

Full Length Research Paper

Process and impact evaluation of the Odi youth centre regarding behavioural change towards HIV/AIDS

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The objective of HIV prevention interventions is that young people would not only have a potential to protect them from being infected but also to shape their lives in a positive way, hence we evaluated the process and impact of a youth centre regarding behavioural change towards HIV/AIDS. This is an evaluative descriptive study using a qualitative research method. For process evaluation, in-depth, interviews were conducted among the staff, groundbreakers (role models) and volunteers working in the youth centre. From the interview conducted, it was reported that the youth centers are effective in keeping the youth out of the streets, educating them about HIV/AIDS, sexually transmitted infections, teenage pregnancy, sexuality and sexual health education. Youth centers provide valuable opportunity to inculcate in youth the dream of a better future and to avert the chances of HIV-infection. Lessons and behavior learnt at this stage will be carried to adulthood. The life skills they acquire from the youth centre are invaluable and recommendations on how to improve quality and service delivery are highlighted.

Key words: Youth centre, sexual behavior, health education, impact and evaluation.

INTRODUCTION

HIV-infection and its social, political and economic impact still remain a big challenge even after two decades since its emergence. In terms of infection rates, young people are mostly affected because of their adolescent behaviors which include experimentation and risk taking tendencies. Young people are known to be vulnerable because they are more sexually active, still exploring the relationship between their sexuality and physical development (UNICEF, 2002).

National studies have repeatedly shown that the primary problem is not a lack of information, but rather a failure to personalize and internalize risk. The percentage of young women aged 15 to 25 estimated to be living with HIV/AIDS in 2007 in South Africa was 12.7% while that of young men of the same age was 4% (Statistics South Africa, 2008).

HIV prevention interventions objective is that young people would not only have a potential to protect themselves from being infected but also to shape their lives in a positive way and such interventions usually include motivational aspect that encourages them to a high aim in life and an aspect that nurtures their talent through regular practice and competitions. The programmes do not only teach them about HIV prevention but they are taught how to become responsible for everything they do, and other health issues. Young people acquire knowledge about family planning, sexuality, teenage pregnancy, sexually transmitted infections and life skills. There is substantial experience internationally to show that the best opportunity to positively impact on adolescent behavior is prior to the onset of sexual activity (Stadler and Hlongwa, 2002).

Around the world, evidence tends to indicate that the spread of HIV is on a decline, primarily because young men and women are given the tools and the means to adopt safer behaviors (UNICEF, 2002). In almost every country where HIV transmission has been reduced, it has

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been among young people that the most spectacular reductions have occurred. According to UNICEF (2002) young people offers the greatest opportunity to defeat HIV/AIDS. Epidemiological studies have shown that the peak incidence of HIV/AIDS occurs in young people aged 15-24 years, hence the much attention given to youth interventions. Early sexual debut, low condom use and sex with multiple partners heighten the adolescents' vulnerability to the virus (Dickson-Tetteh et al., 2001). This implies that even in South Africa, effective use of the youth centers can result in the decline of HIV infection rates, hence the interest to evaluate the effective use of such centers.

The importance of targeting young people has been supported by the UNAIDS study reports (2004), which show that when young people are provided with accurate information on sex and HIV/AIDS, they are more likely to delay sexual activity and use condoms when they finally do have sex. Furthermore, it has been suggested that involving young people in prevention efforts not only educate them about HIV, but also gives them a sense of responsibility and pride as they take ownership of their lives and empowers them with the ability to give inputs on how to implement programmes that suit them. With the right skills and knowledge, young people can have an extended impact by having a positive influence on their peers. Young people are more likely to speak more freely and openly among themselves, this is why interventions directed to young people are very important.

In terms of gender, young women in many societies including South Africa are less able to assert themselves in sexual relations, or to make informed choices about sexual participation. For this and other related reasons, the rate of HIV infection is higher among girls and women than it is among men. Girls are physiologically more vulnerable to HIV infection, and gender-based inequities compound their risk, hence the need to have gender specific approaches even among the youth (UNICEF, 2002).

Open communication with parents about HIV, sex or sexuality appears to reduce risk. Young people whose parents report that they talk to their children about dealing with the pressure to have sex and the risks of unprotected sex are more likely to say they have changed their sexual behavior when made aware about HIV-infection (UNAIDS, 2004).

Evidence from various parts of the developing world indicates that the age of puberty has been falling for both boys and girls, due mostly to improvements in nutrition. Age of marriage and premarital sex are increasing. Sexual coercion appears to play a considerable role in the sexual relations of both young men and women. The magnitude of sexual coercion varies across countries but appears to be somewhat lower in Asia compared with sub-Saharan-Africa and Latin America (UNAIDS, 2004).

Various studies have highlighted the discrepancy between knowledge and behavior, showing that although,

knowledge about HIV transmission was generally high, there was evidence that misconceptions about AIDS persist; particularly myths related to HIV transmission, and that some youth still do not practice safe sex (Lovellife, 2003). National opinion polls regularly record that crime; poverty, unemployment, women and child abuse are primary concerns to the public (UNAIDS, 2004).

In 2005, Ipas South Africa (an international organization that works around the world to increase women's ability to exercise their sexual and reproductive rights and to reduce abortion related deaths and injuries) and the North West Department of Health conducted a study to assess the strengths and gaps in the services of five youth centers in the region. Among the findings, the partners concluded that despite the youth center's initial mission of being multipurpose facilities, the centers had become de facto reproductive health clinic, primarily serving the needs of sexually active young people who are typically isolated from such care (North-West Department of Health, South Africa, 2007).

It is believed that youth centers provide avenue in the community where adolescents can be involved in positive recreational activities, vocational training, and access to peer educational programmes that promote healthier lifestyles. In addition, youth centers also provide clinical and preventive services related to reproductive health needs of adolescents including counseling and testing, access to contraceptive services and diagnosis and treatment of STIs. The primary purpose of the youth centre is to demonstrate the effectiveness of a non-clinical environment in providing sexual health education and care for adolescents. South Africa has a fairly extensive network of youth centers throughout the country that are being implemented by a variety of agencies. Currently, the main implementers of youth centers are Planned Parenthood Association of South Africa (PPSA), Lovellife programme, and the Youth Adolescent Reproductive Health Programme (YARHP), which has contracted PPASA to establish youth centers on behalf of three provincial Departments of Health, Gauteng, North West and Kwa Zulu Natal (Erulkar et al., 2001).

The North West Department of Health (NWDoH) absorbed the previously known PPASA centers in the province and Odi Youth Centre is one of them. The youth centers are usually stand-alone entities or they are incorporated into clinics. All of these centers have peer educators/groundbreakers that coordinate life skills workshops and conduct outreach activities. Information on quality, functioning and impact of existing programmes for young people in South Africa and sub-Saharan Africa is generally limited. The goal of the study was to evaluate the process and impact of the Odi Youth Centre. This study will help the youth centre recognize its weaknesses so that it can improve on quality and delivery of services.

The results of the study will also be of interest to public

health.

Settings of the study: Odi youth centre

Odi Youth Centre is in the same premises with Tlamelong Clinic in Mabopane, even though they are separate buildings. The centre offers the following services: sexual health education, HIV/AIDS education, family planning, treatment of STI's, pregnancy testing and counseling and life skills. The centre also offers the following activities: football, basketball, aerobics, drama, township dance, indigenous games and poetry. The aforementioned setting was used to interview professionals and groundbreakers because they could easily be accessed.

PeloTona middle school

This site was used because most of the learners who attend the centre are pupils in this school. It would be easier to access them since the staff at the center does not know how many of the learners would pitch on the day of the interviews. Another advantage was that the groundbreakers would be present at the school doing their school visits. They helped with making the groups get ready for focus groups.

Staffing of the youth centre

Odi Youth Centre falls under Odi sub-district, North West Department of Health, South Africa. It consists of a project manager, clinical nurse, CLO (Community Liaison Officer) and a general assistant. The team has 3 HIV/AIDS counselors from lifeline trained by PPASA and 2 groundbreakers from Lovelife. Volunteers who are also called Mpintsi's assist the groundbreakers with the programmes.

METHODOLOGY

Design of the study

This is an evaluative descriptive study using a qualitative method. For this process evaluation, in-depth interviews were conducted among the staff, groundbreakers and volunteers working in the youth centre. To evaluate the impact of the centre on the youth, focus groups were conducted among the users of the services, being the youth themselves.

Population of the study

This study included clients of the Odi Youth Centre and service providers. The sample was determined by the saturation point in the focus groups which was done by the participants. To evaluate the impact of the service on the youth and the implementation process of the service, in-depth interviews were done with the 8 service providers (Manager, clinical nurse, CLO, lifeline councilor, 2

groundbreakers and 2 volunteers).

Included sample

1. Staff and volunteers: Professional staff members of Odi Youth Centre, groundbreakers and volunteers
2. Young people who have been utilizing the services of the centre for at least three months prior to data collection.

Excluded sample

All new clients or visitors to the centre and youth who utilized the services for less than 3 months were excluded from the study.

Participants recruitment

The investigators sent an enclosed letter to the youth centre manager, followed by a verbal discussion with the manager and clients about the study.

Recruitment of staff

The investigators requested the centre manager to explain the study to the staff members and request their participation. Members, who agreed to participate, signed consent forms.

Recruitment of youth

The investigators requested the centre manager to assemble the youth and requested their participation. Members who agreed signed consent forms.

Data collection

Permission was obtained from the principal to interview the learners and it was granted. Through co-operation of the teachers, consented learners were allowed to participate in the study. Learners were grouped into eight groups and interview was conducted for the eight groups. The research assistant was responsible for tape recording and made sure that each learner signs a consent form and the teacher signed in place of the guardian. All learners were given a chance to answer one question and they were all allowed to provide additional information if they had anything to say on that particular question. All staff members and volunteers were interviewed in the hall of the youth centre.

Data analysis

Thematic content analysis was used for both the in-depth interviews and focus group discussion.

RESULTS

The results of the study showed that the process of implementing the youth centre and its programmes was not properly done. Staff was just placed to take care of the centre without any special training for its needs. The needs of the centre are not considered as a priority to the senior management and the relationship between service

providers is not very good. However, the centre is serving its intended purpose even though it could do better. It is appreciated by the youth and they feel it would be a great loss to lose it.

The implementation process of the centre

Question: What are the processes involved in implementing the services at the centre?

Responses and comments: The centre was adopted from a non-profit organization called PPASA by the North West Department of Health in South Africa. A professional nurse in reproductive health services was assigned to manage the programme without any formal training in running such a centre. Another professional nurse was assigned to be a clinical nurse for the centre. The CLO is the only person who received appropriate training relevant to managing the centre because he was with the PPASA before the hand over. The two groundbreakers received training a month from the Lovelife programme while the volunteers were trained by the CLO and the groundbreakers (role models) for at least a week. The professionals work together with Lovelife groundbreakers and the volunteers without any formal understanding (for example, the noise in the centre comes with the package of some activities). Some of the indoor activities are bound to create noise and the professionals sometimes can't cope with the noise, this makes the activities somewhat difficult. They help each other wherever necessary but their relationship is not the best.

Resources available to carry out responsibilities

Question: What are the resources available to carry out your responsibilities?

Responses and comments: The groundbreakers have facilitator's manuals, Life orientation text books and Lovelife magazines as materials to use for their different programmes. They have a TV and some dance and educational visual cassettes. They improvise equipment such as DVD players and music systems because there is not much provided by the centre. The centre does not have a computer. The professionals use manuals and policies from the department of health. They do not have guidelines or indicators to show them if they are heading in the right direction or otherwise.

Working hours of the centre

Question: What are the operating hours like?

Responses and comments: The centre operates from 8 in

the morning to 16 h in the afternoon. Most young people come to the centre after 14 h, so they only spend two hours or less in the centre. In an assessment of youth centres in South Africa a similar trend was seen, where Lovelife clinics peak attendance was between three and four o' clock in the afternoon, which roughly coincides after- school hours (Erulkar et al., 2001). Discussion on opening hours has been raised with the possibility of youth centres staying open later in the afternoon. The centre is closed on weekends and holidays. The centre manager, the clinical nurse, the CLO, groundbreakers, volunteers and clients wish the center could be opened until five to allow more time for those students who come back later from school, especially those who go to school in town. They also wish it could be opened on Saturdays. The groundbreakers also wish they had free access to the centre so that they would be able to stay longer at the centre if necessary or come on Saturdays. At the moment only the government employees have the keys to the centre.

Programme support and support for personal and emotional needs

Question: What types of programmes do you offer to support their personal and emotional needs?

Responses and comments: The support from management is minimal. The service providers think that this is because the programme is not considered a priority programme, which is why they usually do not get the equipment they needed. Another reason could be the management has no clue on how to be of best assistance since they have no mandate from provincial offices. The professionals (manger, clinical nurse and CLO) main complaint is to have a clear directive, standards and indicators. At the moment they feel like they are just supporting a programme whose goal is not clear. The Centre manager, the clinical nurse and the CLO find personal and emotional support from each other and outside sources. Groundbreakers and volunteers also help each other, whenever one has a crisis (financial or otherwise). They counsel each other, especially about the difficulties at work and they lend each other motivational books to stay encouraged. They often do not seek help from the centre manager, the clinical nurse or the CLO.

Areas of the Centre that need Improvement

Question: Which areas do you think need improvement?

Responses and comments: The centre needs to improve on its resources, things like computers and internet are imperative these days. Young people can get information they need quickly and those who are still illiterate can

learn here. They also need sound equipment with microphones to enhance their poetry and dance. Groundbreakers and volunteers need an improved relationship between them and the government employees to make their service more effective. The centre manager, clinical nurse and the CLO need management to take the programme more seriously so that their needs may also be budgeted for. They also feel that they need more staff. Working hours of the centre should be adjusted to accommodate its clients.

The impact of the centre on the youth of Mabopane

Question: What impact does the centre have on the youth of Mabopane?

Responses and comments: The objectives of the youth centre are to promote healthy and positive lifestyle among the youth, provide information on HIV infection and behavioural change that could potentially reduce HIV transmission among the youth and develop life skills. Activities to achieve the objectives were identified as sexual health and HIV/AIDS education, distribution of condoms, lovelife magazines and booklets, lovelife games, drama, dance and aerobics and workshops on life skills. This part of the evaluation was to assess if such activities were carried out at this youth centre and the data was collected from the youth. The result showed that the centre is used for its intended purpose, which is a resource for information about health issues and HIV/AIDS, a place for development of talents and providing emotional support. They learn about their own sexuality, their physical development, STI's, teenage pregnancy and acquire life skills.

HIV/AIDS and STI's

Question: How does the youth obtain information about HIV/AIDs and STIs?

Responses and comments: Participants learned about sexually transmitted infections. They know there are specific infections and discharges. HIV is also sexually transmitted even though this is not the only way it is transmitted. It can be transmitted from mother to child, through blood transfusion and through coming in contact with infected blood (for example, sharing infected blades/needles/tattooing needles/drug injections/piecing instruments/circumcision knives).

People who have STIs are at a higher risk of getting HIV because the virus is sexually transmitted and can easily pass into their blood stream through openings created in the skin by sores, rashes or ulcers. The HIV/AIDS education the clients received gives the tools to protect themselves and to educate others. They are not

ignorant about things such as how it is transmitted, how it is not transmitted and how to care for those who are infected and affected. They know about the different stages of HIV and what is needed at each stage. They also know the different types of HIV tests and prerequisites that are needed before one goes for a HIV-test. They have been taught on how to show compassion on PLWA (people living with AIDS) and on how to show empathy. Participants have also learned about anti-retroviral treatment. They know about TB and the fact that even though it may be HIV-related, it can infect a person who is HIV negative. Participants know that TB is curable if one takes the treatment as prescribed. They encourage family and community members to test for TB whenever there are symptoms. Condoms are always available at the centre and books and pamphlets that teach more about HIV/AIDS are also available.

Sexual reproductive health and sexuality

Question: Does your clients understand sexual reproductive health and sexuality?

Responses and comments: Participants clearly understood the reproductive system of both boys and girls. Girls can start menstruating between the ages of 9 to 17 years. Hormones stimulate the ovaries to produce a mature egg (ova). When an egg is not fertilized, the lining of the uterus is shed in a show of blood which lasts between 3 to 5 days. The onset of menstruation signifies that a girl is capable of falling pregnant. The students learnt terms such as masturbation. They also understand what sexual intercourse is and have an understanding of what happens when this act becomes rape. They understand what terms like homosexual and heterosexual mean.

Teenage pregnancy

Question: How about teenage pregnancy and its consequences among the youth?

Responses and comments: The learners know about safer sex practices, contraceptives and the consequences of teenage pregnancy. The consequences of teenage pregnancy for a girl include; disruption of education and career goal, fewer job opportunities, isolation from friends, choices in all aspects of life are restricted and you will be unprepared and immature to care for a child. The consequences for boys include; they are often blamed, seen as the guilty party and have to deal with a lot of anger from families, educational and occupational opportunities are decreased, often not included in the choice of option regarding the child, experience resentment and guilt, has no legal right

regarding the mother and child, and relationship with families are often characterized by conflicts. Options available for teenage pregnant girls are abortion, marriage, adoption, single parenthood and fostering.

Life skills

Question: Are the youth exposed using and developing life skills?

Responses and Comments: Information is not enough to make young people act. They also need to develop “life skills” –the attitudes and negotiating capacity to put what they know into practice and to make informed choices about sex, drugs and other issues. The life skills programme gives them skills to handle peer pressure and to make good decisions. Their self-esteem has gone up because they have learnt to assert themselves and to value who they are as unique individuals. Affirmations (positive self-statements that are repeated several times a day to create a powerful and positive mindset) actually helped them to change the way they think about themselves. For example ‘I’m great, I’m strong and worthy of success’ helps them to act that way. They are able to assert themselves and will not be talked into drinking alcohol, using drugs or having sex when they are not ready. “Life skills” enables young people to practice safer sex, postpone sexual activity and limit the number of their sexual partners through the social interpersonal skills they have learnt to make informed decisions.

Their communication skills have also improved and they are more skilled in communicating their needs to their parents. Participants reported that they are more comfortable in talking to their parents about issues they would normally not talk about and the same is true about their parents. They are no longer shy to stand in front of a crowd and they have also developed debating and public speaking skills. They have learnt what sexual abuse entails and how to say "No" in a more confident way that will not send wrong signals. They know that the body, facial expression, hands and arms should support the message of “absolutely not”. The youth also use the centre as a place where they can be helped with their homework.

Drama and dance

Question: Are the youth involved in drama and dance?

Responses and comments: Drama and dance give them a chance to discover and groom their talents. The centre has a professional way of taking their talent to another level. Every activity has a name and rules. Improvisation is acting in a pretend world, in a specific situation and reacting to the moment truthfully and imaginatively. No

one tells you what to say, you just make it up on the spot. During this, they can find out whose imagination is wild and whose is a fast player, imagine they are putting on someone else’s shoes (for example, doctor, gangster, dancer) and walk in them. They stand like the character, walk and act like it. All this is evaluated to see if it is interesting, if the players work well together, if they use the space of their stage and if the scene has an important message. These, they would not learn if they were just doing drama on their own. Dance includes Kwaito and hip hop. They have dance manuals which instruct them on how to dance. They believe this has dramatically improved their dancing skills because it is at a level of choreography. Some of them aspire to become choreographers while others aspire to become actors. These activities are mostly favored because they do not require much equipment.

Sports

Question: Are the youth involved in sporting activities and what type?

Responses and comments: The youth reported that they are enjoying the lovelife games which give them the opportunity to compete outside the hometowns to see other places and meet new people. The sport they play at the centre is not only football and netball they play at school, but have the opportunity of learning other games (that is, basket ball). They particularly like basketball and football. Others use the sports to keep physically fit while others use this opportunity to loose weight. Some really believe that this is where their talent will be spotted and it will take them to greater heights (for example, being part of the South African team in 2010). Others stated that they like the sports because it is during these games that they are offered food. It is advised that youth centers in South Africa should not lose sight of their health objectives.

DISCUSSION

The centre is mostly attended by boys than girls. The reason could be that boys are more into activities than girls or girls are more engaged in domestic chores after school than boys do. A similar trend was seen in assessment of youth centers in South Africa (Erulkar et al., 2001). Repeat visitors were more likely to be young males attending school. On the average, male visitors to the youth centers had paid four visits to the centre in the previous week as compared to girls’ two visits. The study also shows that the repeat visitors were more likely to come to the centers for sports or recreation as compared to the other services offered at the centers. The age range of young people coming to the centre ranged from 13 to 20 years. Most of the youth attending the centre are from the vicinity of the centre.

Youth centers have shown to be of service to the youth in many ways. These centers serve as counseling units to the youth who lack services of social workers and psychologists. They serve as resource or information centre for learners who do not have help with their homework at home. The center is a more liberal environment where the youth feel free to learn about their sexuality, sexual health and HIV/AIDS. Also, it provides an avenue to explore their talents.

The uncoordinated collaboration of government and Lovelife to rescue the youth centers in North West province has serious managerial problems. The relationship between top management of Lovelife and that of the provincial government is not encouraging and this is negatively affecting the delivery of services at the centre. For instance, government has no budget for the youth centers and its services, thus, it is hard to make improvements where they are needed.

The fact that the government staff members are not specially trained to work in a youth centre makes it difficult to cope with some of the factors inherent with being in the centre for example, the noise that is caused by most of the activities in the centre. Special training for the centre staff would also help in understanding the principles behind youth centre services, keeping in mind that the professionals have no indicators to guide them but working with whatever information they come across as health professionals. The unhealthy relationship between groundbreakers and the professionals is not helping the services. It would be easier if they had the same directive or one neutral person who is able to address their problems. Both the government employees and the groundbreakers agree that the operating hours are not convenient for their clients and Saturday should also be used to accommodate other clients.

Young people's self esteem is affected in a positive way that one wonders where these young people would get these life skills if it was not for the centre. The centre has also given them communication skills which they would otherwise not have. Communication with parents is easier and more open. Young people have a privilege of inviting someone from the centre to intervene whenever there is a dispute between them and their parents. This is similar to previous reports by Erulkar et al. (2001).

The talents of the youth are groomed professionally which could help them to become more useful to themselves and the society in the future. Ground breakers get an opportunity to acquire skills as well. It is truly much better for youth to keep busy at the centre with sports, music, drama etc. than to be gallivanting on the streets, using drugs, drinking and involved in all sorts of mischief. Teenage pregnancy can really be curbed by the education they get from the centre.

Conclusion

Youth centers are effective in keeping the youth out of

the streets, educating them about HIV/AIDS, STI's, teenage pregnancy, sexuality and sexual health education. This is the best opportunity to inculcate in them the dream of a better future and to avert the chances of HIV infection. Lessons and behavior learnt at this stage will be carried to adulthood. The life skills they acquire from the youth centre are invaluable. Youth have testified how it would be missed if it were taken away from them. Even though the centre is not "perfect" and lacks some equipment and other resources, it is still serving its purpose to a certain degree. The service definitely needs to be extended to surrounding areas to make it more accessible to most youth. Intervention is needed at operational level between government employees and NGO employees and a lot of work is needed at national and provincial level to manage youth centers.

RECOMMENDATIONS

1. A special office that directs the youth centers should be established from the National Department of Health of South Africa to provincial health then to district level. This will ensure a budget for youth centers from the Department of Health.
2. Special training for government employees should be done so that they will be adequately prepared for the working conditions that come with the centre. Individuals should be interviewed to find out their interest in working with the youth.
3. The relationship between lovelife and government should be strengthened at national level then the same spirit will transcend to the employees at the centers.
4. More youth centers should be opened on neighboring surroundings to accommodate other young people who have no such intervention in their lives.
5. Introduce flexible hours for employees of the centre for example, 9h00 to 17h00 and also consider opening on Saturday where staff will alternate.

REFERENCES

- Dickson-Tetteh K, Pettifor A, Moleko W (2001). "Working with public sector clinics to provide adolescent-friendly services in South Africa. *Reprod. Health Matters*, 9: 34-38.
- Erulkar A, Bekinska M, Cebekhulu Q (2001). An assessment of youth centres in South Africa. *Urban Health & Dev Bull* 3: 6-10.
- Lovelife (2003). South Africa's national HIV programme for young people. Retrieved from (www.lovelife.org).
- North-West Province (2007). North-West province, Department of Health HIV survey.
- Stadler J, Hlongwa L (2002). Monitoring and evaluation of Lovelife's AIDS prevention and advocacy activities in South Africa 1999-2001. *Eval. Programme Plan.*, 25: 365-376.
- Statistics South Africa (2008). HIV prevalence in South Africa.
- UNAIDS (2004). Making condoms work for HIV prevention. Retrieved from www.unaids.org.
- UNICEF (2002). HIV prevention among young people. Geneva, Switzerland.