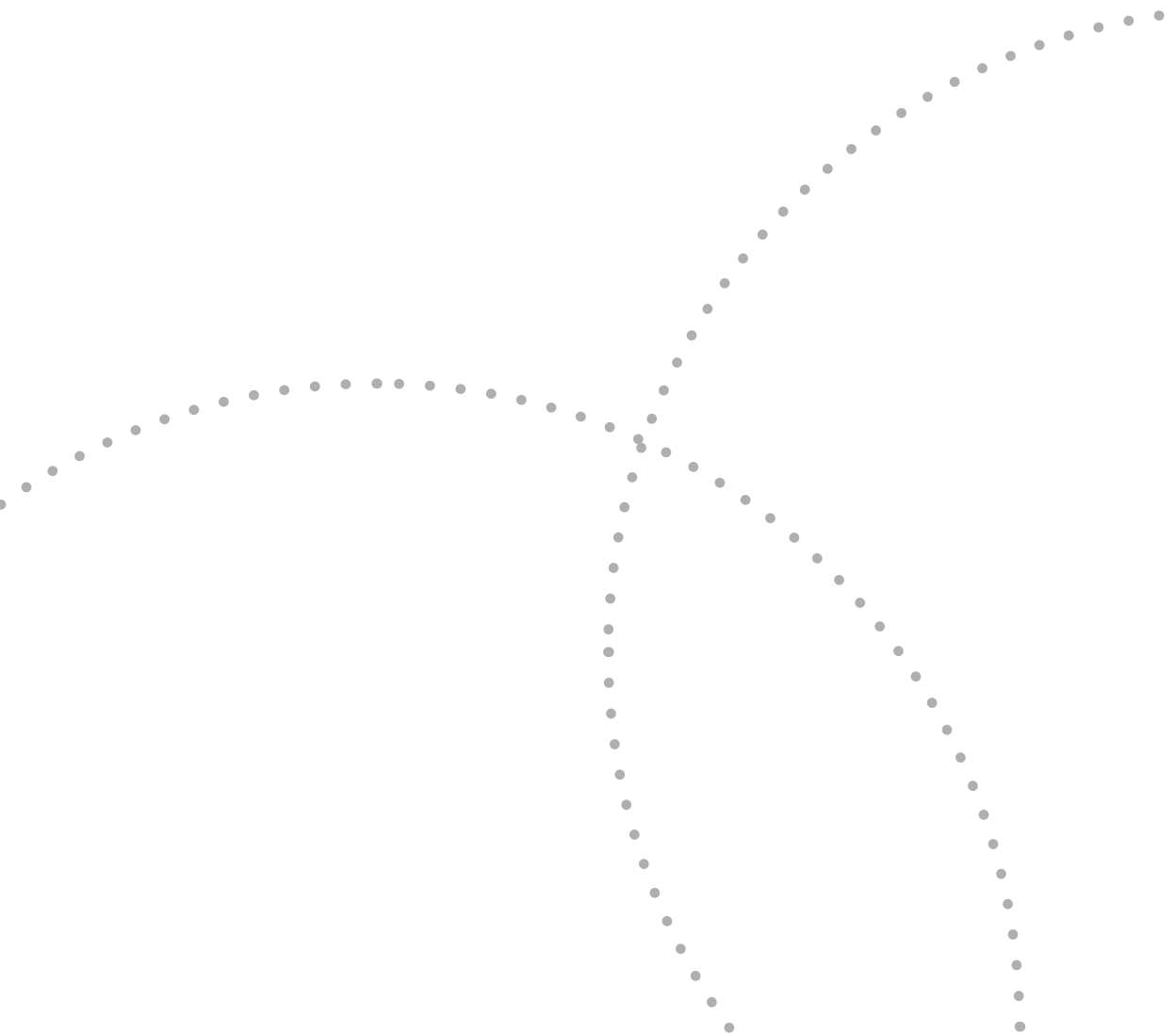# FOREWORD

Human sexuality has always been two things: a positive force, and a health risk, and with the arrival of HIV, the health risk stakes of sexuality were raised. We all share an important responsibility to provide the best possible support for young people who are at the beginning of an active sex life, support that will help them avoid the health risks of sexuality while enjoying its positive aspects.

The form that sexuality takes depends very much on the functioning of the young people's surrounding community. One effect of social change in Sweden and many other parts of the world over the past 40 years is that young people are "young" for longer, and postpone starting a family. The link that used to exist between starting a family and first intercourse in practice has thus been eliminated. Young people in Sweden have a number of sexual partners before they settle down in marriage, or a quasi-marital relationship, quite late in life. This has brought many benefits: studies show that young people today are happier in their close relationships and with their sexuality than they used to be. The studies also show that the sexuality of young women and young men is more equal: most young women feel that they can make demands in a sexual relationship, which is good news.

Nonetheless, this active sexuality in young people means that we need a new approach to the health risks of sex. We can see that sexually-related ill-health is rising in Sweden: the number of diagnosed cases of chlamydia is on the rise, as is the number of abortions. Preventive work must be updated and improved. Prevention must reach everyone, homosexual or heterosexual, male and female.

Sexual health has been the subject of debate and preventive work in Sweden and other countries since the 1980s. However, the broad efforts that would be needed to reach all young people have not been forthcoming: resources and will are both lacking. This is largely because sexuality and gender issues are still surrounded by a strong taboo. We want these matters to remain private. Sexuality is still seen as something embarrassing or vulgar.

Preventive work is an important social matter, and sexual health efforts need to reach all young people, of all ages, time and time again. Each young person undergoes a process of taking control of their own sexuality, and if they are to avoid serious health problems they need the right support.

Like many other western countries, Sweden has built up a structure to safeguard sexual health. It is 50 years since sex and relationships education became mandatory in Sweden. The Swedish school authorities, in an evaluation of their own work, report that sex and relationships education takes place in all schools, but that its quality is often poor and there is also often a lack of adaptation to the prevailing situation. Sweden's 227 Youth Clinics feel that their resources for preventive work are being squeezed and that they are at risk of being reduced to traditional care providers without special youth-friendly amenities. Sexuality issues are also neglected in teacher training and in training for the various care professions.

A very common argument used for not undertaking enough preventive work among young people is that we do not know if it has any effect. What should we actually be doing, and how? We often end up with isolated projects that are not evaluated, and this is not enough if the work is to achieve the impact we need.

The argument that we do not know if preventive work has any effect does not hold up, however. The first review of scientific studies on preventive interventions was presented in 1994, and pointed to the important role played by schools. I became convinced that knowledge-based preventive work is just as possible as knowledge-based care. The problem is that less much money is spent on systematically evaluating preventive work than on developing and evaluating medical treatment.

Since then, I have systematically searched for and collected research reviews from around the world which cover HIV prevention and sexual health efforts among young people. I have frequently presented these results in lectures, but this has been the first opportunity to bring them all together. Dr Margareta Forsberg, a specialist in social work, undertook to go through all the reviews and has also added some new ones. She has made an excellent job of sifting through the reviews, listing their most important findings and clarifying what conclusions we can draw.

HIV prevention and sexual health work can be vastly improved by applying knowledge that in fact already exists, that is to say if we are bold enough to apply the results of this report. It is based on international material and can therefore be a useful tool for everyone involved in international opinion-forming and policy development in the area of HIV and sexual health, as well as those involved in more practical application. That is the reason why we are making the report available in English.

The report also covers some relevant Swedish studies in this field. Although many Swedish interventions are in line with the results of the report,

there is an almost total lack of intervention research in Sweden, something that Sweden has in common with many other European countries. We do not just need efforts to implement knowledge-based methods; we also need more research into new interventions.

It is my hope that this report can contribute to more wide-ranging and effective work, and prompt more research in Sweden and other countries.

Viveca Urwitz
Head of Unit for National Coordination of HIV/STI Prevention

BACKGROUND
AND METHOD

The Unit for National Coordination of HIV/STI Prevention was established at the Swedish National Board of Health and Welfare in June 2006. In the autumn of the same year, work was initiated on a review and summary of the results of international experiences of HIV prevention targeting young people. This report is the outcome of that work. Alongside this work, Dr Ronny Tikkanen has worked on a corresponding assignment regarding HIV prevention in men who have sex with men. Tikkanen's work is presented in the report *Knowledge-Based HIV Prevention, Intervention Targeting Men Who Have Sex with Men: A summary and discussion of six international research reviews* (2007).

This project relating to young people involves examining five international reviews of studies dealing with preventive work in the field of young people and sexuality. These five reviews in turn cover a large number of studies from many different countries, mainly written in English. No corresponding review has been published in Sweden, so the project comprises a search for Swedish primary data – research papers, reports and suchlike – that can increase our knowledge in this field.

The international reviews collected by the National Board of Health and Welfare are presented below. With respect to Swedish reports, the search has been confined to texts that can tell us something about interventions which have had (or have not had) direct effects on young people. This has involved demarcation, in that texts dealing with how teachers and others feel about an intervention programme, for example, are not discussed here. Nor do we consider texts in which young people express their views about programmes, unless the effects on their behaviour have also been measured. Additionally, our report covers only primary prevention: secondary prevention measures, such as contact tracing – decisive in stopping the spread of infection – are barely discussed in the texts on which this report is based.

During the course of the work, we have discovered further publications, mainly through the references cited in various papers to other reviews of HIV/STI prevention work or related fields such as prevention of unwanted pregnancy. This field is discussed in two reviews by North American researchers: one on the effects of HIV prevention measures in sexually active young people

(Mullen et al. 2002) and one on measures to prevent unwanted pregnancy (DiCenso et al. 2002). The results of these studies and from an anthology looking at communication on sexual health (MacDowell & Mitchell 2006) are briefly presented under the heading *Other international experience*. Further identified publications will be followed up in future development work, but are not included in this first report.[1]

The focus here, then, is on collected publications which can provide us with knowledge of primary preventive intervention programmes that have effects in the target group as such.

The report ends with *Conclusions and Discussion*. The Conclusions section summarises the recommendations and conclusions of the international and Swedish texts under a number of themed headings. The Discussion section deals with how the conclusions can be related to current knowledge regarding young people and sexuality in Sweden in the early 21st century.

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1. Some such titles are Santelli et al., (1999), Rotheram-Borus et al. (2000) and Kim et al. (1997), see also footnote no. 5 in the "Other international experiences" section.

INTERNATIONAL EXPERIENCES

The reviews

The five international reviews of preventive measures collected by the National Board of Health and Welfare are, by year of publication:

Review	Type of publication	Number of studies covered
Oakley, A; Fullerton, D; Holland, J; Arnold, S; France-Dawson, M; Kelley, P; McGrellis, S (1995). **Sexual health education interventions for young people: a methodological review**. British Medical Journal 1995;310:158–162	Article	270
NHS (1997). **Effective Health Care. Preventing and reducing the adverse effects of unintended teenage pregnancies**. NHS Centre for Reviews and Dissemination, University of New York 1997, Vol. 3 number 1, ISSN:0965-0288	Report	42
Kirby, Douglas (1997). **No Easy Answers. Research Findings on Programs to Reduce Teen Pregnancy**. Washington DC: The National Campaign to Prevent Teen Pregnancy	Report	50*
UNAIDS (1997). **Impact of HIV and sexual health education on the sexual behaviour of young people. A review update**. UNAIDS/97.4	Report	68
WHO (2006). **Preventing HIV/AIDS in young people. A systematic review of the evidence from developing countries**. Ed: David Ross, Bruce Dick, Jane Ferguson. WHO technical report series; no 938, ISBN 92 4 120938 0	Report	Chapter 5: 22 Chapter 6: 16 Chapter 7: 15 Chapter 8: 22 Chapter 9**

* This report often refers to a number of different articles written on the basis of one and the same study. The figure 50 refers to the number of studies, not the number of articles.
** In Chapter 9 of the WHO report, the number of studies and articles is not cited in a way that clarifies how many are actually covered by the review. The reference list for this chapter gives 67 titles, but this also includes reference literature, not just the articles studied.

The international review articles covered by this project were published over a period of eleven years. During this time, there have been considerable changes regarding the spread of, and knowledge about, HIV. Many different types of prevention have been tried in many different countries with vastly divergent circumstances. The five publications are also very different, and their aims vary.

The first published report, Oakley et al., 1995, is about sexual health education in its wider meaning. Two publications – Kirby 1997 and NHS 1997 – primarily deal with the prevention of unwanted teen pregnancy and its negative consequences. Experiences from prevention programmes that aim to prevent unwanted pregnancy can also contribute to the development of HIV/STI prevention. However, the goals are different, and while widespread use of contraceptive pills can yield success in the former case, it might be negative in terms of HIV and STI because it is associated with a lower use of condoms (Novak 2005). Two reports (UNAIDS 1997 and WHO 2006) focus directly on prevention strategies for HIV and other STIs. All the texts present a number of conclusions, and these points are reproduced in this report.

One more review was included in the project which differs in nature from the others. This is an article published in the UK medical journal The Lancet:

Marston, C; King, E (2006) **Factors that shape young people's sexual behaviour: a systematic review**. The Lancet vol 368 Nov 4, 2006.

This article does not discuss the effects of a prevention programme; the authors instead carry out a systematic review of 268 publications based on qualitative studies of what shapes the sexual behaviour of young people. In this context, they discuss key findings that must be taken into account in designing different types of strategy for sexual health promotion or preventive work with young people. The results of this report are presented under a separate heading, *Environmental factors*, below.

Summaries of the five international prevention reviews

Report I: Sexual health education interventions for young people:
a methodological review (Oakley et al. 1995)

This research team, consisting of seven people working at the University of London Institute of Education, studied 270 reports of sexual health interventions targeting young people. They presented their results in an article in the British Medical Journal in 1995. In this article, they emphasise scientific standards and say that the capacity to evaluate an intervention programme should be inbuilt from the outset.

Of the 270 reports they studied, they pay particular attention to 65 evaluations of effects. Fifty-nine (91 per cent) of these were carried out in North America, three (5 per cent) in the UK, two (3 per cent) in other European countries and one in another country (it is unclear which). The programmes studied focused on the 12–19 age group and 74 per cent were interventions within the framework of the school system. Forty-six per cent of the studies focused on HIV, while the remaining 54 per cent focused on preventing pregnancy or STIs, or on sexual health in a broader sense.

Of the 65 evaluations, twelve were assessed as having been carried out in a fashion that met the scientific quality criteria established by the research team. Eleven of these had been carried out in North America and one in Finland. Of the twelve evaluations, only seven were assessed by the research team as fully (three) or partly (four) effective.

Two of the three programmes assessed as having been most effective had been carried out in high schools in the US. These two reports show that after attending a teaching programme about sexual health, pupils knew more about the area than before, and had also been affected in other respects by the goals of each programme: in one case, by being able to communicate better with their parents about sex, and in the other by having a more accepting attitude towards classmates with HIV or AIDS. The third programme focused on young people living in residential shelters after having run away from home, who were given up to 30 lessons on HIV/AIDS. Evaluations carried out three and six months afterwards showed that these young people used condoms more consistently and that they took fewer sexual risks than before the intervention.

So, of the three programmes assessed as having been effective, only one measured behavioural change in the young people involved. This programme also has a target group that differs from a number of other programmes, in

that it focuses particularly on young people who have lived more risk-exposed lives than others.

Of the twelve programmes regarded as reliably evaluated, only this one and one other indicated a change in behaviour in the shape of greater use of condoms. Other programmes that reported success concentrated on knowledge and attitudes.

One programme was considered counterproductive and harmful: this was a programme focusing on younger teenagers from minority groups in low-income families in Arizona. Its goal was to reduce the prevalence of premarital sexual relationships and advocate abstinence, by pointing to various types of sexual risks. After the programme, more young boys in the target group than in a control group stated that they had become sexually active.

The article's discussion mainly centres on the need to base interventions on evidence-based knowledge and to design them in ways that enable systematic follow-up and evaluation. The authors also point to the fact that many studies are content with examining knowledge, and do not even try to measure behavioural change despite awareness of the weakness of links between knowledge and behaviour. They also say that only two of the twelve reliable studies in their own review showed positive behavioural change, specifically in evaluations carried out a short time after the intervention.

It is difficult, on the basis of this article, to determine *what* it is in the seven different programmes that has appeared to affect the young people's knowledge, attitudes or behaviour. The research team does say, however, that there is no evidence that providing practical information and contraception leads to greater risk-taking; their view is that there is in fact evidence to the contrary, that teaching aimed at promoting abstinence may instead prompt sexual experimentation. They write that young people want practical information and help in avoiding unwanted pregnancy, rather than exhortations about the anatomical and moral aspects of sexuality. They want information in a form that is based on, and takes account of, their real lives.

On the basis of their review, Oakley and her colleagues list the following points to be considered in planning a prevention programme:
• Use the results of evidence-based reviews to design future interventions.
• Base interventions on what young people say they want in sexual health information and resources.
• Focus on changing behaviours rather than simply on knowledge or attitudes.

- Evaluate intervention effectiveness by using the design of randomised controlled trials.
- Include an adequate follow-up period to look at both short-term and long-term effectiveness.

Report II: Effective Health Care. Preventing and reducing the adverse effects of unintended teenage pregnancies (NHS 1997)

This report is from the NHS Centre for Reviews and Dissemination at the University of York in the UK. It is a review of 42 evaluations of measures for preventing unintended pregnancy. The interventions are classified into seven types of strategy to prevent unwanted pregnancy. These seven categories are discussed and compared in the report, and experiences from a number of them may also contribute knowledge to HIV/STI prevention work.

To begin with, this report also finds that intervention programmes whose main focus is on persuading young people to wait to have sexual relationships until they are older (late teens) or married have proven ineffective. Experience shows that such programmes neither delay first intercourse nor reduce the number of pregnancies.

The report does find, however, that some programmes that also urge young people to wait before having sex have had some success in changing sexual behaviour and contraceptive use. What distinguishes these programmes is that they do not just urge a delay in first intercourse, they also provide factual information about and access to contraceptives, while also working to raise knowledge levels among young people.

Two different strategies of greater interest than the others appear in the report. One is that of school-based programmes with a broad approach. These build on a combination of different measures: teaching about sex, confidence-boosting, access to condoms and visits to family planning clinics. Evaluation after two years of such a programme shows a significant fall in the number of pregnancies.

The second strategy concerns intervention programmes intended to prevent HIV. Three such programmes, focusing on "hard to reach groups" and carried out outside the school, are described. All three programmes are reported to achieve good results in the shape of a lower degree of risk-taking and greater use of condoms or other contraceptives.

The report's conclusions are that:
- there is reliable evidence that education in schools on sex and contraceptives does not lead to greater sexual activity or more pregnancies;
- clear contraceptive information and information about where to get contraceptives are important ingredients in successful programmes;
- young people who are already sexually active are less affected by the various programmes than those who are not;
- young people differ, and that programmes must be designed on the basis of each specific target group;
- school-based programmes are important and that they are most effective when they are coordinated with family planning clinics and measures to improve young people's level of knowledge;
- programmes must be appropriate to their setting;
- special programmes must be designed that focus on young people particularly at risk;
- systematic evaluation is necessary to study the effectiveness of different programmes.

Report III: No Easy Answers: Research Findings on Programs to Reduce Teen Pregnancy (Kirby 1997)

This American review article covers papers and reports based on a total of 50 studies. Its main aim is to look at interventions to prevent unwanted pregnancies, but the author also discusses a number of programmes and measures to combat HIV and STIs. The most extensive section of the report discusses programmes focusing on "reducing sexual risk-taking among young people".

In the introduction, the author emphasises that the main conclusion is that if programmes in these areas are to have more decisive effect, they need a broad approach and need to be sustainable over time. He also says that the programmes that yielded positive effects on behaviour have nine qualities in common.

1. Effective programmes focused clearly on reducing one or more sexual behaviours that lead to unintended pregnancy or HIV/STD infection. There are two aspects to this characteristic. First, these programmes focused narrowly upon a small number of specific behavioural goals, and second, they did not implicitly let the students decide which choice was right for them on the basis of broad information, but conveyed a clear message about what was considered to be desirable behaviour in the programme.

2. The behavioural goals, teaching methods and materials were appropriate to the age, sexual experience and culture of the students.
3. Effective programmes were based on theoretical approaches, such as cognitive theory and social influence theory.
4. Effective programmes lasted a sufficient length of time to complete important activities adequately. Effective programmes tended to fall into two categories: those that lasted 14 or more hours, and those that lasted a smaller number of hours, but were implemented in small group settings with a leader for each group.
5. Effective programmes employed a variety of teaching methods designed to involve the participants and have them personalise the information. Examples of such methods are small group discussions, games or simulations, role-playing, visiting family planning clinics, tasks involving finding out where to get condoms, etc.
6. Effective programmes provided basic, accurate information about the risks of unprotected intercourse and methods of avoiding unprotected intercourse. This information was not unnecessarily detailed or comprehensive, but provided basic information that students needed to make behaviourally relevant decisions.
7. Effective programmes included activities that address social pressures on sexual behaviours. Some examples given are discussions about media influences (e.g. television shows that suggest that characters frequently have unprotected sex but never experience the negative consequences), about "lines" that are typically used to get someone to have sex, and about embarrassment about buying condoms.
8. Effective programmes provided modelling and practice of communication, negotiation and refusal skills. During this, such situations were practised through e.g. role play.
9. Effective programmes selected teachers or peers who believed in the programme they were implementing and then provided training for those individuals. The training ranged from approximately six hours to three days, and included information about the programme and practice using the role playing exercises and leading group discussions.

In his final recommendations as to what should characterise different prevention programmes, the author considers three different contexts. First, interventions are described that should be useful in *schools*, *family planning clinics* and suchlike; then interventions at *community level* (A programme that only focused on unwanted pregnancy has been excluded from this list).

Schools
- Education programmes that incorporate the nine common characteristics of effective programmes (listed above)
- Service-learning programmes that incorporate community service and ongoing small group discussions.

Family planning clinics
- Outreach efforts to youth in schools and the community
- Clinic protocols that reduce barriers to adolescent access: provide services at no cost, have extended hours for adolescents, do not require appointments, extend activities for initial visit into two visits, train staff to work with adolescents, provide more consistent and intensive follow-up, place greater emphasis on non-medical needs of adolescents (such as partner involvement).

Communities
- Education programmes on sexuality and AIDS that incorporate the nine common characteristics of effective programmes (listed above).
- Comprehensive youth development programs that include tutoring, mentoring, small group discussions with caring adults, development activities (including arts, sports, and career planning), referrals to health services (including reproductive health services), and other components.
- Programmes designed to improve employment opportunities for youth.

Report IV: Impact of HIV and sexual health education on the sexual behaviour of young people. A review update (UNAIDS 1997)

After searches in 13 databases and international contacts with other researchers, the authors identified 68 reports. Fifty-three of these reports had evaluated specific interventions. Of these, 27 reported no effects of the interventions studied. Twenty-two reported positive effects, such as delayed first intercourse, fewer sex partners, fewer unplanned pregnancies or a lower level of STIs.

   The review only examines studies that have been identified as having affected behaviour. Reports that focused only on knowledge or attitudes were excluded: this is because of the weak link thought to exist between knowledge and attitudes on the one hand, and behaviour on the other (see e.g. Andersson-Ellström, 1996).

This review, too, finds that education on sexuality does not make young people more sexually active. It also points to the fact that individual differences between teachers are important in how effective a programme or intervention is. They go on to say that successful prevention programmes had the following characteristics in common:

- social influence theory, social learning theory or cognitive-behavioural theories of behaviour underpinned the interventions;
- the programmes were focused on the specific aims of delayed intercourse and protected intercourse;
- the interventions were at least 14 hours in length or there was work in small groups to optimise the time in shorter programmes;
- a range of interactive activities such as role-playing, discussion and brainstorming were employed such that participants personalised the risks and were actively involved in the process;
- clear statements were given about the outcomes of unprotected sex and how those outcomes could be avoided;
- the social influences of peers and media to have sex or unprotected sex were identified, and strategies to respond to and deal with such pressures were generated;
- there was clear reinforcement of values supporting the aims of the programmes and development of group norms against unprotected sex relevant to the age and experiences of the participants;
- programmes included activities that allowed participants to observe in others, and rehearse themselves, communication and negotiation skills, yielding greater effectiveness in achieving delays in initiation of intercourse or protected sex;
- there was effective training for those leading interventions.

In its closing discussion, the report draws particular attention to the social circumstances determined by gender. The authors describe how gender stereotypes and the inferior position of women are obstacles to efforts to combat the negative consequences of sex.

Their view is that many programmes are designed without taking women's and men's differing circumstances into account. As an example, the authors point out that women are generally expected to assume responsibility for their own sexuality and that of their partners, one aspect of this being that they are assumed to take responsibility for contraception, even where condoms are involved. At the same time, women are expected to be respectable and more

passive than men in the sexual relationship. Implicitly, this means that the individual woman, in the actual sexual situation, must be able to step out of a passive gender role into an active one in which she controls the sexual encounter, in this case in the direction of greater safety.

   Negotiations about safe sex thus challenge the cultural constructs of female and male. Interventions to influence the behaviour of young people must take social circumstances into account. Interventions to get young women to change their behaviour will have limited impact unless they take into account their position relative to young men. The report ends by saying that to move ahead, interventions must also focus on young men and work with the prism of ideas about sex and sexual identity through which they interpret their experiences and understand themselves.

Finally, the report formulates a number of points which should be the basis of planning for intervention programmes. These are:
- Education on sexual health and/or HIV does not encourage increased sexual activity;
- Good quality programmes help delay first intercourse, and protect sexually active youth from STD including HIV, and from pregnancy;
- Responsible and safe behaviour can be learned;
- Sexual health education is best started before the onset of sexual activity;
- Education has to be gender sensitive for both boys and girls;
- Young people's sexual health is informed by a wide range of sources;
- Young people are a developmentally heterogeneous group, and not all can be reached by the same techniques.

In addition, studies show that effective education programmes:
- are grounded in Social Learning Theory;
- have focused curricula, giving clear statements about behavioural aims, and feature clear delineation of the risks of unprotected sex and methods used to avoid it;
- focus on activities that address social influences;
- teach and allow practice in communication and negotiation skills;
- encourage openness in communicating about sex;
- equip young people with skills for decoding media messages and their underlying assumptions and ideologies.

Finally, the report says that planning must disregard convention and current epidemiological data, and rather rely on evaluated best practice and trend analysis.

Report V: Preventing HIV/AIDS in Young People. A systematic review of the evidence from developing countries (WHO 2006)

This report, the most ambitious of the reviews, discusses HIV prevention in the context of developing countries, and consists of ten independent articles written by a total of 22 researchers from different countries. It is held together by an introductory chapter and a concluding one, both of which were written by the trio of researchers Bruce Dick, Jane Ferguson and David A. Ross.

The other eight chapters have different focuses, and discuss, by turn:
- Young people at the centre of HIV/AIDS prevention;
- Different types of effective or promising HIV/AIDS prevention interventions;
- Evaluation of interventions and programmes;
- The role of schools in prevention work in developing countries;
- Interventions designed to increase young people's use of the health services in developing countries;
- Use of the mass media to change HIV/AIDS-related behaviour among young people in developing countries;
- Community interventions focusing on preventing HIV/AIDS in developing countries;
- Achieving the global goals on HIV among the groups of young people most at risk: sex workers, injecting drug users and men who have sex with men.

In the chapter dealing with evaluations of interventions and programmes, the researchers have divided their conclusions about the different intervention programmes into four categories. These are then used to assess the interventions studied in the other chapters. The categories are called *Go*, *Steady*, *Ready*, and *Do not go*, and have the following meanings.

• Go	Evidence threshold met. Sufficient evidence to recommend widespread implementation on a large scale now, Ideally with careful monitoring of coverage, quality and cost, and operations research to better understand the mechanisms of action.
• Ready	Evidence suggests interventions are effective but large-scale implementation must be accompanied by further evaluation to clarify impact and mechanisms of action.
• Steady	Some of the evidence is promising but further development, pilot-testing and evaluation are needed before it can be determined whether these interventions should move into the "Ready" catgory or "Do not go".
• Do not go	Strong enough evidence of lack of effectiveness or of harm. Not the way to go.

Brief description of the eight chapters of the WHO report.

Chapter 2. Young people: the centre of the HIV epidemic

Following a review of national data from a number of countries, the researchers say that from a global perspective, young people are at the centre of the HIV epidemic: about half of all those infected are aged 15–24.

The HIV epidemic differs in different parts of the world, but there are some similarities. In countries where HIV/AIDS is concentrated in some specific groups (men who have sex with men, injecting drug addicts and sex workers), risky behaviour generally begins in adolescence. In countries in which HIV/AIDS is a generalised epidemic, adolescents and young adults are also responsible for most of the spread.

This means that regardless of the nature of the epidemic, young people are at its centre, as newly infected individuals and as a key target group for preventive measures. We can achieve most change by reaching young people.

Chapter 3. Overview of effective and promising interventions to prevent HIV infection

In this chapter, the researchers have examined a number of different intervention strategies and divide them into interventions to change behaviour (such as advice, education, treatment for drug addiction), biomedical interventions (such as widespread testing and treatment for STIs, prevention of blood-borne infection in health care, male circumcision) and social interventions (such as empowerment interventions for women, condom campaigns, access to clean needles for drug users).

The researchers' goal was to review a number of different intervention strategies, not to carry out a comprehensive survey. After their review, their view is that there are some strategies that should continue to develop while others require more analysis before large-scale implementation. They warn, however, against drawing the conclusion that programmes that have not attracted much attention or been widely implemented are less effective than those that have "made it". What they do want to see is more, and ongoing, evaluation and research into most programmes. Their view is that behavioural change strategies, biomedical strategies and social strategies do yield results, particularly if they are combined. They close by saying that "no intervention will be 100% effective, but implementing many [….] in different combinations in different places as befits the local situation, will yield important prevention outcomes at population level" (p. 63).

Chapter 4. The weight of evidence: a method for assessing the strength of evidence on the effectiveness of HIV prevention interventions among young people

The authors discuss a number of difficulties attached to evaluating measures to prevent HIV/AIDS in young people. They point to the following areas:

- HIV prevention interventions are complex;
- Evaluating interventions targeting young people is difficult;
- Evaluation strategies cannot be standardised;
- Evaluation results are not always generalisable;
- The contested nature of evidence itself (different people accord different weight to different types of evidence, often reflecting their disciplinary background).

After a discussion of the above, the authors propose a seven-point programme to compare different interventions and programmes. This seven-point programme is:

1. Define the key types of intervention that policy-makers need to choose between in the population setting under consideration (for example, schools);
2. Define the strength of evidence that would be needed to justify the widespread implementation of this type of intervention ("the evidence threshold");
3. Describe explicit inclusion and exclusion criteria for the studies that will be reviewed;

4. Critically review all studies that meet the inclusion criteria and their findings, by type of intervention, type of context, outcome, quality of outcomes;
5. Summarise the strength of the evidence for the effectiveness of each type of intervention in making process towards each of the global goals;
6. Compare the strength of the evidence provided by the studies against the evidence threshold described in 2;
7. From this comparison, define each programme into one of the categories "Do not go", "Steady", "Ready" or "Go".

Chapter 5. The effectiveness of sex education and HIV education interventions in schools in developing countries

In this chapter, the researchers reviewed 22 reports of interventions carried out in the education system. Sixteen of the 22 interventions showed significant results with respect to delaying first intercourse, having fewer partners, or greater use of condoms or other contraceptives, thus reducing young people's risk-taking.

One of the 22 reports[2] identified what characterises successful interventions in schools, and these conclusions are also highlighted in the chapter. These characteristics are divided into three areas: developing the curriculum, content and implementation.

Developing the curriculum

1. Involve multiple people with different backgrounds in theory, research and sex/HIV education.
2. Assess relevant needs and assets of target group.
3. Use a logic model approach to develop the curriculum that specifies the health goals and the behaviours affecting those health goals. Define risk and protective factors affecting those behaviours and activities addressing those factors.
4. Design activities consistent with community values and available resources (such as staff time, staff skills, facility space and supplies).
5. Pilot-test the programme before large-scale implementation.

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2. Kirby, D., Laris, B., Rollerei, L. Impact of sex and HIV education programs on sexual behaviours of youth in developing and developed countries. Washington, DC, *Family Health International*, 2005:1-45

Content

Curriculum goals and objectives

1. Focus on clear health goals, such as the prevention of STIs and HIV and/or pregnancy.
2. Focus narrowly on specific behaviours leading to these health goals (such as abstaining from sex or using condoms or other contraceptives). Give clear messages about these behaviours. Address situations that might lead to them and how to avoid them.
3. Address multiple sexual-psychosocial risk and protective factors affecting sexual behaviours (such as knowledge, perceived risks, values, attitudes, perceived norms and self-efficacy).

Activities and teaching methods

4. Create a safe social environment in which youths can participate.
5. Include multiple activities to change each of the targeted risk and protective factors.
6. Use teaching methods which actively involve participants and that help participants personalise the information. Also use teaching methods that are designed to change each group of risk and protective factors.
7. Use activities, instructional methods and behavioural messages that are appropriate to the culture, developmental age and sexual experience of the participants.
8. Cover topics in a logical sequence.

Implementation

1. Secure at least minimal support from appropriate authorities, such as ministries of health, school districts or community organizations.
2. Select educators with desired characteristics, train them and provide monitoring, supervision and support.
3. If needed, implement activities to recruit and train youths and overcome barriers to their involvement (for example, publicise the programme, obtain consent from parents, adapt physical conditions).
4. Implement virtually all activities as designed.

Following a review of all interventions, the researchers' key conclusions are as follows.

1. Most school-based interventions lead to greater knowledge and should be assigned to the "Go" category.
2. Curriculum-based interventions that are led by adults and incorporate the characteristics described above affect behaviour and should be assigned to the "Go" category.
3. With respect to all other interventions, such as those led by peers, or those implemented outside the classroom situation, more follow-up and evaluation are necessary before implementation on a larger scale can be recommended.

Chapter 6. Review of the evidence for interventions to increase young people's use of the health services in developing countries

Following various types of search, 16 studies were identified in this area. The chapter notes that it is important that steps are taken to persuade young people to use existing clinics, and the researchers also provide a number of recommendations for the development of clinics for young people. A number of these concern the need for more, and more systematic, research to be able to assess various types of intervention. Some recommendations that are more directly useful in the work of such clinics are also provided. These involve the need to make the clinics easily accessible to young people and to train staff to be able to deal with young people on the basis of their specific situations and needs.

Chapter 7. The effectiveness of mass media in changing HIV/AIDS-related behaviour among young people in developing countries

Fifteen programmes were identified. A review of these shows that communication in the mass media is effective in boosting knowledge of how HIV infects, achieving better and more widespread condom use, influencing some social norms, getting people to discuss the issues more and boosting awareness of clinics that provide advice and care. Fewer significant differences could be measured with respect to abstinence, delayed first intercourse and reduction of the number of sexual partners. Campaigns that also include television slots have the greatest impact, but different campaigns have differing impacts.

Chapter 8. The effectiveness of community interventions targeting HIV and AIDS prevention at young people in developing countries

In this chapter, the researchers reviewed 22 evaluations of different interventions carried out in geographically defined areas, urban as well as rural. They identified four types of intervention: 1. interventions targeting young people through existing youth organisations, clinics and suchlike; 2. interventions which targeted young people but did not go through existing organisations; 3. interventions targeting all inhabitants of a given area, through existing organisations or networks; 4. interventions targeting entire communities by more general means.

The researchers' conclusion is that the first type of intervention, i.e. that focusing on young people through already established organisations or clinics, produced mainly positive results and that these results have also been measured in scientifically reliable evaluations. The other three types of intervention also produced mainly positive results, but evaluations of these did not provide a sufficient basis for any definite conclusions about their effectiveness.

Chapter 9. Achieving the global goals on HIV among young people most at risk in developing countries: young sex workers, injecting drug users and men who have sex with men

The researchers note that the specific groups the chapter is about – young men who have sex with men, sex workers and injecting drug addicts – require particular attention in preventive work. In countries where the HIV epidemic is at a low level and is concentrated, these groups have a key position in efforts to reduce the spread of HIV/AIDS.

The researchers comment how difficult it was to find reliable follow-ups of such focused projects. They note that there are increasing signs that interventions focusing on particularly at-risk groups are effective. Such results must, however, be reported specifically for different age groups if the methods are to be adaptable to the target group in question. They also say that there is evidence that clinic-based programmes, which also include outreach work and support and help, yield good results. They draw the conclusion that measures focusing on risk young people most at risk should contain a combination of outreach work, easily accessible clinics and information interventions. They point out that it is doubtful whether information interventions have any results if they are not combined with the offer of condoms, treatment for STIs and other supporting measures.

Conclusions of the WHO report

In chapter 10 of the report, the authors present the overall conclusions of the report under the four headings "Go" "Ready" "Steady" and "Do not go" In assessing the category an intervention should be assigned to, they take two factors into account. They carry out an assessment, on the basis of the evaluations that have been done, of what evidence (strong, doubtful or weak) exists for a type of intervention being effective. They also assess what strength of evidence (strong, average or weak) is required for an intervention to be deemed ready for large-scale implementation. An intervention that has weak or ambiguous evidence of success can still be placed in the "Go" category provided that it is assessed as not requiring particularly strong evidence for larger-scale implementation (meaning that we can be sure that it is not counter-productive, does not cost too much and so on).

Go

Context of intervention	Type of intervention
Schools	Curriculum-based interventions with characteristics that have been found to be effective on the basis of the criteria presented in Chapter 5 of the report, see above, and which are led by adults.
Health services/family planning clinics	Interventions carried out by clinics, adapted to young people and linked to activities to promote the health services for young people.
Mass media	Interventions with messages broadcast via radio and TV and other media (such as print media).
	Interventions with messages broadcast via radio and other media (such as print media), not TV.
Geographically defined communities	No interventions met the criteria.
Young people most at risk	No interventions met the criteria.

Ready

Context of intervention	Type of intervention
Schools	No interventions met the criteria.
Health services/family planning clinics	Interventions with service providers and in health facilities and in the community that involve other sectors.
Mass media	No interventions met the criteria.
Geographically defined communities	Interventions targeting youths using existing youth-service organisations.
Young people most at risk	Facility-based programmes that also have outreach and provide information and services.

Steady

No interventions have been assigned to the "Do not go" category. There are, however, some interventions under the "Steady" heading, in which the authors have put a possible "Do not go" in brackets.

Context of intervention	Type of intervention
Schools	Curriculum-based interventions with characteristics found to be effective in developed countries and that are led by peers.
	Curriculum-based interventions without the characteristics found to be effective in developed countries and that are led by adults.
	Curriculum-based interventions without the characteristics found to be effective in developed countries and led by peers.
	Non-curriculum based without characteristics found to be effective in developed countries and led by adults.
	Non-curriculum based without characteristics found to be effective in developed countries and led by peers.
Health services/family planning clinics	Interventions with service providers and in the community (Do not go!).
	Interventions with service providers and involving other sectors.
	Interventions with service providers and in facilities and involving other sectors (Do not go!).
Mass media	Radio only.
Geographically defined communities	Interventions targeting youths through new, structures (Do not go!).
	Interventions targeting the entire community through traditional networks.
	interventions targeting the entire community through community events.
Young people most at risk	Outreach only interventions providing information and services.

The summary of the conclusions of the WHO report raises a problem related to the overall level that we are concerned with. Despite the systematic approach, and despite the consistent presentation of results, it can be difficult in some cases to use the summary as guidance for actual measures. Two examples presented in the "Go" category illustrate how the degree of guid-

ance can vary. The first conclusion was that curriculum-based interventions, led by adults and meeting certain criteria (as specified in chapter 5 and reproduced above), are effective. Clear guidelines are provided here and they also refer to a more detailed description which is easy to find. Here, then, the reader receives good guidance for future work. Another type of example is harder to interpret. Under the heading *Mass media* we find the phrase "interventions with messages delivered through the radio, television and other media (such as print media)". Here, the reader is given no concrete guidance other than that messages communicated using certain types of technology are more effective than others. Questions about the content of the message being delivered are not answered. We would need to go back to each respective study to find answers to these questions.

Other international experiences

The above section describes the five reviews collected by the National Board of Health and Welfare and covered in the project. Study of these, and a search for further material, shows that there are a number of other publications whose ambition has been to establish an overview of different prevention strategies. Three such texts which have appeared during the course of the work and which have been studied in the project are:

- DiCenso et al.(2002) *Interventions to reduce unintended pregnancies among adolescents: systematic review of randomized controlled trials.* BMJ Vol 324 15 June 2002

- Mullen, PD, Ramírez, G, Strouse, D, Hedges, LV, Sogolow, E (2002) *Meta-analysis of the Effects of Behavioral HIV Prevention Interventions on the Sexual Risk Behavior of Sexually Experienced Adolescents in Controlled Studies in the United States*. JAIDS Journal of Acquired Immune Deficiency Syndromes 30;S94-S105

- MacDowell, W & Mitchell, K (2006) Sexual health communication. In Ingham, R & Aggleton, P (ed) *Promoting young people's sexual health. International perspectives*. New York: Routledge

DiCenso (2002) and her fellow researchers studied 22 reports which described a total of 26 interventions to prevent unplanned pregnancy, with randomly selected young people and control groups.

The review showed that the interventions did not lead to the desired result: they did not postpone first intercourse, did not increase the use of contraceptives and did not reduce the number of pregnancies. In five cases – four of which aimed to promote abstinence – the number of pregnancies actually rose. An exception to this depressing result was found in a study of an intervention programme that took a broad approach, which showed a significant fall in the number of pregnancies. There were, however, some differences between the study group and control group, which may have led to an excessively positive result. This made it difficult to draw conclusions from this study.

In their final discussion, the authors consider the need for more long-term perspective on prevention and also the need to see the link between different types of risk factor and risk behaviour. For example, they note that a long-term evaluation of eight different trials with day-care activity for socially vulnerable children pointed to a lower number of pregnancies in these children when they became teenagers. They also note positive results of interventions aimed at prevention of alcohol and drug use in young people, and consider that lessons could be learned from such contexts.

The authors close by urging input from young people in the planning of preventive measures. They say that none of the intervention programmes they studied had the objective of making good sexual relationships possible. They end their article by noting that:

> Sexual exploitation, lack of mutual respect, and discomfort in voicing sexual needs and desires are common problems in adulthood. Interventions to help adolescents learn about healthy sexual relationships need to be designed and evaluations of these interventions that follow the adolescents into adulthood should be done (DiCenso et al. 2002:324).

Mullen (2002) and colleagues looked at 16 different publications which studied the effects of HIV prevention interventions in sexually active young people. The review points to a generally positive result (primarily greater condom use) from these measures. At the same time, the authors warn that the results should not be interpreted too optimistically and say that on the basis of the

skewed distribution of studies that they have found, it might be the case that studies with more negative results have not been published.[3]

The overall results of the 16 studies in the review, however, show "a significant protective effect of interventions aiming at safer sexual behaviour" (p.100).[4] This result applies to classroom-based interventions and others, and is, according to the authors, in line with conclusions in other overviews in the field to which they refer.[5]

On the basis of these results, the authors recommend that preventive measures be based on experience of successful programmes. They also say that interventions carried out in ethnically homogenous groups show the best results. They discuss whether this can be seen as an indicator that discussions about sensitive subjects have greater effect in groups with a common perspective in these issues. Their conclusion is that in future research, attention should be paid to the context in which an intervention is carried out and that interventions that have proven effective should be used with some adaptation to local conditions and the target group in question, but without moving away from their basic design.

MacDowell & Mitchell's text is a contribution to the anthology *Promoting young people's sexual health. International perspectives* (2006). The anthology contains a number of interesting contributions; the only one presented here, however, is MacDowell's & Mitchell's *Sexual health communication: Letting young people have their say*.

Here, the authors discuss how social constructs and "scripts" about sexuality create the context for how preventive messages can be communicated, and what the chances are of reaching young people. They begin the presentation of their conclusions by noting that there is currently almost complete consensus that information is not enough to change behaviour. After that, they discuss the importance of basing different conclusions on theories of behavioural science, but say at the same time that this must be combined with an awareness of, and adaptation to, the social context in which an intervention is

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3. The 16 studies that the research team found have a distribution indicating a "gap" with respect to studies with negative results. The researchers' view is that the explanation for this gap is that such studies may have been done, but not published.

4. Some studies differ from the majority and show no positive results. Overall, however, results are positive and indicate that interventions should continue.

5. The overviews to which they refer are Santelli et al. (1999) *Sexually transmitted diseases, unintended pregnancy, and adolescent health promotion*. Adolesc Med 1999;10:195-209. Rotheram-Borus, MJ et al: (2000) *Prevention of HIV among adolescents*. Prevention Sci 2000;1:15-25. Kim, N et al (1997) *Effectiveness of the 40 adolescent AIDS-risk reduction interventions: a quantitative review.* J Adolesc Health 1997;20:204-15.

to be carried out. A deeper understanding of the importance of context also means an understanding of the multifaceted factors that impact on human health. This, in turn, leads to the conclusion that interventions must also be multifaceted and multidimensional if they are to be able to reach different types of people in different contexts and situations.

The authors also discuss the mass media which, through its enormous expansion and potential to reach people, is an important information channel about safer sex. They point to the example of a HIV/AIDS campaign, which through MTV reached almost 800 million households around the world, and note that if just one per cent of these viewers was influenced by the campaign then that is still a large number of individuals.

One section of the text discusses "peer education" and its pros and cons. Peer education is a cheap method that is based on the fact that "like listens to like". It is founded on commitment among the young people themselves, and can have a number of positive effects, both for the peer educators and for those they are trying to reach. There are, at the same time, difficulties inherent in the model. Young people may, for example, tend to disbelieve information from peers, assuming that they do not know enough about the issue they are discussing, or because they belong to the "wrong" group by youth culture standards.

MacDowell & Mitchell end their text by pointing out that it is crucial, when designing intervention strategies, to understand the importance of theoretical support and social context. Their view is that the mass media and peer education are two strategies which, if part of a multifaceted approach, can contribute to positive change in individual attitudes and behaviours, and in social norms at the overall level of the community.

Environmental factors

In work to design strategies to prevent sexual ill-health among adolescents and young adults, it is key to take into account the social factors that shape ideas about gender, sexuality and relationships. The British researchers Marston & King (2006) carried out a systematic review of 268 publications based on qualitative studies published in English between 1990 and 2004. The aim was to study how social and cultural aspects shape the way young people behave in sexual contexts.

Marston & King distinguish a number of areas which recur in the studies they have reviewed. This allows them to identify seven themes which are central to how young people construct their view of sexuality and how they

behave in sexual contexts. These themes are thus also key to the different types of intervention to try to influence the behaviour of young people.

These seven themes are described by Marston & King as follows:

1. *Young people subjectively assess the risks from sexual partners on the basis of whether they are "clean" or "unclean".* Studies repeatedly showed that young people assess the disease risk of a potential partner on imprecise grounds. They may, for example, proceed on the basis that they know the person socially. They also often think that they can judge whether someone might be infected by external attributes such as behaviour or social position.

2. *Sex partners have an important influence on behaviour in general.* The nature of the partner and the partnership do not just affect condom use, but sexual behaviour in general. For example, sex can be seen as something that strengthens a relationship or as a way to please a partner. Saying no to sex can be felt as a threat to the relationship, and a failed relationship can in turn threaten someone's social position, particularly that of a girl/woman.

3. *Condoms can be stigmatising and associated with lack of trust.* Asking their partner to use a condom may be seen as suspicion. Intercourse without a condom can in the same way be seen as a signal of trust and confidence. In some countries and contexts, suggesting a condom can be taken as a signal that one is an STI carrier. Having condoms, or asking for condoms, can be seen as a sign of sexual experience – something which is undesirable in girls/women, although sometimes desirable in boys/men.

4. *Gender stereotypes are crucial in determining social expectations and behaviour.* All the societies studied had strikingly similar expectations of men's and women's behaviour. Men are expected to be highly active (heterosexually) and women "chaste". Men are expected to seek physical pleasure, but women desiring sex may risk being branded as "loose" or "cheap". In cultures where romantic love is expected to precede marriage (i.e. romance is a prerequisite for sex), girls/women are more governed by this ideology than boys/men. Boys/men are expected to scheme and plot to obtain sex, for example by making girls/women think that a relationship is serious, when it is not.

   Paradoxically, despite the stigmatising effect for girls/women in carrying condoms, women are generally considered responsible for pregnancy prevention.

5. *There are penalties and rewards for sex from wider society*. Social rewards and penalties influence behaviour. Complying with gender expectations can raise social status. Men can achieve higher status by having many partners. Women can do so by appearing respectable and either abstaining from sexual relations or entering into a stable, exclusive relationship with one man. Extramarital pregnancy can be stigmatising, but in some cases it can be an escape route from the parental home. Young people may behave in particular ways through fear of being caught in the act. Sex can also be a way of obtaining money and gifts from a boyfriend, something which is particularly well described for sub-Saharan Africa, but which is not exclusive to the region. The relation between individual motivations and social expectations is complex. For instance, behaviours considered risky or taboo can become desirable for that very reason.

6. *Reputations and social displays of sexual activity or inactivity are important.* Reputations are crucial for social control of sexual behaviour. Reputations are linked to displays of chastity for girls/women and to heterosexual activity for men. Being branded "queer", or "slut" or equivalent can lead to social isolation or even abuse.

   Girls'/women's reputations are damaged by "too many" partners. Even mentioning sex can risk implying sexual experience and damage a woman's reputation. Some women in Nepal feigned ignorance of all contraceptives to preserve their reputations.

   Although direct intergenerational communication about sex is rare, family members may prevent young people socialising with members of the opposite sex, to protect family and individual reputations.

   Young men's reputations can suffer if they are not seen to push for sexual access and numerous female partners. Displaying heterosexual activity can thus be important for them. In Thailand, the Philippines and Cambodia, groups of men generally visit brothels in groups. Young men often report sexual experiences to their peers, sometimes in exaggerated terms, and the first sexual intercourse is often proudly recounted.

   There is often a stigma attached to not having had, or being unable to have, penetrative intercourse. Young men not having sex with their girlfriends may be accused of being "gay". Some young men worry that they will be unable to achieve penetration, and may even avoid condom use for fear of loss of erection.

7. *Social expectations hamper communication about sex.* Social pressures mean that women may not wish to mention sex or acknowledge sexual desires, particularly early in a relationship. Young people often avoid speaking openly to partners about sex. Instead, they use deliberate mis-communication and ambiguity. For instance, women may avoid saying yes directly to sex, in case they seem inappropriately willing. This makes "no" difficult to interpret.

   Young men may avoid discussing sex for fear that raising the possibility may lead to loss of face or hurting others' feelings, or damage to reputation. This makes safer sex difficult to plan: if the possibility of sexual intercourse is not acknowledged, contraception is unlikely to be discussed.

   Young people might also be reluctant to discuss condom use in case it is seen as equivalent to proposing or agreeing to sex. One young man in the UK said the problem with producing a condom was that "you're just assuming that you'll have sex with someone, and you don't know whether they want to have sex with you." Avoiding talk of condom use also keeps the option of refusing intercourse open.

In their summing-up, Marston & King state that there are many explanations other than the obvious ones (ignorance and difficulty in obtaining contraceptives) for why young people do not use condoms. Their view is that social aspects of human behaviour are often overlooked when programmes are being designed. The challenge for the future is to create locally-adapted programmes that take all of these seven themes into account, and which are adapted to the context in which they are to work.

SWEDISH EXPERIENCES

Web searches for Swedish research that can provide knowledge of effective methods in the field yield very poor results,[6] despite the long experience in Sweden of sex and relationships education in schools, at youth clinics, leisure centres, voluntary organisations, etc. There are at least two reasons for this poor outcome.

To begin with, very few proper evaluations have been carried out of the different interventions. There is, for example, no systematic evaluating research which has studied the effects of the sex and relationships education in schools. This is despite the fact that this teaching is probably one of the earliest introduced and most consistently implemented in the world, and is often mentioned in international contexts.[7]

Another factor that makes it hard to find information about any evaluations through Web searches is that few researchers in the field publish in a way that leads to their results being included in various databases of research journals etc.

As a supplement to Web searches, we therefore also contacted individual researchers, organisations and authorities working with sexuality and HIV/STIs. All Swedish county councils were also asked about evaluations of completed interventions. Five of these – Jämtland, Region Skåne, Stockholm, Region Västra Götaland and Östergötland – responded and sent texts.

The texts sent by the five county councils are largely descriptions of activities, collaboration projects, interventions targeting young people, surveying sex and relationships education in schools and so forth.

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6. Searches were made in the databases Sociological Abstracts, Pubmed/Medline, ERIC, GENA and Kvinnsam. Search terms used were various combinations of youth, adolesc*, swed*, sexu*, hiv, sti and prev*. Pubmed/Medline collects papers from over 5,000 scientific journals in the fields of medicine, nursing science, science and odontology. Sociological Abstracts collects articles from over 1,800 sociology and behavioural science journals. These two databases give good coverage of journals in which texts about HIV/STI prevention are published. ERIC relates to papers from over 900 international educational journals. The Swedish database GENA contains theses on gender research. KVINNSAM, also Swedish, is an interdisciplinary database of Swedish and foreign gender science references from the stocks of the Gothenburg University Library, and contains over 100,000 references.

7. Verbal communication, Barbro Lennéer-Axelsson, former President of the International Planned Parenthood Federation/Europe Region.

They contribute important knowledge of the strategies used in Sweden today, but fall outside the scope of this summary since they do not study the effects of HIV/STI preventive measures in the target group as such (see, for example, LAFA 2002 and 2005). Some results gleaned from these texts deserve mention, however, despite not being scientific evaluations. One is "Chlamydia Monday", organised by Stockholm County Council; a broadly based campaign for free testing for chlamydia at a number of clinics around the county. During the week of Chlamydia Monday in 2006, a 35 per cent increase in laboratory testing was recorded in Stockholm. The campaign thus yielded good results with respect to drawing attention to chlamydia and persuading people to be tested (Ådin 2007). The other result is a note from the "We Always Use Protection" campaign from Jämtland county council. In this campaign, young ice hockey players in Jämtland Hockey were recruited as "ambassadors" for greater condom use. The effect of the campaign on the young population as a whole cannot be assessed on the basis of the evaluation, but one interesting aspect is that about 75 per cent of the "ambassadors" themselves, in a follow-up, responded that in private situations (at school, at parties, over a coffee), they raised the issue of condom use with people they met (Wåhlén-Götzman 2007). This result points to an increase in awareness of the subject, at least among those young people who were involved as peer educators. Another activity that is worthy of mention, primarily because of its longevity, is "Youth Counsellors" in Malmö. This activity has been ongoing since 1988, and is praised by young people themselves. One thing they like about it is being able to steer the discussions, and being able to sit in small groups and talk about sex and relationships (aspects that are both in line with international recommendations) (Person et al 2001).

   Other texts produced by the National Institute for Public Health (NIPH) describe different types of experience in the field of sexuality and prevention. These include texts about sex and relationships education in compulsory schools, and evaluations of different campaigns. These evaluations focus on factors such as the extent to which a campaign reached people, how those involved felt about it, and so on. Since they do not study concrete effects in the target group "young people", they fall outside the scope of this report. Examples of such texts are Bolin 1996, Jarlbro 1997, Lennerhed 1996, Falkheimer & Palm 2004 and Falkheimer & Wallgren 2005. Some texts of this type (including the last two) are, however, described in Tikkanen's report on men who have sex with men (2007).

Texts which more directly illuminate the effects of different interventions in the group itself – young people – are:

- Tydén, T., Björkelund, C., Odlind, V., Olsson, S-E., Strand, A. (1994) *Effects of Specially Tailored Information on Swedish University Students' Sexual Behaviour.* Paper in the Journal of American College Health 1994;43:75-79

- Kindeberg, T. (1997) *Undervisningens möjligheter att förändra elevernas tänkande inom området aids och sex* (The ability of education to change pupils' thinking about AIDS and sex). Thesis. Lund Studies in Education 2. Lund: Lund University Press

- Lindblad, I (1996) Swedish Information about HIV and AIDS. A Text Analysis and Reception Study. *In Nordicom Information* 2/1996. Umeå: Department of Media and Communication, University of Umeå

- Sundbaum, B (2005) *Genus, klass och sexualitet – om genus, jämställd-het, sexualitet och samlevnadsundervisning vid några gymnasiers indivi-duella program* (Gender, class and sexuality – about gender, sexuality and education on relationship in the individual programmes of some upper secondary schools). Master Thesis in Public Health. MPH 2005:5. Göte-borg: Nordic School of Public Health.

- Larsson, M., Eurenius, K., Westerling, R., Tydén, T. (2006) *Evaluation of a sexual education intervention among Swedish high school students*. Scandinavian Journal of Public Health, 34(02):124–131, 2006

A further text included in this compilation is

- Nationella kvalitetsgranskningar: Sex och samlevnadsundervisningen (National Quality Reviews: Sex and relationships education). Report from the Swedish Board of Education, 1999.

The Quality Review did not include an evaluation of effects on young people's attitudes, knowledge or behaviour. The reason why this text is referred to here is that it is the only one that has made an overview of sex and relationships education in Swedish schools, education which in its scope and ambition must be regarded as the most central context for promotive and preventive sex and relationships education targeting young people.

Tydén et al. (1994) **Effects of Specially Tailored Information on Swedish University Students' Sexual Behaviour**. Paper in the Journal of American College Health 1994;43:75–79

In 1990, a campaign was carried out targeting university students in the city of Uppsala (about 20,000 people). The goals of the campaign were to boost knowledge of STIs and get students to test themselves, and to create a positive attitude to condoms. The campaign consisted of newspaper articles, jingles on the student radio station, brochures designed especially for the campaign and distributed to students, and posters designed specially for the campaign that were put up in places frequented by students. There were also exhibitions and drop-in talks, and condoms were provided free during the campaign.

Evaluations showed that students developed greater awareness of STIs and of the great prevalence of STIs in their own group (students). However, fewer than one per cent of students went to be tested for STIs as a result of the campaign. The campaign on the whole was well received among students, but did not lead to any changes in attitude.

Kindeberg, T. (1997) **Undervisningens möjligheter att förändra elevernas tänkande inom området aids och sex (The ability of education to change pupils' thinking about AIDS and sex)**. Thesis from Lund University.

In this thesis study, Kindeberg followed 13 teachers and their 15 classes for two years during lower and upper secondary education. They were given instruction on "AIDS and sexuality". The study also included a control group of five teachers and nine classes. Pupils' knowledge, attitudes and readiness to take action were examined on three occasions over the period of two years using questionnaires and in-depth interviews. The project teachers carried out their work independently, but with the condition that the teaching about "AIDS and sexuality" would be in-depth and should recur regularly throughout the two years. The teachers documented all training and answered questions about their own role as teachers on two occasions. The teachers in the control group had a free hand, which meant that the four upper secondary classes did not receive any instruction on "AIDS and sex" during this period and that the teaching in three of the five compulsory school classes consisted of three weeks' work in grade 8 with two lessons of follow-up in grade 9.

After one year, at the second follow-up, there were no differences between "project classes" and "control classes" with respect to factual knowledge, attitudes or preparedness. This result surprised the participating teachers and

the researcher. Analysis of the in-depth interviews after the first and second occasions showed that the pupils did not think that the teachers had been sufficiently credible in their communication, and so the pupils had not found the teaching meaningful. It transpired that the teachers had relied on various methods and aids instead of seeing themselves as an important resource.

> "For teachers, communication is often associated with a choice of methods. […] Choice of methods is often regarded as being decisive in how you succeed in your teaching, and has gained much higher prominence in educational research than has the teacher's ability to communicate. […] It is rarer for focus on communication to deal with language as an expression of thoughts and feelings that gain meaning in interactions with others. Communicating, then, is more about practising social interplay" (1997:154–155).

Research in recent years has come to clearly focus on the teacher's professional personality and its importance for pupils' learning. The study shows that a number of teachers during the year became better at creating a credible relationship with their pupils. This change in the project teachers affected pupils' readiness to take action in a positive direction. The primary change was in pupils' thoughts about their personal responsibility in situations where there was an infection risk. The thesis then discusses qualities in the verbal relationship between teachers and pupils, and its importance in the feelings that are created in the actual teaching situation. Kindeberg writes:

> "In-depth teaching requires the teacher to be prepared to provide guidance on the basis of his/her experience and values. It is not enough to examine terminology. If pupils are to feel touched, teachers must create a sense of inquiry about their own experiences and those of others" (1997:138–139).

She continues:

> "In an in-depth teaching situation, the teacher knows how the subject is to be applied. The teacher is knowledgeable and aware of his/her own positions. The teacher has a personal commitment and relates subject terminology to real situations. The pupil is touched, and responds to the teacher with his or her own experiences" (1997:171–172).

Kindeberg's key conclusion, then, is that the teacher's ability to create a credible and trusting relationship with pupils is crucial if the teaching is to be able to "promote a process of change and affect the pupils' action-oriented thinking" (1997:171).

Lindblad, I (1996) **Swedish Information about HIV and AIDS. A Text Analysis and Reception Study**. In *Nordicom Information* 2/1996. Umeå: Department of Media and Communication, University of Umeå

This 1996 text analysis and reception study is based on three different types of data material:

1. A review of information and campaign materials about HIV and AIDS produced by the National Institute for Public Health;
2. A questionnaire answered by 406 18-year-olds and 50 adult students;
3. Small group interviews with a total of 60 young people (18 years old). The purpose was to examine where young people obtain their knowledge of HIV/AIDS, how the information affects them, and how they themselves communicate on these issues.

Lindblad notes that many of the young people are critical of the information they receive, and that it is hard to reach them. What young people want, among other things, is clear information about the risk of becoming infected "here and now", and the author's view is that a lack of this type of information helps create a lack of confidence in the value of information from public authorities. One conclusion is that information should be designed in close collaboration with each respective target group. Text and images should be clear and straightforward, unambiguous and adapted to the youth culture they are intended for. Another conclusion is that young people do not want to be told how to act, but instead want complete factual information and knowledge, and then to be trusted to use it as a basis for their own informed decisions. Lindblad writes: "In short, information should be more descriptive, and less prescriptive" (1996:11).

Sundbaum, B (2005) **Genus, klass och sexualitet – om genus, jämställdhet, sexualitet och samlevnadsundervisning vid några gymnasiers individuella program (Gender, class and sexuality – about gender, sexuality and education on relationship in the individual programmes of some upper secondary schools).** Master's Thesis in Public Health. MPH 2005:5. Göteborg: Nordic School of Public Health

In this Master's thesis in Public Health, an extra element of sex and relationships education was implemented and studied at six upper secondary schools

with individual programmes[8] in different parts of the country. Seven matching schools acted as a control group. The element comprised 15-20 lessons on sex and relationship, and its effects were measured by a questionnaire before and after. Pre-measurement, intervention and post-measurement took place in October–December 2001. The project is not described in detail in the text, but it is clear that the participating teachers were given a special introductory course which included discussions of their own values. During the course, the teachers worked in gender-specific groups, alternating with discussions and lectures in the whole group. Sundbaum writes: "The course was based on the same educational methods that the teachers were expected to apply in the practice lessons, in that the personal experiences and views of the participants were an important foundation" (2005:19).

Results of the evaluation do not show any significant differences between test and control schools in the aspects that were measured. In the result report, Sundbaum therefore notes that: "The study thus does not lend any support to the idea that time-limited sex and relationships education with a gender equality perspective generally affects pupils' attitudes, ability to communicate on sexual issues or contraceptive use" (2005:30).

Larsson, M., Eurenius, K., Westerling, R., Tydén, T. (2006) **Evaluation of a sexual education intervention among Swedish high school students**. Scandinavian Journal of Public Health, 34(02):124–131, 2006

An intervention focusing on four upper secondary (high) schools in two medium-sized Swedish towns was carried out in October 2002–December 2003. Four other upper secondary schools functioned as a control group. The intervention was provided for a total of 461 pupils studying on vocational programmes.[9] The intervention dealt with condom use and emergency contraceptive pills ("morning-after pills") and began with a twenty-minute lesson on morning-after pills. A week or so later, there was a 40-minute session with information providers from the "Love Emergency Clinic".[10] These sessions, which were largely about condoms and condom use, were led by a female and

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8. The upper secondary individual programme is one which brings together pupils who have not passed all subjects, who lack motivation to study or for various reasons have dropped out of studies on one of the established national programmes.

9. The initial questionnaire was answered by 390 pupils (85 per cent). After one year, 23 pupils had moved and of the remaining 367, 326 (89 per cent) answered the concluding questionnaire.

10. The "Love Emergency Clinic" is a voluntary sex education project run by medical students and exists in all towns with medical schools.

a male information provider and the educational tools used were warm-up exercises, values exercises, discussions and dramatisation of situations. Groups were mixed-gender and single-gender. Apart from this, pupils were given a "VIP card" which entitled them to free condoms from the school nurse during the year of the intervention, and they were also given the phone number of a midwife whom they could call for individual advice on contra-ception.

The results of the intervention demonstrated that the pupils had good knowledge of condoms when the intervention began, and that it thus did not add anything in this respect. One change, however, was that "friends" was ranked as the first information source before the intervention, while after the intervention a majority ranked "school" first. Some attitudes to condoms did not change: sixty per cent felt that producing and putting on a condom ruined foreplay, and 88 per cent felt that sex is better without a condom. Other attitudes were affected however in the intervention group compared to the control group, such as the attitude that a condom is solely the man's responsi-bility and that it is embarrassing to buy condoms. Condom use increased somewhat, and there were also more in this group who thought that they themselves had become better at talking about condoms and found it easier to buy them after the intervention.

Nationella kvalitetsgranskningar: Sex och samlevnadsundervisningen (National Quality Reviews: Sex and relationships education) (1999).

The quality review of sex and relationships education was carried out in the autumn of 1999 by the Swedish Board of Education, and consisted in 13 edu-cational inspectors studying a total of 80 schools (51 compulsory comprehen-sives and 29 upper secondaries) in different parts of Sweden. The inspectors studied the quality of education from five perspectives, and in the final analy-sis the eighty schools fell into three groups (groups 1, 2 and 3). The Quality Review did not include an evaluation of effects on young people's attitudes, knowledge or behaviour.

The review found that there are often no local written objectives for sex and relationships education. There is a great lack of control by head teachers, so no consistency in the quality of teaching is achieved. They found that "the results from all schools showed wide variation, not only between schools but also within individual schools" (p. 52). The review also points to a need for more evaluations of completed interventions. They also write that "because

objectives are largely lacking at from all levels, it has been difficult to assess quality and results of the education that the pupils receive" (p. 97).

The content of sex and relationships education is also discussed. They note that "teaching at the schools studied is more often informative than exploratory" and that "at a number of schools, teaching is stuck in a traditional knowledge-conveying role and does not see that important knowledge is generated in the dialogue itself" (p. 83).

The review highlights a number of perspectives which the international reviews note are key to effective preventive work. For example, they make particular mention of schools that use a *varied work method* – theme work, theatre, drama, role plays, value exercises, films, discussions in large and small groups; *gender awareness*, in which the differing needs of girls and boys are discussed in discussions in single-sex groups (p. 83). They stress the importance of *pupils having influence* – that they are able to influence the teaching and that one of the points of departure of the review is that sex and relationships education is to be based on a "classroom atmosphere characterised by dialogue".

They provide examples of how pupils sometimes are allowed to write down various themes that are later to be raised in the teaching, and write:

> "But if the pupil writes 'contraception', it is up to the teacher whether the pupils will be "informed", or be provided with time for reflection in which "contraception" can be set in relation to the young person's own thoughts about sexuality, insecurity, fears, etc." (p. 85).

The study stresses the importance of finding a balance between *promotion* and a *risk* or *disease perspective*. One of the difficulties described by teachers in the interviews is being able to balance the dark and light sides of sexuality and sex and relationships – the desire, joy and energy of sexuality in interpersonal relationships, but also disease, unwanted pregnancy, violence, abuse and death. What is crucial in raising the quality of sex and relationships education, according to the study, is control by head teachers of *targets*, skills acquisition, follow-up and documentation. Very few schools fulfilled the control target, so few were in group 1.

The quality review formulates a number of proposed measures, and its final section is provided here in full:

> "The results of the review thus provide reasons for taking steps at a number of levels. At national level, there is a need to clarify and develop the area of knowledge about sexuality and relationships.

At local level, we also need skills-developing measures suitable for the diverse needs of different personnel categories. In such measures, the results of many knowledge and research fields must be reformulated so that they become educational tools to teach children and adolescents. The review also points to the need of skills acquisition measures to develop work methods in the field, but also the confidence necessary to teach in a field that school heads and teachers may feel a lack of confidence about.

This ties in to interventions that can be immediately undertaken at local level, since skills acquisition can be initiated internally too, by utilising existing resources among teaching staff. Schools must also put systems in place, and document what is done at their own school, and come together to formulate clear goals and plans for sex and relationships education. Pupil participation in planning and follow-up of the teaching provided is also a clear task. The joint work in the teaching group, combined with control and coordination by head teachers, can make sex and relationships issues the interdisciplinary knowledge field they should be" (p. 99).

These proposed measures are all in line with the conclusions of international research reviews. They are also consistent with Kindeberg's conclusions (see above).

Sweden – a Part of the World

As already described, Sweden has a long tradition of work in the field of sexual health, in the broad sense of the term. Knowing the many aspects of this work, and the experiences gained, it is remarkable how invisible it is in the international overviews, and it is also striking how few texts have been published in other countries by Swedish researchers and other actors.

Can we, then, say anything about more overarching effects of the work conducted by various actors in Sweden? On a few occasions, the international reviews make sweeping references to northern European or Swedish results as "promising". One such example is the report "Effective Health Care" (1997), which contains the passage:

"Research from northern European countries indicates that openness regarding sexuality, educational measures and their content, and access to contraceptive advice contributes to lower figures for teenage pregnancy" (p. 3).

Another section in the same report makes particular mention of a "promising interdisciplinary project" which has not yet been evaluated. This project "is based on a Swedish model in which school teaching is combined with group study visits to local clinics" (p. 4).

A 2001 article (Ahlberg et al.) compares young people in Kenya and Sweden.[11] The authors say that the most striking differences between the two countries are young people's knowledge of sexuality and their ability to talk openly and freely about these issues. They write that the great lack of knowledge of basic issues, misunderstandings and lack of information prevalent among Kenyan adolescents is alarming. The authors' conclusion is that this is a result of the silence that surrounds sexual issues in Kenya, of which they are highly critical. They do, however, see similarities between Swedish and Kenyan adolescents, including in the gender roles which hamper communication, and in the way in which social standards control communication and behaviour in sexual relations.

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11. The article does not describe evaluations of any particular measures, and is therefore not included in this summary; it is, however, still of interest in our context.

CONCLUSIONS

A number of the international reviews bring up similar themes, and their conclusions are very similar. At the same time, they are expressed differently and it is, in some cases, hard to summarise their results. Basic starting points, however, are that young people learn about sexuality from a number of different sources, but also that it is possible to learn safe and responsible sexual behaviour.

In the reports, it is often unclear *what* it is about an intervention that has effects in the target group. This is partly because of the overarching level at which the international reviews are working – the discussion is, so to speak, too far from the actual interventions for them to be able to provide concrete descriptions of them. This is also in part a more general problem which has been raised by the WHO report and others, where it is discussed as a recurring problem in the evaluations of individual projects studied (2006:333).

A systematic review of the various recommendations of the international reviews and of the experiences gleaned in Swedish contexts can, however, be organised into the following themes:
* Young people as a target group
* Actors and arenas
* Intervention structure
* Content of interventions
* Communication
* Evaluation

In the presentation of these six areas, given below, the themes highlighted by the reports studied are shown in bold italics. The subsequent discussion provides some thoughts on the various areas, from a Swedish perspective.

Young people as a target group

From a population perspective, young people are the age group that is central to HIV/AIDS prevention work (WHO 2006).

The seven areas defined by Marston & King (2006) deserve repetition here, since **it is vital that they are taken into account when designing intervention strategies targeted at adolescents in general**.

- Young people assess "risk" with respect to sexual partners on the basis that they are "clean" or "unclean";
- Sexual partners have great influence on sexual behaviour in general;
- Condoms can be stigmatising, and associated with lack of trust;
- Gender stereotypes determine social expectations and behaviour;
- There are penalties or rewards for different types of sexual behaviour at community level;
- Reputations, and social display of sexual activity or inactivity, are important;
- Social expectations can hamper communication about sex.

A number of the reports also point to the fact that young people are a hetero-geneous group and that **interventions must be designed for the specific needs of each smaller group**. Circumstances of particular note are sex, age, cultural background and sexual experience. It is also noted that well-implemented intervention programmes help delay first intercourse, and that those who have not yet debuted sexually are more affected by various inter-ventions than those young people who are already sexually active. At the same time, two review articles [Impact of HIV and sexual health education on the sexual behaviour of young people (1997) and Mullen et al. (2002)] show that measures directed at the latter group have also yielded good results.

More overarching interventions which are also needed are broad develop-ment programmes to support young people on their road to adult life: guidance, mentorship, discussion in small groups with caring adults, readily available health care, various stimulating activities and measures to promote youth employment.

Young people most at risk

It is a well-known fact that every generation of young people contains a small group of individuals who, often for psychological or social reasons, are more at risk and also put themselves at risk more than their peers do (see, for instance, Berg Kelly 1998). With respect to HIV, young men who have sex with men are another group most at risk. It is important to pay attention to these groups and **draw up strategies to reach them and create interven-tions that can appeal to them**.

In some of the international reviews, there is a hint of programmes focus-ing specifically on groups at risk having achieved clearer effects than those focusing more generally on "all" young people. This applies regardless of

whether young people at risk are included in the MSM group[12], are socially vulnerable (e.g. the subject of measures by the social services) or already HIV positive. The 2006 WHO report notes that measures focusing on groups most at risk have often proven effective, but their view is that these results, more than has been the case so far, should be discussed on the basis of different age categories in the groups most at risk.

The report *No Easy Answers* (Kirby 1997) discusses why some of the studied programmes – namely, those focusing on young black people – yield better results than others. The author notes that HIV in heterosexuals is more common among blacks than among whites or Hispanics, and says that one result of this "may be that young black people are more receptive to HIV/ AIDS information" (p. 27).

Actors and arenas

The international reports are in almost total agreement in their conclusions about **the school as the central arena** for education about sexuality and relationships.

School is the place where practically all young people can be reached, and it is those programmes which are implemented as a defined teaching situation which appear to yield results in the shape of a lower degree of risk-taking among young people. The work done in schools is later reinforced by implementing measures in the other local and social contexts in which the young people live, and which are in line and dovetail with the school-based work. This means that youth clinics, youth clubs and other clubs should be brought on board and **that different actors working together** can improve the chances of success of intervention programmes. It is also an advantage if the actors working together have **differing backgrounds** in theory, research and training about sexuality and HIV. They also stress the importance of **outreach work**, in schools and in the community at large. **Peer education** is an area with potential, but it needs to be developed and carefully studied before going on to large-scale implementation.

Access to contraception – in this case, condoms – knowledge of where to obtain contraception and **easily-accessible clinics** are presented as key aspects of effective preventive work. These clinics must also be **adapted to the specific needs of young people** with respect to opening hours, specially trained

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12. MSM is a generally-used abbreviation in work with sexual issues, and stands for Men who have Sex with Men

staff and other factors, and they are need to attend to non-medical needs and be able to involve partners in their work.

At community level, the effects of **mass media information** and campaigns should not be underestimated. Although there is no evidence that they can affect circumstances such as the number of partners or the age of first intercourse, the results of the evaluation do show that they affect knowledge of how HIV infection takes place, condom use and some social standards, and that they encourage discussion about HIV/STI and awareness of clinics for advice and care.

Intervention structure

A number of the review reports discuss frameworks and conditions for intervention programmes. They point to the importance of interventions being **designed for local conditions, broad in their approach and taking place over a long time**. Two of the reports also provide specific recommendations with respect **to the scope** that an intervention should have. Their view is that at least 14 hours' total work is required, or that the work takes place in smaller groups with their own leaders.[13] It is also important **to deal with different subjects in a logical order**.

The reviews also point to the requirement that staff who are to work on the intervention must be provided with adequate **training** to implement the specific programme or activities. They also raise an additional aspect, which is not just that staff should receive training, but that it is also important that those working with an intervention are also genuinely **interested** in it.

They also stress that it is important, when an intervention programme has been designed, to also **complete it as scheduled**. This fosters stringency in the work and allows the opportunity to evaluate it. Fulfilling a specific programme must not, however, prevent adaptation to the target group in question.

Finally, they underline the need **to gain and build support from the relevant authorities**, and to design interventions that are in line with the overall values of the community and which have the necessary resources in terms of money and staff. In some cases, they may also have **to overcome resistance** from the young people themselves, or from their parents, before an intervention can be implemented.

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13. The two reports that specify the time frames are Kirby 1997 and UNAIDS 1997. Both refer to the research by Kirby, who initially formulated these recommendations on the basis of previous reviews of the field.

Content of interventions

With respect to the actual content of preventive interventions, the reviews describe a number of different aspects that are included in successful programmes.

To begin with, several of the international reviews discuss interventions that have not yielded results. They note that **messages about abstinence, for instance, do not lead to abstinence or delayed first intercourse**. Some studies actually indicate the opposite. They also say that **access to contraception and teaching about sex and sexuality does not result in young people becoming more sexually active**, something which is sometimes asserted by opponents of such measures.

What is important is that the interventions are **based on knowledge that is grounded in theory**. Examples given are social theory[14] and cognitive theory. On the other hand, however, they emphasise the importance of basing various interventions on **the wishes and views of the young people** themselves and in producing interventions in an interplay with young people. Both these aspects should thus be taken into account when designing interventions.

Effective interventions also contain **strategies and activities to counteract some social messages**, such as those that exist in the form of peer pressure and messages in some media, and which can encourage unprotected sex. Instead, there is an attempt to strengthen the purpose of the intervention and **develop group norms against unprotected sex**, using age-appropriate discussions about values. Young people also need **practice in interpreting media messages** and the ideology and assumptions underpinning them.

Against the background that insights on a phenomenon do not necessarily govern how an individual acts, it is important to **focus on behaviour**, not knowledge and attitudes. It is important to **define health targets, risk factors and protective factors**, and to **work on as many as possible of these factors** that affect sexual behaviour, but at the same time make an effort to produce a limited number of messages about them, and **not provide too much information** about each message.

The messages given in the intervention must, on this basis, be **clearly formulated**, regardless of whether the message is about how different contraceptives work, where they can be obtained, or whether arguments are being presented for using condoms. Finally, it is important to be clear in information about **the negative effects of unprotected sex** and **to convey an idea of**

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14. "Social theory" is unfortunately not specified more closely in the texts.

what type of behaviour is desirable – protected intercourse for example – with the objective of avoiding such negative effects.

Communication

What, then, works in the actual interventions? What is it that means that individuals or groups can be reached in such a way that they choose to act differently than they would have done? Few of the international reviews provide a clear answer to this basic question. At the same time, some of their conclusions are about concrete teaching methods. This is also discussed in some of the Swedish texts, which, not being reviews, discuss on a level that is closer to practical work.

The international reviews and the Swedish studies both stress the importance of **creating a secure social environment** which also makes it possible to work with **active and involving teaching methods** in interventions. Examples presented include dialogue and discussion of different issues, evaluation exercises, role play or dramatisations and study visits to youth clinics.[15]

They also hold the view that it is key to have **open communication** about sex and an **awareness of how different messages are communicated** to achieve a situation in which young people think at a personal level about how different actions can have different consequences, communication that reaches each individual on the basis of his or her own situation, thus enabling them to personalise the information.

Here, it is worth repeating Kindeberg's key conclusion that the **teacher's ability to create a credible and trusting relationship** with pupils is crucial if the teaching is to be able to "promote a process of change and affect the pupils' action-oriented thinking" (1997:171).

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15. The international reviews do not mention youth clinics, but rather family planning clinics in general.

Evaluation

To develop more successful and stable intervention strategies, all reviews **ask for more consistent evaluation and research** into different interventions and intervention programmes. They also ask for interventions to be carried out in the form of **pilot projects** which are evaluated before decisions on large-scale implementation. The WHO report on HIV prevention in developing countries warns against drawing the conclusion that programmes that have not attracted much attention or been widely implemented are less effective than those that have "made it". Here, they draw attention to the need to design interventions in a way **that enables evaluation**, and the importance of **ensuring that evaluation actually takes place**.

The WHO report also reviews the various difficulties associated with evaluating HIV prevention measures. These were mentioned in the presentation in Chapter 4 of the report, but bear repetition here. For example: they note that **interventions to prevent HIV are complex, and that it is difficult to measure interventions targeting young people**, not least because it is difficult to distinguish the effects of an intervention from the effects of other phenomena in the lives of adolescents. Interventions targeting individuals differ from those at community level, a factor which **makes it difficult to standardise evaluation strategies**. The context in which an intervention takes place can impact on the result, which is **why evaluation results are not always generalisable. Research results can also be understood in different ways**, not least due to the disciplinary background of the recipient.

At the same time, the reviews agree that **interventions should be evaluated** and that new **interventions and programmes should be based on systematically evaluated experience** of previous measures. Recommendations for systematic evaluation can be found in Chapter 4 of the WHO report. They are also repeated in this report.

DISCUSSION

The aim of this project was to search for effective types of intervention with respect to HIV/STI prevention targeting young people. The project consisted in reading five international reviews on prevention in the field of sexual health and searching for, and studying, corresponding Swedish material in this field. During the work, some other international texts have also been added to the assignment.

It is natural that there should be a clear difference between the international reports, which each consist of summarising reflections on a large number of studies, and the Swedish ones, which consist of delimited studies in a Swedish context. It is also natural that conclusions drawn in the international reports must be read and transposed to Swedish circumstances.

What, then, are these Swedish circumstances? How do Swedish young people act on issues to do with sexuality and relationships? What is the profile of the target group "young people" in Sweden? What opportunities are there in Sweden to work on HIV/STI prevention with this target group?

The headings **Environmental factors** and **Young people as a target group** present seven themes which come from studies from around the world defined by the researchers Marston & King (2006). The authors support each theme with a number of international references. What is the relevance of these seven themes to Swedish conditions? In large areas of the world, the view of teenage sexuality, and above all perhaps the view of that of girls and young women, is more restrictive than Sweden's (see e.g. Lewin 1991 and Forsberg 2005).

Despite this, the seven themes discussed by Marston & King are also clearly familiar in Swedish contexts. For example, a review of Swedish research into youth and sexuality found that gender is of crucial importance in circumstances and experience of sexuality – including in Swedish contexts (Forsberg 2006). These seven themes should thus be carefully taken into account in designing strategies for HIV/STI prevention, as in other contexts where work is being done to promote sexual and reproductive health.

The discussion about particularly vulnerable or adolescents at risk is also familiar in Sweden. In each young generation, there is a small group of young people who are more vulnerable to various types of risk and who also take more risks than their peers. This is a key group to work with.

Another perspective on risk-taking is that generations differ from each other. For example, various data indicate that those who were young in the 1980s acted with greater care in various respects (alcohol, drugs, sexual risks) than earlier and later generations of young people. International experience shows that mass media information and campaigns yield some preventive results. Against this background, there is reason to ponder whether the HIV prevention campaigns in 1980s Sweden may partly explain the "caution" of young people in this decade (cf. Swedin et al. 1994).

From the early 1990s, however, this development is reversed and research shows that subsequent generations of young people are moving towards greater risk-taking, for example in sexual relationships. Expressions of this risk-taking are greater acceptance of intercourse outside an established relationship, more partners, and more young people who have experience of sex "on the first date" (Herlitz 2004). In the early 21st century, then, we have a generation of young people who in a historical perspective are taking increasing risks in a sexual context (Forsberg 2006).

What opportunities do we in Sweden have, against this background, of turning experience in Sweden and other countries into successful prevention work?

To start with, a number of the international reviews stress two conclusions which in the Swedish debate have been generally accepted for many years. One is that more discussion of sex does not lead to young people becoming more sexually active. The same assumption, that education on sexuality would risk "waking the sleeping dogs", has also been expressed in Sweden, but this is a discussion which belonged to the early and mid-20th century [Lära, leva tillsammans (Learn, live together), 1982]. Those active in the field have subsequently been largely in agreement that "the dogs are not asleep anyway". The other conclusion is that messages about abstinence are ineffective and sometimes directly counterproductive. This conclusion is also familiar in the Swedish debate. The basic assumption in Sweden has long been that most young people begin sexual activity at some point in their teen years, and that the task of society is to make this a safe and secure experience, through sex and relationships education, the provision of effective contraceptives and other measures. These two conclusions, which in Sweden grew from practical experience of issues of sexuality and sex, are confirmed here by international research.

With respect to the theme of **Actors and arenas**, the long tradition of promotion and prevention that exists in Sweden is clearly apparent in a reading of the international reviews. Many other countries often have considerably

poorer access to various types of social services intended to meet the needs of young people.

International reviews urge systematic work within the framework of the school system. Sweden has had such a system for about fifty years. Interventions against HIV/STI are a key part of this broadly-based sex and relationships education. It is worth mentioning that pupil health is not mentioned in the international reports, whereas pupil health services are a clear and key factor in the context in Sweden.

International reviews urge the establishment of easily-accessible clinics with staff who have been specially trained to deal with young people, and contraception provision. Over the past two or three decades, a large number of youth clinics have been set up in Sweden to deal with the needs of young people in particular. These clinics today are a relatively well-established part of society's range of support and advice to young people. International reviews confirm that this has been a correct step, which it is important to safeguard and develop in the future. The reviews also stress the importance of collaboration between different actors in the field.

In other areas – **Intervention Structure, Content of Interventions and Communication**, the international reviews and Swedish texts point to the needs and orientation of future Swedish development work. In many contexts, work takes place which, for example, fulfils the requirement for active and involving educational methods, and many places have established forms of collaboration between different actors, and so on. Despite this, it is clear that this is not the case everywhere, and the national quality review of schools asks for more systematic work on sex and relationships issues.

With respect to **Evaluation and Research**, it is necessary to evaluate various measures in a clearer and more consistent way, and also highlight Swedish experiences for presentation and discussion in the international arena.

Within these four concluding themes, there is, in brief, much to be done, based on the recommendations presented under *Conclusions.*

REFERENCES

Ahlberg, B M, Jylkäs, E, Krantz, I (2001) Gendered constructions of sexual risks: implications for safer sex among young people in Kenya and Sweden. In *Reproductive Health Matters*, Vol. 9, No. 17, May 2001

Andersson-Ellström (1996) *Sexuality and sexually transmitted diseases in young women*. Doctoral thesis. Department of Obstretics and Gynecology, East Hospital, University of Gothenburg, Gothenburg, Sweden and Centre for Public Health Research, County Council of Värmland, Karlstad, Sweden

Berg Kelly, K (1998) *Ungdomsmedicin*. Stockholm: Liber

Bolin, A (1996) *Operation Närskydd – om sexualitet, manlig identitet och hiv/STD-prevention i värnpliktsutbildningen*. Folkhälsoinstitutet utvärderar 7/1996. Stockholm: National Institute of Public Health.

DiCenso et al (2002) Interventions to reduce unintended pregnancies among adolescents: systematic review of randomized controlled trials. *BMJ* Vol 324 15 June 2002

Effective Health Care. Preventing and reducing the adverse effects of unintended teenage pregnancies. (1997) NHS Centre for Reviews and Dissemination, University of New York 1997. Vol 3 number 1 ISSN:0965-0288

Forsberg, M (2005) *Brunetter och Blondiner. Om ungdom och sexualitet i det mångkulturella Sverige*. Doctoral thesis. Göteborg: Department of Social Work, Göteborg University.

Forsberg, M (2006) *Ungdomar och sexualitet. En forskningsöversikt år 2005*. Rapport R 2006:18. Stockholm: National Institute of Public Health.

Herlitz, C (2004) *Allmänheten och hiv/aids. Kunskaper, attityder och beteenden 1987–2003*. Rapport 2004:7. Stockholm: National Institute of Public Health.

Impact of HIV and sexual health education on the sexual behaviour of young people. A review update.(1997) UNAIDS/97.4

Jarlbro, G (1997 *Sex- och samlevnadsundervisning i grundskolan*. Rapport 1997:18. Stockholm: National Institute of Public Health.

Kim, N et al (1997) Effectiveness of the 40 adolescent AIDS-risk reduction interventions: a quantitative review. In *J Adolesc Health* 1997;20:204-15.

Kindeberg, T (1997) *Undervisningens möjligheter att förändra elevernas tänkande inom området aids och sex*. Thesis. Lund Studies in Education 2. Lund: Lund University Press

Kirby, D (1997) *No Easy Answers. Research Findings on Programs to Reduce Teen Pregnancy.* Washington DC: The national Campaign to Prevent Teen Pregnancy

LAFA 1:2005 *Sex och samlevnadsundervisning i skolan. En kartläggning av sex- och samlevnadsundervisningen på sju högstadieskolor i Stockholms län.* Stockholm: Landstinget förebygger aids (Lafa)

LAFA 2:2002. *Kondumutdelare. Praktiker och uppfattningar hos Lafas kondomutdelare I Stockholms län.* Stockholm: Landstinget förebygger aids (Lafa).

Larsson, M., Eurenius, K., Westerling,R., Tydén, T. Evaluation of a sexual education intervention among Swedish high school students. *Scandinavian Journal of Public Health*, 34(02):124-131, 2006

Lindblad, I (1996) Swedish Information about HIV and AIDS. A Text Analysis and Reception Study. In *Nordicom Information* 2/1996. Umeå: Department of Media and Communication, University of Umeå

Lära, leva tillsammans, Ministry Publications Series S 1982:8 Stockholm: Ministry of Health and Social Affairs

Lennerhed, L (1996) *Att förebygga oönskade graviditeter och sexuellt överförda sjukdomar. En lägesrapport.* Rapport 1996:115. Stockholm: National Institute for Public Health.

Lewin, B. (1991) *Att omplantera sexualiteten. Om latinamerikanska ungdomars sexuella socialisation i Sverige.* Uppsala:Uppsala University, Department of Sociology.

MacDowell, W & Mitchell, K (2006) Sexual health communication. I Ingham, R & Aggleton, P (ed) *Promoting young people's sexual health. International perspectives.* New York: Routledge

Marston, C; King, E (2006) Factors that shape young people's sexual behaviour: a systematic review. *The Lancet* vol 368 Nov 4, 2006

Monasch, R & Mahy, M (2006) Young people: the centre of the HIV epidemic. In *Preventing HIV/AIDS in young people. A systematic review of the developing countries.* WHO Technical Report Series 938. WHO

Mullen, PD, Ramírez, G, Strouse, D, Hedges, LV, Sogolow, E (2002) Meta-analysis of the effects of Behavioral HIV Prevention Interventions on the Sexual Risk Behavior of Sexually Experienced Adolescents in Controlled Studies in the United States. *JAIDS Journal of acquired Immune Deficiency Syndromes* 30;S94-S105

Novak, D, Karlsson & R B (2005) Gender differed factors affecting male condom use. A population-based study of 18-year-old Swedish adolescents. In *International Journal of Adolescent Medicina Health* 2005; 17(4):379 – 390.

Oakley, A, Fullerton, D, Holland, J, Arnold, S, France-Dawson, M, Kelley, P & McGrellis, S (1995) Sexual health education interventions for young people: a methodological review. In *British Medical Journal* 1995;310: 158-162

Person, Å, Olsberg, P & Agardh, A (2001) *Ungdomssamtalarna. En utvärdering av ett projekt i Malmö Stad*. Malmö: Social Medicine Unit, Malmö University Hospital

Rotheram-Borus, MJ et al: (2000) Prevention of HIV among adolescents. In *Prevention* Sci 2000;1:15-25.

Santelli et al (1999) Sexually transmitted diseases, unintended pregnancy, and adolescent health promotion. In *Adolesc Med* 1999;10:195-209

Sundbaum, B (2005) *Genus, klass och sexualitet – om genus, jämställdhet, sexualitet och samlevnadsundervisning vid några gymnasiers individuella program*. Master Thesis in Public Health.

Swedin, G., Näslund, G., Evetorp, K. (1994) Stora förändringar av ungdomars sexualvanor. *Läkartidningen* vol 91 nr 11 1994.

Tikkanen, R (2007) *Kunskapsbaserad hivprevention riktad till män som har sex med män i Sverige. En sammanställning och diskussion utifrån internationella kunskapsöversikter*. Stockholm: National Board of Health and Welfare

Tydén, T., Björkelund, C., Odlind, V., Olsson, S-E., Strand, A. Effects of Specially Tailored Information on Swedish University Students' Sexual Behaviour. *Paper in the Journal of American College Health* 1994;43:75-79

WHO (2006) *Preventing HIV/AIDS in young people. A systematic review of the evidence from developing countries.* (2006) Ed: David Ross, Bruce Dick, Jane Ferguson. WHO Technical Report Series 938. Geneva: World Health Organization

Wåhlén-Götzman, K (2007) "*Vi använder alltid skydd" Arbetsrapport från Jämtlands läns landsting*.http://www.jll.se/download/18.7a23db8111224a 7d49800018544/Hockeykampanjen.doc

Ådin, H (2007) Klamydiamåndagen, en ögonöppnare. Article in *Insikt* nr 1/2007. Stockholm: Lafa