CHAPTER - II

REVIEW OF LITERATURE
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Sexual health is an essential part of overall health and well being, and sex education is critical to achieving good sexual health. Young people need and have the right to the information and skills that will help them achieve a healthy and positive sexuality, before and after they become sexually active.

Schools play an important role in providing sex education because they are the only formal education institution to have meaningful contact with nearly every young person! They are in a unique position to provide children, adolescents and young adults with the knowledge and skills they will need to make and act on decisions that promote sexual health throughout their lives. Access to comprehensive sex education is especially important for the most vulnerable groups of young people who are most at risk of unwanted pregnancy, sexually transmitted infections and sexual violence.

A 2005 Conference on the History of Sex Education (Davis, 2005) concluded that the history of sex education is still relatively unexplored. However, United Nations Educational, Scientific and Cultural Organization (UNESCO) together with UNAIDS cosponsors, particularly UNFPA, WHO, UNICEF, UNAIDS Secretariat, as well as with a number of independent experts and those working in countries across the world have spearheaded the movement of strengthening sex education across the world. Efforts by these United Nations agencies are a testament to the success of inter-agency collaboration and the priority which the United Nations attaches to the work with children and young people.
“Sex education is an educational programme designed to provide the learners adequate and accurate knowledge of the biological, socio-cultural and moral dimensions of human sexuality. Human sexuality is the core of sex education and is a function of the total personality which includes the human reproductive system and processes, individual feelings about being a woman or a man, the relationship between the members of the same or opposite sex. It embraces the biological, socio-cultural and ethical aspect of human sexual behaviour” (WHO, 2002).

Today, Sex Education has assumed greater significance, broadened its domain beyond Sex, Relationships and HIV/AIDS education and has grown at a phenomenal pace. The sheer volume of literature available at the International level on sex education and its related issues is proof enough for this growth. Every aspect of sex education ranging from concept, contents, curriculum, success stories, case studies and evidence-based researches appears to have caught the imagination of researchers the world over. A detailed study of their work was indeed useful in gaining deeper insights into the subject and bringing the study into proper perspective. The vast body of knowledge and evidence-based studies available on sex education and its related issues has, in this chapter, been reviewed under four main heads namely:

1. Whether sex education in schools is required or not?
2. Whether knowledge, attitude and behaviour among parents, teachers and students have improved after introducing sex education in schools?
3. What is the need for sex education in secondary schools, what should be the content/curriculum and who should deliver it?
4. What are the factors contributing to improving the awareness among parents, teachers and students and successful implementation of effective school-based sex education?
The purpose of such an area-wise review is to delimit and make explicit the dimensions that have been investigated. Attempt is made to review the literature pertaining to the subject study. Good numbers of review have been made where sex education and sexuality education has already been implemented. This review also traces the results of impact studies conducted at International and National level by reputed organizations including UNESCO. Few case studies also help us to understand the importance of sex education from a global perspective.

‘Sex Education’ is a process of acquiring information, building a critical understanding and forming attitudes about the body as well as the mind about the biological as well as the social aspects of sexuality about the self as well as relationships. Sexuality is mediated through socio-cultural and psychological factors as well as biological capacity, and political ideologies and systems. This makes it a difficult subject to study. Additionally, because it is considered a personal and intimate part of life and is interwoven with myth, taboo and morals, it demands a highly sensitive research approach. Researching sex education anywhere in the world, at any time, is challenging. In India, it is complicated by societal taboos that surround a discussion of issues related to sex (Basu, 1994). However, despite these difficulties, sex education must be studied because it permeates most aspects of human existence (Chandiramani, et.al, 2002).

Some of the researchers have defined their understanding of sex education and sexuality (Abraham, 2000; Amin, 1997; Bhende, 1994, for example) and also of the terms that they use. For example, Bhende (1994), George, (1998), Khanna et. al. (2000), and Sharma and Sharma (1998) provide clear definitions of 'sexuality', 'negotiation', 'coercion', and, 'masturbation'.
Unfortunately, most other researchers have not laid out what they understand as being encompassed within the terms sex, sexuality and sexual behaviour (Agarwal, 1992; Allahbadia, 1990; Nayar, 1996; Tikoo, 1995).

On the positive side, Bhende (1994) covers the following aspects of sex education: 'knowledge about physical aspects of bodily functioning, sex, HIV, sexually transmitted diseases (STDs), opinions and perceptions about relationships, sexual behaviour including harassment.' The definition used in Bhende's study is the International Planned Parenthood Federation (1989) definition which is: "Sexuality is understood to mean the total sexual makeup of an individual, in addition to covering the physical aspects, sexuality in this context also encompasses attitudes, values, experiences and preferences." Sharma and Sharma (1998) state that masturbation "is variously known as 'playing with oneself' or self-stimulation, or sexual self-pleasure, and has been defined as “the process of self-stimulation designed to produce erotic arousal and sexual satisfaction”.

Most studies, with remarkably few exceptions (Chandiramani, 1998; Khanna et al, 2000; Joshi, 1996) deem sexuality worthy of study only because of its links with disease, particularly, HIV/AIDS, reproductive tract infections (RTIs) and sexually transmitted diseases (STDs). For example, in a study on sexual behaviour, Reddy (1997) quite openly states that “those people who have casual sex will cause a major obstacle to our HIV/AIDS prevention goals”. There are only a few studies that connect sex education with factors other than biology, health and disease. Abraham's (2000) is one of the few studies that have referred to the historical work and international literature on sex education. This study is informed by the understanding that the construction of sex and sexuality is affected by age, sex and social class.
Abraham recognizes that meanings of sex and sexuality have evolved over time. This study also reveals a good understanding of youth subculture and the relationships with family and society. It also highlights the universal pressure to marry especially for young women and explores how social expectations affect young women's sexual behaviour.

Some of the studies have explored the nature of sexual interactions contextualized within patriarchal gender power relations (Chandiramani, 1998; George, 1998; Joshi, 1997; Sodhi, 2000). Joshi’s (1997) study on how rural men initiate a sexual relationship with village women and communicate sexual interest and desire also goes beyond viewing sexual behaviour as limited to specific acts. Joshi mentions activities other than genital, oral or anal sex that are part of the repertoire of sexual behaviour. This study provides some information on how rural men initiate a sexual relationship with the village women by using verbal and non-verbal signals to communicate sexual interest and desire. It also describes the feelings of love and attachment that keep two people in a continuing relationship after they have been married, according to village custom, to others. Similarly, Bhende (1994) has used a broad framework to study the sex and sexuality of adolescent girls and boys, with the aim of developing an HIV prevention module.

WHETHER SEX EDUCATION IN SCHOOLS IS REQUIRED OR NOT?

Sexual debut for most young people occurs during their teenage years. Sexual experience among young people has been estimated in a number of countries: At age 15 years, 53 per cent of young people in Greenland, 38 per cent of young people in Denmark (Werdelin, Misfeldt, Melbye and Olsen, 1992), and 69 per cent of young people in Sweden (Klanger, Tyden, and Ruusuvaara, 1993) have experienced intercourse.
By age 18/19 years, the percentage that are sexually active has been reported as 54.1 per cent in the United States, 31 per cent in the Dominican Republic (Westhoff, McDermott and Holcomb, 1996), 66.5 per cent in New Zealand (Paul et al., 1995), and 51.6 per cent in Australia (Rodden, Crawford, Kippax and French, 1996). Age of debut has been estimated at a median of 17 years in England (Wellings et al., 1995) and a mean of 15.95 years in the United States (Zelnik and Shah, 1983), and 16.8 years in Sweden (Schwartz, 1993). Therefore, the majority of young people have begun to have sexual intercourse before they leave their teens, and at least half, by the age of 16.

Use of contraception and Sexually Transmitted Diseases prevention has been reported to vary across adolescence according to the age at which initiation occurs. Condoms (Kraft, Rise and Træen, 1990) and contraception (Faulkenberry, Vincent, James and Johnson, 1987; Mosher and Bachrach, 1987; Zelnik and Shah, 1983) are more likely to be used the later sex is initiated. Education on these topics has been found to modify that pattern, and appears to be more effective if given prior to first intercourse (Howard and McCabe, 1990), that is, in adolescence or pre-adolescence.

Partner turnover rate is greater during adolescence and the early twenties than in later years (Billy, Tanfer, Grady and Klepinger, 1993; Paul et al., 1995). This is true not only for numbers of casual partners, but also for those relationships perceived as being regular and monogamous (Rosenthal, Moore and Brumen, 1990). Although these serially monogamous pairings may be of short duration, their regular status, in the minds of many of the young people in them, confers safety with respect to STD transmission (Rosenthal et al., 1990).
Unprotected sex is viewed as not risky because the partner is a regular partner as opposed to a casual one. Thus, unprotected sex occurs with multiple partners, but the cumulative risk is rendered invisible by the apparent monogamy and commitment of each discrete relationship. The risk posed by unprotected sex in young people is reflected in disproportionately high rates of sexually transmitted diseases infection (Braverman and Strasburger, 1994; Maxwell, Bastani and Yan, 1995; Rosenthal and Reichler, 1994) and unwanted pregnancy. Higher rates of sexually transmitted diseases infection have been associated, in at least one study, with earlier initiation of sexual intercourse (Rosenthal, Biro, Succop, Cohen and Stanberry, 1994).

Educating adolescents on contraception, HIV, and STD prevention has been shown to be effective in reducing these unintended consequences (Daures, Chaix-Durand, Maurin, Viala and Gremy, 1989; Nafsted, 1992; National Committee on Health Education, 1978; Vincent, Clearie and Schluchter, 1987). Unfortunately, parents, although keen to help their children, still do not communicate adequately with them about sex (Geasler, Dannison and Edlund, 1995; Postrado and Nicholson, 1992). Many parents feel inadequate to the task (Geasler et.al., 1995). Further, children are often reluctant or too embarrassed to approach parents with the topic (Goldman and Goldman, 1981), and therefore have turned, particularly in more recent times, to more formal sources of sexual health education such as school-based lessons (Wellings et.al.,1995).

Thus, we have a period in which people are beginning their sexual lives, and have a reasonable turnover of partners once they do; there is a demonstrated risk in terms of unwanted outcomes (pregnancy and STD infection); parents are concerned but unprepared for intervention; and there is evidence that education prior to initiation is most efficacious in achieving programme aims. The need for formalized provision
of education about sexual health and its potential consequences for young people is therefore apparent.

Formal sexual health education for adolescents in developed countries has had a long and chequered history, its fortunes waxing and waning with the changing of governments and the tide of public opinion (Holmstedt, 1974; Mellanby, Phelps and Tripp, 1992; Nazario, 1992; Scales, 1981; Siedlecky, 1979; Thomson, 1994; Wallace and Vienonen, 1989). Those changes are reflected in the content and ideologies that underpin school sexual health education curriculum and the public controversy they often engender. As a consequence, sexual health education is far from being a homogeneous or unitary concept: it encompasses a wide range of curriculum that differ with respect to their aims, scope, implementation, and content (Jorgensen, Potts and Camp, 1993; Nazario, 1992). The variety of approaches is reflected in the range of nomenclature used to describe what otherwise is broadly termed sexual health education. For example, programmes have been labelled variously as family life education, sexual health, personal development, values clarification, ‘just say no’, sex respect, and human sexual health.

Now, let us also understand the outcomes of various controlled intervention studies, other interventions studies, cross sectional surveys and comparison between international and national intervention studies.

**Controlled Intervention Studies**

Experimental designs were employed in 15 studies, all of which were conducted in the United States. These studies randomly assigned individual participants or groups (e.g., school classes) to either treatment (e.g., sexual health education or HIV/AIDS education) or control conditions.
They were conducted primarily with school-age or college students, most involving mixed gender groups, although some were single gender studies (Danielson, Marcy, Plunkett, Wiest and Greenlick, 1990; Kirby, Harvey, Claussenius and Novar, 1989; Vincent, Clearie and Schlucter, 1987; Williams, Achilles and Norton, 1985). Intervention impact was assessed by pretest and post-test measures of self-reported sexual activity and/or indicators of unprotected sexual activity such as pregnancy, abortion, and birth rates.

The findings of those studies were remarkably consistent despite variations in sample size, course composition, course duration, country of origin, and year of publication (1985 through 1996). Six of the sexual health education programmes were associated with delayed initiation of intercourse (Jorgensen et al., 1993; Kirby, Barth, Leland and Fetro, 1991; Zabin, Hirsch, Smith, Streett and Hardy, 1986), and/or reduced sexual frequency (Smith, 1994), pregnancy, abortion, or birthrates, for instruction recipients (Vincent et al., 1987; Williams et al., 1985). Following an AIDS prevention curriculum, one study found greater monogamy and more consistent condom use (Walter and Vaughan, 1993), and another reported fewer sexual partners in the previous two months for education recipients compared to controls (Main et al., 1994).

Six studies reported no relation between sexual health education and sexual activity (Bellingham and Gillies, 1993; Danielson et al., 1990; Kirby et al., 1989; Kvalem, Sundet, Rivo; Levy et al., 1995; Miller et al., 1993). However, changes or differences in rates of sexual activity in the Miller et al. study would have been difficult to detect given the overall low rates of sexual intercourse (between 3 per cent and 5 per cent).
Vincent et al. (1987), for example, demonstrated the potential for a dramatic decrease in rates of adolescent pregnancy through the provision of sexual health education and family planning services. The programme was instituted within a portion of a county in South Carolina (USA), with the remainder of the county and three other counties serving as control areas. The intervention involved education for adult leaders, such as community agency professionals, religious leaders, and parents. There were also school-based sexual health education for students from grades K through 12, broadcasting of programme initiatives and messages through the media, and integration of sexual issues into mainstream health promotion. After two to three years of programme implementation, the area in which the intervention was conducted experienced a 35.5/1000 reduction in the estimated pregnancy rate for females between 14 to 17 years of age, as compared with 14.4/1000 in the non-intervention area of the target county, and increases of 5.5 (P<0.002), 16.4 (P<0.001) and 13.9/1000 (P<0.0001) in the control counties. The study demonstrated that the effects of sexual health education initiatives may be observed on a scale larger than that of a single school or college class, or institution.

Other Intervention Studies

However, we need to note that the findings of Edwards et. al. have been re-examined using newer methods of birthrate calculation; results indicate that the provision of clinical services had no effect on birthrates (Kirby et al., 1993). Further, twenty-one studies showed no impact of sexual health education on levels of coital activity.

One study of school-based clinics reported mixed effects on students’ sexual and contraceptive practice across school sites and varying with the priorities of the programmes (Kirby, Waszak and Ziegler, 1991). Marcotte and Logan (1977) described what seems to have been an increase in the percentage of medical students reporting regular sexual intercourse from 70.9 per cent to 75.6 per cent, and frequency of intercourse from 9.4 to 9.7 times per month pretest to post-test. The questions were about regular sexual intercourse and frequency in the last month following a course of only three days’ duration, and therefore the increase may have reflected a greater rate of admission of sexual activity due to the intervention rather than an increase in activity per se. Moreover, interpretation is difficult, as the statistical significance was not reported. Zuckerman, Tushup and Finner (1976) reported statistically significant increases for male students attending a sexual health course in homosexual experiences and numbers of partners at post-test.

The Howard and McCabe (1990) study provides an example of the apparently successful use of the social inoculation theory of health education, based on the premise that it is possible to ‘immunize’ people against the social and peer pressures that encourage negative health behaviours. That programme targeted 13- and 14-year-old boys and girls, and consisted of five periods of instruction (given by slightly older peers) in combination with a five-period programme on reproduction, family planning, and sexually transmitted diseases.
The curriculum focused on identifying and resisting social and peer pressures that might motivate early coital activity. In those schools in which the programme had been implemented, there were lower proportions of male and female students beginning sex than in schools that did not take part in the programme: in the eighth grade 4% as compared to 20% (P <0.01), and in the ninth grade 24% compared to 36% (P <0.01) had become sexually active. Contraceptive use was higher among those sexually active students who had been the recipients of sexual health education. Pregnancy rates for the female students in the programme were also lower; a result both of greater utilization of effective contraception and of less sexual activity. This highlights the importance of reaching both those young people who are, and those who are not, sexually active.

A number of studies have demonstrated increased use of contraception among the sexually active following sexual health education (Berger et.al.,1987; Blanchard et.al.,1993; Eisen and Zellman, 1987; Herlitz, 1993; Howard and McCabe, 1990; Wielandt and Jeune, 1992; Sakondhavat et.al.,1988). Other studies have indicated that although sexual health education does not generally produce an increase in coital activity, such education may lead to increases in alternative and safer practices (in terms of pregnancy or HIV transmission) such as masturbation or oral sex (Dignan et. al., 1985; Yarber and Anno, 1981; Zuckerman et.al.,1976).

Eight recently published studies evaluated education campaigns that focused on HIV/AIDS issues and the promotion of condom use (Blanchard et. al., 1993; Goertzel and Bluebond-Langner, 1991; Herlitz, 1993; Kipke et.al., 1993; Rotherum-Borus et.al.,1991; Siegal et.al.,1995; Turner et.al.,1993; Wielandt and Jeune, 1992).
Four of those reported no change in condom use post-test (Goertzel and Bluebond-Langner, 1991; Kipke et al., 1993; Siegal et al., 1995; Turner et al., 1993), but six (the remaining four plus Jemmott et al., 1992; and Mansfield et al., 1993) reported post-intervention increases in condom use with no accompanying increase in sexual activity or lowering of age of first intercourse. For example, in Switzerland, Blanchard et al. (1993) serially surveyed first- through fourth-year apprentices in the Swiss Canton of Vaud in 1987, 1990, and 1992 regarding their sexual behaviour, knowledge, and attitudes. Over that five-year period, the young people had been exposed to the Swiss Stop-AIDS campaign, which promoted safer, rather than reduced, sexual activity. From 1987 through 1992 there were dramatic increases in regular condom use, and no lowering of age of first intercourse.

**Cross Sectional Surveys**

In the nine cross-sectional surveys reviewed, study participants were not assigned randomly to treatment and control conditions, nor were interventions manipulated by the investigators. Rather, respondents were surveyed as to whether they had or had not received sexual health and/or contraceptive education and then compared with respect to subsequent sexual behaviour. With one exception (Marsiglio and Mott, 1986), survey investigations did not report any increase in sexual behaviour (either lower age of onset or greater number of partners) associated with receiving sexual health education (Anderson et al., 1990; Dawson, 1986; Furstenberg, Moore and Peterson, 1985; Pick-de-Weiss, Diaz-Loving, Andrade-Palos and David, 1990; Ku, Sonenstein and Pleck, 1992; Moreau-Gruet, Ferron, Jeannin and Dubois-Arber, 1996; Philliber and Tatum, 1982; Spanier, 1978; Wellings et al., 1995).
Three studies reported greater contraceptive use among those respondents who had received sexual health education (Ku et al., 1992; Dawson, 1986; Marsiglio and Mott, 1986). A large-scale study by Ku et al., (1992) surveyed over 1800 males 15 through 19 years of age and found that most of them had received formal education on HIV/AIDS, birth control, and resisting sexual activity. The analysis revealed an association between education and decreased numbers of sexual partners, lower frequency of intercourse, and increased condom use. The effects were found to be significant even after potentially confounding variables such as age, ethnicity, and religion were controlled for. The development of skills for resisting intercourse was found to be particularly important in reducing levels of sexual activity. The authors concluded: “In many communities, concerned parents or community members have feared that education about sex or AIDS may increase sexual activity by condoning contraception; this analysis does not indicate such an association (Ku et al., 1992).

**International and National Comparison Studies**

Comparison studies indicate that when and where there was open and liberal policy as well as the provision of sexual health education and related services (e.g., family planning) there were lower pregnancy, birth, abortion, and STD rates. For example, Jones et al. (1985) used a 37-country comparison of patterns of adolescent pregnancy to examine the impact of, inter alia, government education policy, financial support for abortion and single parents, religiosity, openness about sexual health, ethnicity, and marriage laws, on adolescent pregnancy and sexual activity. Findings from that study indicates that those countries that rated higher on openness about sex were also those that experienced the lowest birthrates; teaching of birth control in schools was associated with low adolescent fertility; and low birth rates were associated with low abortion rates.
In a detailed analysis comparing the United States with Canada, England and Wales, Sweden, the Netherlands, and France, the United States was found to have by far the highest rates of adolescent pregnancy, birth, and abortion. Differences in amount of financial support for unmarried mothers, minority issues, and adolescent unemployment did not account for the discrepant birth rates. If discouraging the discussion of sex and access to family planning services in an effort to deter or shield adolescents from sex were effective policies, the United States would have been expected to have one of the lowest adolescent pregnancy rates. Instead, for 1980, 15- through 19-year-olds in the United States had a pregnancy rate of 96/1000 females, over double that of the countries ranked second (England and Wales: 45/1000) and nearly seven times that of the sexually liberal Netherlands (14/1000).

Countries that address young people’s sexual health in a frank, open, and supportive manner experienced fewer of the negative consequences of sexual activity, yet did not see greater sexual involvement. Jones et al. (1985) conclude that increasing the legitimacy and availability of contraception and sexual health education (in its broadest sense) is likely to result in declining adolescent pregnancy rates.

TACKLING QUESTIONS AND ADDRESSING THE OPPOSITION: SORTING FACT FROM FICTION

In the present context, there are few questions raised by the opposition towards introducing sex education at the school level. It is important to clarify the thinking behind introducing sex education in schools. An attempt is made to sort fact from fiction.
QUESTIONS AND STATEMENTS BY THE OPPOSITION

Why do we need sex education at all?

- Sexual health is an essential part of overall health and well-being, and sex education is critical to achieving good sexual health. Young people need and have the right to the information and skills that will help them achieve a healthy and positive sexuality, before and after they become sexually active.

- Schools play an essential role in providing sex education because they are the only formal educational institution to have meaningful contact with nearly every young person. They are in a unique position to provide children, adolescents and young adults with the knowledge and skills they will need to make and act on decisions that promote sexual health throughout their lives.

- Access to comprehensive sex education is especially important for the most vulnerable groups of young people who are most at risk of unwanted pregnancy, sexually transmitted infections and sexual violence.

Comprehensive sex education encourages young people to have sex.

- This is false; there is no evidence to suggest that this is true. In fact, the opposite is true. Evidence from an increasing number of studies discussed in the beginning of this chapter clearly shows that comprehensive sex education does not lead to earlier sexual initiation or an increase in sexual activity. Some studies show that it can even delay sexual initiation.

- Comprehensive sex education presents young people with the full range of honest and trustworthy information that enables them to choose what is best for them, whether it be abstinence or engaging in safer sex.
Comprehensive sex education attempts to do away with traditional values.

- Comprehensive sex education encourages values, by helping young people to identify their own values and empowering them to lead their lives according to these values. What it does not do is impose values on young people that may cause them harm.

- Comprehensive sex education means that sensitive cultural practices, such as female genital mutilation and early marriage, can be explored by young women and young men from their own personal points of view. It means that young people can become the drivers of change in their societies.

Does comprehensive sex education really work?

- Yes! Research increasingly shows that comprehensive sex education is beneficial for young people’s health during their youth and even into adulthood. Additionally, comprehensive sex education upholds young people’s rights and it can lead to improved social development, for example by having a positive effect on the Millennium Development Goals.

Giving young people more information will just confuse them. They are too young to make decisions about what is best for them.

- Evidence shows that giving young people complete and accurate information on their sexual and reproductive health, including both abstinence and contraception, does not lead to confusion (Collins, Alagiri and Summers 2002; Santelli et. al., 2006a; Ingham 2005).

- Comprehensive sex education also equips young people with the skills and critical thinking necessary to understand the information given to them and to incorporate it into their lives in relevant ways. Young people who know
themselves and their sexuality will be able to make informed decisions about what is best for them.

- Conversely, it is hard for young people to act responsibly when they are denied the information to do so and their rights are being denied. Acting responsibly implies that someone has the liberty to choose among different options and to make a responsible decision. Denying young people their rights will only make it harder for them to make responsible choices (IPPF, 2007).

- Although well-intended, limiting young people’s access to information and experience is a form of over-protection that can actually increase their vulnerability (Lansdown, 2004).

QUESTIONS AND STATEMENTS ON PROGRAM ISSUES RELATING TO SEX EDUCATION

Should sex education be different or similar for boys and girls?

Traditionally, the focus of sex education has been on girls. Boys may feel that sex education is not relevant to them and are unable or too embarrassed to ask questions about relationships or sex. Boys are also less likely to talk to their parents about sex and relationships. For these reasons, it is important to make sure that sex education programmes focus on boys as much as on girls.

Teachers will need to plan a variety of activities that will help to engage boys as well as girls, matching their different learning styles. Single-sex groups may be particularly important for young people who come from cultures where it is only acceptable to speak about the body in single gender groups. Both co-education and single-sex sex education could work effectively for boys and girls provided that teachers and educators are taught about the differences.
It is also important that girls and boys communicate and negotiate openly about sexuality, their needs and desires, and safer sex. Research has proved this to be crucial to prevent unwanted pregnancy, sexually transmitted infections and HIV. We need to understand that boys and girls learn differently, so we are able to help both boys and girls in both co-ed and single-sex classes. Traditional gender roles may encourage girls to develop their empathic ability and express their feelings while boys are encouraged to be more competitive and take risks. Boys and girls may have different needs and questions in relation to sex, sexuality and relationships.

**When should sex education start?**

It is never too early to start talking to children about sexual matters. Openness, even with young children, will show that sex is an acceptable topic of conversation. Between the ages of 18 months to three years, children begin to learn about their own bodies; at this stage they need to know that it is normal for a child to explore his or her body and to do what feels good. By the age of three or four, children are ready to know that boys and girls have different genitals. To satisfy their normal curiosity about each other’s sex organs, children may play ‘doctor’ or take turns examining each other in a matter of fact way. This exploration is far removed from adult sexual activity, and it is harmless when only young children are involved. At this age, many children ask the question “Where do babies come from?” They need a simple and direct response, such as “Babies grow in a special place inside their mother.” As the child matures, more details can be added.

Between the ages of five and seven, children become more aware of their gender. Boys may tend to associate only with boys, and girls only with girls. At this age, questions about sex will become more complex, as a child tries to understand the connection between sex and making babies. He or she may turn to friends for some of
these answers. Because children can pick up false information about sex and reproduction, it may be best to ask what a child knows about a particular topic before starting to explain it.

What about parents?

Research has found parental connectedness to be highly protective. Parental connectedness is defined as feeling close to, cared about and loved by a parent. Adolescents who report high parental connectedness indicate that they can talk to at least one parent and that their parent is psychologically available for them. Young people who report higher parental connectedness were less likely than other young people to participate in every risk behavior. Connectedness is not so much an issue of doing activities with parents but, rather, feeling that they can talk with their parents and that their parents know what is going on in their lives and are concerned about them (WHO, 2006).

Young people need sex education and parents, as essential sources of information and as role models, can influence their children’s sexual development. Two parents, a single parent, a foster parent, a grandparent or any other adult who cares for and nurtures a young person must assume this task because sex education involves crucial family, religious and cultural values and convictions. Young people inevitably learn about sex and sexuality from their environment anyway, and it is evident that the environment is not always very safe or reliable. This means that it is up to caring adults to influence their sons’ and daughters’ moral development, healthy decision making abilities, self-esteem, and knowledge of, and comfort with, their own sexuality. A parent really has no choice in this matter; the only choice is whether the job will be done well or poorly.
Providing sex education in school can be enhanced by the support of parents. The key to respectful and effective partnership with parents lies in the general ethos of a school and its openness to parents, the community and sources of outside support. The school ethos also has consequences for the school’s commitment to and confidence in talking with pupils about sex. A positive school ethos is created when questions of sex and sexual health are addressed explicitly as part of the curriculum as well as management issues concerning policy making and consultation. A positive outlook on equal opportunities and cultural diversity will increase parents’ trust in the school’s ability to address issues about sex education. General good practice includes valuing cultural diversity, parents’ opinion and parental support – all of these will have a positive impact on the effectiveness of sex education in school.

**Why talk about sexual pleasure?**

Gender and sexual pleasure are important elements of comprehensive sex education. There is increasing evidence from countries as varied as the Netherlands, the United Kingdom, Cambodia and Bangladesh that positive health outcomes can be achieved if gender norms and power disparities are addressed and if there is a greater acceptance of positive sexual experiences (Ingham and van Zessen 1998).

There is a real problem in the way that discussions of sexual health have focused mostly on information on health and warnings, and what not to do. The idea of some form of pleasure is often a central motive or an assumed goal for at least one if not both partners in the quest for sexual connection. So if pleasure is a key reference point that people actually hope to experience or consider highly significant in their sexual lives, the effort to open up discussions of pleasure is extremely important in trying to activate safer sex and may be crucial to promoting safer behaviors.
Sexual pleasure means different things to different people, depending on lifestyle, partner, context, socio-economic conditions, religion and cultural beliefs. It is important to support young people to maintain pleasure in a longer relationship with one partner so they don’t have to run around to find new partners for pleasure and excitement (Lewis and Gordon 2006).

Notions of sexual pleasure are laced with beliefs and customs. We could benefit from more discussions and debates about different cultural traditions for learning about sex. The gender systems upheld and reproduced in a culture also infuse particular understandings into what pleasure is. Men and women learn both formally and informally from their culture what is expected of the sexual contract or sexual contact. Every culture offers maps for learning ways to understand and express desire and ways to project onto or interpret the sexual desire and actions of the other sex (Lewis and Gordon 2006).

The way the media tend to portray sex in a positive and pleasurable way is often much more appreciated by young people, whereas sex education and health services often focus on the negative, harm-related side of sex. In order to bridge this gap, the role of pleasure and an acceptance of positive sexuality should also feature more prominently in sex education. A sex-positive approach can increase condom use and safer sex. We should promote the fact that safer sex and sex are one and the same. Pleasure and desire for intimacy are forces for good. Through the discovery and development of sexual pleasure, greater overall self-confidence and self-esteem can be gained, which in turn lead to a greater ability to make empowered decisions about safer sex.
There is not much support for comprehensive sex education.

As parents develop greater understanding of comprehensive sex education, there is increasing support for it. Parents want their children to develop knowledge and skills to cope with the risks they encounter. In the United States, interviews conducted in 2000 demonstrated that 65 per cent of parents supported sex education that encourages abstinence, but that also prepares young people to use birth control and practice safer sex (Dailard, 2003).

In the United Kingdom, studies have also shown that parents want schools to provide a more comprehensive education that will begin at younger ages and that will address the more difficult issues that parents may not feel comfortable discussing with their children (Carrera and Ingham 1998). The State of World Population report of 2000 (UNFPA) also stated that parents around the world would like their children to be taught about sex, but often feel ill-informed or embarrassed about doing it themselves.

At the international level, many statements have been issued by various organizations advocating for a comprehensive, rights-based approach to sex education. The UN Guidelines on HIV/AIDS and Human Rights both call on States to “ensure that children and adolescents have adequate access to confidential sexual and reproductive health services, including HIV/AIDS information, counseling, testing and prevention measures such as condoms,” and to “ensure the access of children and adolescents to adequate health information and education, including information related to HIV/AIDS prevention and care, inside and outside school, which is tailored appropriately to age level and capacity and enables them to deal positively and responsibly with their sexuality.” (Santelli et. al. 2006b)
The 1994 Programme of Action of the International Conference on Population and Development also addresses these issues and adds that responsible sexual behaviour, sensitivity and equity in gender relations, particularly when instilled during the formative years, enhance and promote respectful and harmonious partnerships between men and women. Communication can play an important role in overcoming community opposition to comprehensive sex education. Because of common myths and misconceptions about sex education (including those mentioned earlier), it is essential to explain the programme being implemented within the community and to discuss it with community members, allowing them to voice their concerns.

After understanding the meaning of sex and sexuality, outcomes of various controlled intervention studies, cross sectional surveys and comparison between international and national intervention studies, it can be concluded that sex education is required for the school children.

**WHETHER KNOWLEDGE, ATTITUDE AND BEHAVIOUR HAVE IMPROVED AFTER INTRODUCING SEX EDUCATION IN SCHOOLS?**

Worldwide, sex education has been implemented in both developed and developing countries. Review of literature was made to understand whether knowledge, attitude and behaviour among parents, teacher and students have improved or not after introducing sex education in schools. In this perspective, UNESCO has conducted a seminal study. As part of the development of the International Technical Guidance on Sexuality Education, a specially commissioned review of literature on the impact of sex and sexuality education on sexual behaviour was made.
The review considered 87 studies from around the world; 29 studies were from developed countries, 47 from the United States and 11 from other developed countries. The common characteristics of existing and evaluated sex education programmes were identified and verified through independent review, based on their effectiveness in increasing knowledge, clarifying values and attitudes, developing skills and at times impacting upon behaviour. The review team searched multiple computerized databases, examined results from previous searches, contacted 32 researchers in this field, attended professional meetings where relevant studies were presented, and scanned each issue of 12 journals. Summary of review is furnished in Table 2.1.

Table 2.1: The number of sex education programmes demonstrating effects on sexual behaviours

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Developing Countries (N=29)</th>
<th>United States (N=47)</th>
<th>Other Developed Countries (N=11)</th>
<th>All Countries (N=87)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation of Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Delayed initiation</td>
<td>6</td>
<td>15</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>• Had no significant impact</td>
<td>16</td>
<td>17</td>
<td>7</td>
<td>40</td>
</tr>
<tr>
<td>• Hastened initiation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Frequency of Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Decreased frequency</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>• Had no significant impact</td>
<td>5</td>
<td>15</td>
<td>1</td>
<td>21</td>
</tr>
<tr>
<td>• Increased frequency</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Number of Sexual Partners</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Decreased number</td>
<td>5</td>
<td>11</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>• Had no significant impact</td>
<td>8</td>
<td>12</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>• Increased number</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Use of Condoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Increased use</td>
<td>7</td>
<td>14</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>• Had no significant impact</td>
<td>14</td>
<td>17</td>
<td>4</td>
<td>35</td>
</tr>
<tr>
<td>• Decreased use</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Use of Contraception</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Increased use</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>• Had no significant impact</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>• Decreased use</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Sexual Risk-Taking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Reduced risk</td>
<td>1</td>
<td>15</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>• Had no significant impact</td>
<td>3</td>
<td>9</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>• Increased risk</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Impact on Sexual Behaviour: Of 63 studies that measured the impact of sex education programmes upon the initiation of sexual intercourse, 37 per cent of programmes delayed the initiation of sexual intercourse among either the entire sample or an important sub-sample, while 63 per cent had no impact. Notably, none of the programmes hastened the initiation of sexual intercourse. Similarly, 31 per cent of the programmes led to a decrease in the frequency of sexual intercourse (which includes reverting to abstinence), while 66 per cent had no impact and 3 per cent increased the frequency of sexual intercourse.

Finally, 44 per cent of the programmes decreased the number of sexual partners, 56 per cent had no impact in this regard, and none led to an increased number of partners. The small percentages of results in the undesired direction are equal to, or less than, that which would be expected by chance, given the large number of tests of significance that were examined. Also by the same principle, a few of the positive results were probably the result of chance.

Taken together, these studies provide some evidence that programmes that emphasize not having sexual intercourse as the safest option and that also discuss condom and contraceptive use do not increase sexual behaviour. On the contrary:

- More than a third of programmes delayed the initiation of sexual intercourse;
- About a third of programmes decreased the frequency of sexual intercourse; and
- More than a third of programmes decreased the number of sexual partners, either among the entire sample or in important sub-samples.
**Impact on Condom and Contraceptive Use:** Forty per cent of programmes were found to increase condom use, while sixty per cent had no impact and none decreased condom use. Forty per cent of programmes also increased contraceptive use; 53 per cent had no impact, and 7 per cent (a single programme) reduced contraceptive use. Some studies assessed measures that included both the amount of sexual activity as well as condom or contraceptive use in the same measure.

For example, some studies measured the frequency of sexual intercourse without condoms or the number of sexual partners with whom condoms were not always used. These measures were grouped and labeled ‘sexual risk-taking’. Fifty-three per cent of the programmes decreased sexual risk-taking; 43 per cent had no impact and three per cent were found to increase it. In summary, these studies demonstrate that more than a third of the programmes increased condom or contraceptive use, while more than half reduced sexual risk-taking, either among entire samples or in important sub-samples.

The positive results on the three measures of sexual activity, condom and contraceptive use and sexual risk taking, are essentially the same when the studies are restricted to large studies with rigorous experimental designs. Thus, the evidence for the positive impacts upon behaviour is quite strong.

**Specific Curriculum Based Activities:** Few studies have measured the impact of specific activities within curriculum-based programmes. However, two studies considered the impact of particular activities within larger, more comprehensive HIV prevention programmes, integrated within multiple courses in schools.
The first study (Duflo et.al., 2006) found that, when young people observed a debate on whether school children should be taught how to use condoms and then wrote an essay about ways they could protect themselves from HIV, students were subsequently more likely to use condoms.

The second study (Dupas, 2006) reported that the following activities all significantly decreased the rate of pregnancy among teenage girls with older men: providing HIV prevalence rates, disaggregated by age and sex; emphasizing the risk of young women having sexual intercourse with older men (who are more likely to be HIV-positive); and showing a video about the danger of having sexual intercourse with older men. The biological marker of pregnancy among teenage girls with older men was perceived to be important both in itself and as an indicator of the amount of unprotected sexual intercourse between young women and older men.

**Impact on Cognitive Factors:** Nearly all sex education programmes that have been studied increased knowledge about different aspects of sexuality and risk of pregnancy or HIV and other STIs. This is important, because increasing knowledge is a primary role of schools. Programmes that were designed to reduce sexual risk and employed a logic model also strove to change other factors that affect sexual behaviour. Those programmes that were effective at either delaying or reducing sexual activity or increasing condom or contraceptive use typically focused on:

- Knowledge of sexual issues such as HIV, other STIs and pregnancy, including methods of prevention
- Perceptions of risk e.g. of HIV, other STIs and of pregnancy
- Personal values about sexual activity and abstinence
- Attitudes about condoms and contraception
• Perceptions of peer norms e.g. about sexual activity, condoms and contraception
• Self-efficacy to refuse sexual intercourse and to use condoms
• Intention to abstain from sexual intercourse or to restrict sexual activity or number of partners or to use condoms and
• Communication with parents or other adults and potentially with sexual partners.

It should be emphasized that some studies demonstrated that particular programmes improved these factors (Kirby, Obasi and Laris, 2006; Kirby 2007). Other studies have demonstrated that these factors, in turn, have an impact on adolescent sexual decision making (Blum and Mmari, 2006; Kirby and Lepore 2007). Thus, there is considerable evidence that effective programmes actually changed behaviour by having an impact on these factors, which then positively affected young people’s sexual behaviour.

Summary of Results

Summary of Results of UNESCO (2009) studies indicate that curriculum-based programmes implemented in schools or communities should be viewed as an important component that can often (but not necessarily always) reduce risky sexual behaviour. However, isolated from broader programmes in the community, these programmes do not always have a significant impact in terms of reducing HIV, Sexually Transmitted Infections or pregnancy rates. To sum up, following is the summary of results:
• There is evidence that programmes did not have harmful effects: in particular, they did not hasten the initiation or increase sexual activity. The studies also demonstrate that it is possible, with the same programmes, to delay sexual intercourse and to increase the use of condoms or other forms of contraception. In other words, a dual emphasis on abstinence together with use of protection for those who are sexually active is not confusing to young people. Rather, it can be both realistic and effective.

• Nearly all studies of sex education programmes demonstrate increased knowledge!

• About two-thirds of them demonstrate positive results on behaviour among either the entire sample or an important sub-sample.

• More than one-fourth of the programmes improved two or more sexual behaviours among young people. Encouragingly, these programmes with positive behavioural results include those with strong evaluation designs and those that replicated similar programmes, with consistent results.

• Comparative analysis of effective and ineffective programmes provides strong evidence that those incorporating the characteristics of effective programmes can change the behaviours that put young people at risk of STIs and pregnancy.

• Even if sex education programmes improve knowledge, skills and intentions to avoid sexual risk or to use clinical services, reducing their risk may be challenging to young people if social norms do not support risk reduction and/or clinical services are not available.
- Sex education programmes studied had one big gap in common: none of them appeared to address the behaviours that cause significant HIV infection among adolescents in large parts of the world (i.e. Europe, Latin America and the Caribbean and Asia). Those behaviours are unsafe injecting drug use, unsafe sexual activity in the context of sex work and unprotected (mainly anal) sexual intercourse between men.

**Sexual activity has Consequences: Examples from Uganda**

Now, let us look at the example of Uganda. It indicates that sexual activity has far-reaching consequences on the boys and girls.

- In the case of Uganda (Straight Talk Foundation, 2008), it is important to recognize that sexual intercourse has consequences that go beyond unintended pregnancy or exposure to STIs including HIV.
- ‘Ugandan boys and girls who have sex early are twice as likely not to complete secondary school as adolescents who have never had sex.’ For many reasons, ‘currently only 10% of boys and 8% of girls complete secondary school in Uganda’.
- In Uganda, thousands of boys are in jail for consensual sex with girls aged less than 18 years. Parents of many more have had to sell land and livestock to keep their sons out of jail.
- Pregnancy for a 17 year old Ugandan girl may mean that she has to leave school forever or marry a man with other wives (17% are in polygamous unions). About 50% of adolescent girls in Uganda give birth attended only by a relative or traditional birth attendant or alone.
Latin America and the Caribbean

A growing number of governments around the world are confirming their commitment to sex education as a priority essential to achieving national development, health and education goals. In August 2008, health and education ministers from across Latin America and the Caribbean came together in Mexico City to sign a historic declaration affirming a mandate for national school-based sex and HIV education throughout the region. The declaration advocates for strengthening comprehensive sex education and for making it a core area of instruction in both primary and secondary schools in the region.

Main features of the Ministerial Declaration include:

- A call to implement and/or strengthen multi-sectoral strategies for comprehensive sex education and the promotion and care of sexual health, including HIV prevention
- An understanding that comprehensive sex education entails human rights, ethical, biological, emotional, social, cultural and gender aspects; respects diversity of sexual orientations and identities (UNESCO, 2009).

MEMA kwa Vijana (Good things for young people): A Study in Tanzania

A particularly interesting study is that of the MEMA kwa Vijana programme in a rural area of the United Republic of Tanzania. This study evaluated the impact of a multi-component programme comprised of a strong classroom-based curriculum, youth-friendly reproductive health services, community-based condom promotion and distribution for and by peers, together with a community sensitization effort to create a supportive environment for the interventions.
A rigorous randomized trial found that the programme had some positive effects on reported sexual behaviour. For example, after a period of eight years the programme reduced the percentage of males who reported four or more lifetime sexual partners from 48 per cent to 40 per cent. It also increased the percentage of females who reported using a condom with a casual sexual partner from 31 per cent to 45 per cent. However, the programme did not have any impact on HIV, other STI or pregnancy rates.

There are at least three possible explanations for this. First, study participants’ reports of sexual behaviour may have been biased and the programme may not have actually changed sexual behaviour. Second, the programme may have changed risk behaviours, but may not have changed the specific behaviours that have the greatest impact on pregnancy, STIs and HIV. Third, the programme may not have changed behaviours to such an extent as to make a difference in rates of pregnancy, STIs and HIV. Whatever the explanation, the study is a caution that even a well-designed, curriculum-based programme implemented in concert with mutually reinforcing community-based elements still may not have a significant impact on pregnancy, STI or HIV rates (www.memakwavijana.org).

**Involving Young People: A Survey in UK**

A report published in 2007 (Fisher and McTaggart, 2008) by the UK Youth Parliament, based on questionnaire responses from over 20,000 young people, says that 40 per cent of young people described the sex and relationships education (SRE) they had received as either ‘poor’ or ‘very poor’, with a further 33 per cent describing it as only average. Other key findings from the survey were that:

- About 43 per cent of respondents reported not having been taught anything about relationships
- More than half (55%) of the 12-15 year olds and 57 per cent of the 16-17 year old females reported not having been taught how to use a condom.

- Just over half of respondents had not been told where their local sexual health service was located.

Involving a structure like the Youth Parliament in the process of reviewing SRE provision yielded important data. The report also illustrates the scale of the challenge in meeting young people’s needs, even in developed countries’ education systems. Partly because young people got involved in the UK Youth Parliament process, compulsory sex and relationships education was announced in England in 2008.

**Perceptions of Students and Teachers on School Based Education in Nepal**

To introduce sex education in schools, there is a need to draw the attention of policy makers and implementing agencies. It has to be imparted beyond the school curriculum, so that changes in culture and traditions can be brought.

In Nepal, two studies (IPPF and FPAN, 2011) were conducted to gain a better understanding on Comprehensive Sex Education-related policy situation and the perception of young people towards sex and sexuality. The first study conducted was a Review of Government Education Policies and Programmes Related to Comprehensive Sexuality Education in Nepal in 2008-09. The aim of this study was to document government policies, identify major strengths and areas for improvement, regarding Comprehensive Sexuality Education-related policies, plans and programmes. Quantitative data from 408 students were collected from Kathmandu and Dhading districts.
Findings of the study in a nutshell are as follows:

- The education on sex and sexuality is incomplete for students up to secondary level and there is a need to draw attention of policy makers and programme implementers to expand the coverage of Comprehensive Sex Education in the school curriculum.
- The students want to know more about sex for their age for which there is also the need to expand sex education in schools.
- Comprehensive Sex Education should be extended beyond the school curriculum, so that changes in culture and traditions is brought about to create receptivity in society.

Another study was carried out by Family Planning Association of Nepal in 2010 on Perceptions of Students and Teachers on Content and Classroom Environment on School Based Sex Education in Nepal. The study was conducted among 338 students of class IX, X and 118 teachers belonging to more than 30 schools from the rural, semi urban and urban areas of 15 districts of Nepal. The study aimed at understanding the perception of students and teachers on sex education and its importance in the formal education system. It further explored the existing classroom environment while teaching and learning the sex education curriculum. The study applied quantitative methodology and involved young people at different stages of the research. The major findings of the study were:

- Most of the schools cover sexual and reproductive health education, but more than 50 per cent teachers and students feel it is insufficient.
- Majority (98%) of the teachers and students feel Comprehensive Sex Education must be included in the school curriculum.
• Teachers and students opined that sex education reduces sexually transmitted infections and gives right information. It makes teenagers knowledgeable in the present context, resulting in cultivation of positive attitude toward sex and sexual health.

• More than half of the teachers interviewed stated that they feel uneasy to explain details of the subject in class and more than half felt they need proper teaching materials 32 per cent teachers say that the students do not cooperate in the classroom when this topic is being taught.

• More than 95 per cent of teachers and students say these topics should not be excluded from the current curriculum and it should be extended with some modification which will help adolescents make decisions in their lives that create a happy and safe life.

This study recommended that Comprehensive Sex Education should be implemented, taking into consideration social norms and values. It suggests that the curriculum should be more focused on gender, sexual pleasure, satisfaction, diversity and relationship issues. It also says that it should not just focus on biomedical aspects but should also look into developing self confidence of adolescents and empower them to take on responsibilities in society. Lastly, according to the study, appropriate training and education material is essential for teaching comprehensive sex education.

Young people’s access to sexual and reproductive health information is a crucial step towards their practicing safe behaviours, although information itself is not adequate for behaviour change. The findings of the United National Population Fund (UNFPA)/Reproductive Health Initiative for Youth in Asia’s (RHIYA) baseline and end line surveys conducted in 2004 and 2006 respectively are to a certain extent
encouraging in terms of access to information. The survey report shows that more than 96 per cent of the young people in the baseline survey and almost all in the end line survey said that they had knowledge of at least one contraceptive (UNFPA and RHIYA, 2007).

Similarly, according to Demographic Health Survey 2006, only 28 per cent of women and 44 per cent of men of ages 15 to 24 have comprehensive knowledge about HIV and AIDS (IPPF and FPAN, 2011). Another study conducted on the knowledge and use of condoms by young people in Nepal found that two-thirds of the young people of Nepal have actual knowledge of condoms. Among ever sexually active males and females, 25.2 per cent and 10.4 per cent respectively, reported currently using condoms (Thapa and Shreshta, 2004).

**Sex Education: Research Findings**

Sex education can postpone the sexual debut and engage less in sexual activities. In the United States, a review of 23 sex education programmes covering people less than 22 years of age showed that participating youths were less prone to engage in sexual activities, and those who were sexually active, were beginning to slow down. Furthermore, some of these programmes had a specific impact in terms of postponing their sexual debut and reducing the number of sexual partners (Kirby D., Short L. and Collins J. *et al*; 1994).

Imparting sex education creates awareness about safe sex practices. A study on the effects of 19 sex education programmes implemented in various countries’ schools showed that sex education did not lower the age of sexual debut nor did it increase its frequency. In fact, six studies showed that sex education raised the age of
initiation and lowered the number of sex encounters, while ten showed that the most sexually active youths adopted secure sex practices more often (WHO, 1996).

Sex Education can also make an impact on the students indulging in sexual intercourse. The evaluation of a sex education programme conducted in Norway during 1991 among 9th graders, revealed a substantial reduction in the percentage of students who had actually engaged in sexual intercourse (Nafstad P; Henden K. et al, 1994). There also exists a positive correlation between sex education programme and its anticipated results. A stratified sample of 2411 Norwegian students participating in a prevention enhancement programme intended to reduce Sexually Transmitted Diseases and the occurrence of adolescent pregnancies, showed a positive correlation between the programme and the anticipated results. The correlation was closer among students with fewer sexual partners (Kvalem I; Sundet J; et al, 1996).

Sex Education does not aim at only preventing unwanted pregnancies. It can also reduce the risk of contracting HIV/AIDS. In order to evaluate the impact of programmes designed not only to prevent unwanted pregnancies but also to reduce the risks of contracting HIV/AIDS and other Sexually Transmitted Diseases in U.S.A., 383 African American youths between the ages of nine and 15 participated in a follow-up activity, at six, 12 and 18 months, following attendance to an educational programme on prevention methods. Research showed that before these programmes two-thirds of the participating youths used some kind of preservative or contraceptive, or both. This proportion increased markedly after the programme was completed. (Stanto, BF.; Li X; et al, 1996).
Translating knowledge into action learning is also very important. Sustainable utilization of knowledge is the key to success which can be done by education. In the United States, traditional sex education classes restricted to offering information on reproductive and contraceptive functions are seldom effective. Recent studies detect an extremely tenuous relationship between students’ knowledge of birth control methods and their consistent utilization. In the United States, successful postponement of sexual activity has been achieved by programmes beginning in pre-adolescence and grades 6 and 7. These are interactive experiences which in addition to providing young men with information, help to develop decision-making skills, be assertive, and resist pressure to engage in sexual activities (Citizen for Missouri, 1994).

As shown by educational research, a quality sex education can in fact postpone the sexual debut among youths; if additionally, it is successful in terms of curtailing the frequency of sexual encounters or, where couples are already sexually involved, makes possible the introduction of contraceptive methods, a quality sex education could definitely become a pregnancy-preventing strategy, among adolescents of poverty-stricken areas. Consequently, in time it could emerge as factor that, in and by itself, will contribute to enhance the living conditions of the new generations (UNESCO, 1997).

Mounting evidence (UNESCO, 2006) suggests that education programmes that address sex, sexuality and behaviours do not lead to earlier sexual debut or the adoption of high-risk behaviours. Thus, in order to stem the spread of HIV and AIDS, sex education for children is imperative.
The UNAIDS Inter-Agency Task Team on Young People conducted an extensive review of the evidence on sex education programmes around the world and created a system to identify successful types of HIV/AIDS prevention programmes that should be replicated (Kirby, Obasi and Laris 2006). Of 22 school-based programme evaluations included in the review, mainly from Africa and Latin America, characteristics deemed effective included the relevance of addressing multiple factors affecting sexual behaviours, including knowledge, perceived risks, values, attitudes, norms and self-efficacy.

Another report on sex education programmes identified 83 studies that matched strict selection criteria. Of the programmes evaluated, 56 were USA-based and the remaining 27 were from a number of developing and developed countries. The programmes that were more comprehensive in focus, providing accurate and complete information on sexual and reproductive health, using teaching skills to engage in healthier behaviour and addressing attitudes and values, were usually shown to result in better health outcomes (Kirby, Obasi and Laris 2006).

The World Health Organization publication “Preventing HIV/AIDS in Young People: A Systematic Review of the Evidence from Developing Countries” reviews evidence for policies and programmes on young people and HIV/AIDS prevention in developing countries and found similar outcomes (Ross, Dick and Ferguson 2006). It also highlighted the important link between school-based sex education and a reduction in injecting drug use and increased referrals to health services. In addition, it found that promoting interventions through communities that model skills was successful in reducing unprotected sex (Ross, Dick and Ferguson 2006).
Other reviews of effective sex education programmes have found common characteristics that are beneficial to young people’s sexual health (Blake and Katrak 2002). These include:

- a strong focus on reducing specific risky behaviours
- a better understanding of what influences people’s sexual choices and behaviour
- having clear and continuously reinforced age-appropriate messages about sexual behaviour and risk education including knowledge, skills, values, attitudes, norms and communication
- providing accurate information about the risks associated with sexual activity, about contraception and birth control, and about different ways of avoiding or deferring intercourse
- dealing with peer and other social pressures on young people
- providing opportunities to practice communication, negotiation and assertion skills
- using a variety of approaches to teaching and learning that engage young people and help them to personalize the information
- using approaches to teaching and learning that are appropriate to young people’s age, experience and cultural background
- having good linkages with contraceptive, sexually transmitted infection and HIV/AIDS services

A study of ‘Healthy Oakland Teens’ in California – a programme that provided information and addressed perceptions of personal risk, costs and benefits of preventive behaviours, refusal skills and condom use – found that the programme delayed initiation of sexual activity (Collins, Alagiri and Summers, 2002).
“Reducing the Risk” – a programme in both urban and rural California based on role playing and emphasizing abstinence and protection – was evaluated by Kirby et. al., (1991). It was found to delay sexual initiation, increase contraceptive use for females and reduce frequency of unprotected intercourse. Hubbard et. al., evaluated the same programme in urban and rural areas in Arkansas and found delayed initiation of sexual activity and increased condom use (Collins, Alagiri and Summers 2002).

‘Becoming a Responsible Teen’ – a programme of weekly meetings with small group discussions, role playing, sessions with HIV positive young people, information, sexual decision making and use of condoms – was found by St. Lawrence et. al. to delay initiation, decrease the number of sexual partners and increase condom use (Collins, Alagiri and Summers 2002).

A study compared comprehensive sex education and abstinence-only curriculum, finding more positive effects on frequency of sexual activity, condom use and frequency of unprotected sex over time for comprehensive sex education programmes. Abstinence-only curriculum evaluated did delay initiation at three months post-intervention and increased condom use at 12 months post-intervention. However, it is worth mentioning that the programme, despite being abstinence-focused, did mention condoms as a means of contraception (Collins, Alagiri and Summers 2002).

Some longitudinal studies have shown the long-lasting positive effects on behaviour of comprehensive sex education programmes. Coyle et. al. (2001) studied ‘Safer Choices’ in California and Texas and found that it increased condom use and reduced frequency of sex without condoms for more than 31 months post-intervention (Collins, Alagiri and Summers 2002).
Santelli et. al. (2006) looked at two reviews of sex education studies by Kirby and by Manlove et. al. (2004), and evaluated the effect of comprehensive sex education on the onset of sexual activity. Both reviews showed that comprehensive sex education effectively promoted abstinence as well as other protective behaviours.

Further, out of the 28 programmes evaluated by Kirby (2001), nine delayed initiation, 18 showed no impact and one hastened initiation.

Manlove, et. al. (2004) identified three types of comprehensive sex education programmes: sex education programmes, HIV/sexually transmitted infection prevention programmes and youth development programmes. Six of the nine sex education programmes, five of the seven HIV/sexually transmitted infection prevention programmes and all four of the youth development programmes were found to delay the onset of sexual activity.

In 1998, Ingham and van Zessen completed some research that compared young people’s accounts of their early sexual development and activities in the UK and in the Netherlands (see also Ingham, 2005). Key patterns of results showed that more openness in schools and in the home had positive effects on increasing healthier sexual behaviours. This proved helpful in developing policy in the UK and elsewhere and in persuading those in positions of influence that they need not fear greater discussion of sexual issues (Ingham, 2005).

A 2001 survey by the National Campaign to Prevent Teen Pregnancy reported that teenagers in the United States cited moral and religious beliefs as significant factors in abstaining from sex. It also found that young people who identified themselves as ‘religious’ were more likely to delay sex (Collins, Alagiri and Summers 2002).
Various studies have associated traditional attitudes on gender roles and inequitable power in intimate heterosexual relationships with earlier age of sexual debut, higher number of partners, more frequent intercourse, low rates of condom and contraceptive use, and higher rates of HIV infection (Jorgensen et. al. 1980).

Marriage does not protect against infection or unwanted pregnancy. Research in countries that include Zambia, Kenya, South Africa, India, Colombia and the Philippines – indicates that married women, particularly young women, are at an equal or increased risk of contracting HIV when compared to unmarried women (Cohen 2004; SIECUS Public Policy Office 2005).

Talking About Reproductive and Sexual Health Issues (TARSHI, 2007) is a New Delhi-based Non-Governmental Organization in India that is dedicated to working towards sexual well-being and a self-affirming and enjoyable sex for all people. Based on the 60,000+ calls received about the needs of people of all ages for sex information on the TARSHI helpline, it is evident that it demonstrated that people of all ages and educational backgrounds are lacking information related to sex. From the helpline data, it appears that there are callers in their 30s and 40s who still have not learned even the basics of sex information, which is having an effect on their health and well-being, as well as their relationship with others.

Many young people still lack even the most basic information about sexual health. Evidence reveals that 25 per cent or more of young men in some countries, particularly in Latin America and the Caribbean, have engaged in vaginal intercourse before the age of 15. A similar situation prevails for girls in parts of sub-Saharan Africa, India and Bangladesh - largely because of child marriage (Global Forum for Health Research, 2007).
Even more worrying is the fact that, in a number of countries, 20-40% of young women report that their first experience of sexual intercourse was forced (Jejeebhoy and Bott, 2003). While first sex is not necessarily occurring at earlier ages than in the past, in most countries an increasing proportion of young people are experiencing first sex before marriage, often as a consequence of older age at marriage. The changing context of first sex has implications for certain reproductive health outcomes, in particular the incidence of unintended pregnancy (Lloyd, 2007).

A recent study (Biddlecom et al., 2007) in four sub-Saharan countries concludes that, at any given age, girls are more likely than boys to drop out before completing primary school. Those girls who do complete primary school are less likely than boys to progress to secondary education. Typically, pregnancy leads to girls leaving school, whereas the educational careers of boys are less likely to be compromised by fatherhood. The study draws attention to the need to coordinate HIV prevention activities with those that address the poor economic conditions and unequal gender norms that encourage boys and girls to engage in risky sexual relationships. This includes, for girls, relationships with older men in which sex is exchanged for money or gifts. The researchers argue for continued investment in young women to increase educational attainment, improve financial opportunities and expand legal rights, which will in turn lead to benefits in terms of the sexual and reproductive health of young women and their male partners (Amuyunzu-Nyamongo et al. 2005).

Some studies show that sex education programmes have mixed effects when evaluated on standard behavioural outcomes (Kirby 2001; DiCenso et al 2002; Speizer, Magnani and Colvin 2003). New lessons are being generated about relatively more effective programmes indicating that we should not shy away from exploring
bolder approaches that reach many more young people, especially girls, and could potentially lead to far better outcomes (Rogow and Haberland 2005).

A review of 22 evaluation studies of community HIV prevention programmes for young people in developing countries found that most interventions had positive results when using considerable innovation and creativity (Maticka-Tyndale and Brouillard-Coyle 2006). Interventions that were most successful were developed by youth organizations or centres already accepted in the community. However, an overall lack of strong study design indicated that programmes should invest additional resources in the evaluation of interventions.

Advocates for Youth Respect Young People’s Right to be Responsible support Comprehensive Sex Education (Advocates for Youth, 2002). It considers issues in sex education specific to young people who are gay, lesbian, bisexual, transgender and questioning. Further, it emphasizes the need to create inclusive programmes and how abstinence-only education stigmatizes and excludes young people who are gay, lesbian, bisexual, transgender and questioning.

American Medical Association (2006) urges schools to implement comprehensive, developmentally appropriate sex education programmes. Further, it opposes the sole use of abstinence-only education.

Aradeon, S. (2000) has developed Advocacy for Population and Reproductive Health: An Introductory Manual for Advocates and Trainers. It is a do-it-yourself manual that attempts to demystify advocacy and enable people to become successful advocates.
Bennet, S., and Assefi, N. (2005) conducted a systematic review of randomized controlled trials on school-based teenage pregnancy prevention programs. They compared school-based abstinence-only programmes and ‘abstinence-plus’ programmes (that include contraceptive information) to determine which has the greatest impact on teenage pregnancy. Results show that some abstinence-only and abstinence-plus programmes can change teenagers, sexual behaviours, although effects are relatively modest and may only last in the short term. Concerns that abstinence-plus programmes created confusion and increased sexual activity were unfounded. Programmes that offered contraceptive education significantly influenced students’ knowledge and use of contraception, and one study showed the effects to last for at least 30 months.


Collins, C., Alagiri, P., and Summers, T. (2002) reviews evidence and arguments for and against both abstinence-only and comprehensive sex education. The authors conclude that health education should be designed to prevent disease and unwanted pregnancy and the policymakers need to base funding and laws on the health needs of young people.

In a study on understanding ‘abstinence’: implications for individuals, programs and policies, Dailard, C. (2003) takes a population and public health approach and considers ‘perfect-use’ (100 per cent) vs. ‘typical-use’ (unknown) rate of effectiveness for abstinence. The author argues that success of abstinence-only
education both in the US and Uganda has been wrongly measured and falsely credited for declines in youth pregnancy and HIV prevalence.

Adding a skills-based component to Sexually Transmitted Diseases prevention efforts may increase their success among teenagers. In a programme aimed at sexually experienced young people, Hollander D (2005) looks at the evidence of a study showing that emphasizing sexually transmitted infection risk reduction skills can have a greater impact than information-only interventions. Trial in Philadelphia showed less unprotected sex, lower incidence of sexually transmitted infections, less involvement with multiple partners, and less unprotected sex involving alcohol or drugs in intervention group than in control groups.

Uganda is redirecting its HIV prevention strategy for young people towards focusing primarily on promoting sexual abstinence until marriage. It basically looks at ABC strategy – Abstain, Be faithful and use a Condom. Evidence base suggests that AIDS reductions are mainly due to abstinence-only approach (Human Rights Watch, 2005).

In its Framework on Comprehensive Sex Education, International Planned Parenthood Federation (2006) supports the implementation of the IPPF’s strategic objective on sex education. It provides an in-depth overview of comprehensive sex education, and a basic planning and implementation framework for comprehensive sex education. International Planned Parenthood Federation (2008) grounds sexual rights within core international human rights instruments. It affirms that sexual rights are human rights related to sex. IPPF further provides principles which should inform the development of programmes, services and strategies to ensure that they protect, promote and fulfill sexual rights.
Irin (2006) looks at barriers to HIV reduction and argues that there is a need to move beyond ABC messages. Inability to change behaviour lies in the nature of messages – “top-down, fear-inducing lectures on safe sex by national AIDS bodies do not acknowledge that sex is about desire, love, the irrational and the illicit; cultural contexts, gender roles, and the influence of peers confound a ‘one size fits all’ approach to awareness and motivating people to change their ways.”

There exists one question that whether abstinence-only programs can delay the initiation of sex among young people and reduce teen pregnancy. Evaluation of ten studies were taken up by Kirby, D. (2002), in which, nine out of 10 studies fails to provide credible evidence and one study shows some delay, but only among specific age groups. There do not currently exist any abstinence-only programmes with strong evidence that they either delay sex or reduce teenage pregnancy.

Quite a few common questions are raised about sexual health based education. McKay, A. (2005) provides answers to common questions about sexual health education based on existing scientific research and evidence. Further, abstinence-only programmes are ineffective. Shears, K., H. (2002) argues that abstinence-only is ineffective and there is a need to give information on contraception.

Studies have been taken up by Feijoo, A. (2001) on Adolescent Sexual Health in Europe and in the United States. He has compared data on young people’s sexual health from the United States and several European countries. The studies reveal that knowledge about sex has improved after the programmes.
Thus, it is evident from the above researches that there is an increased knowledge and attitude among parents, teachers and students after introducing sex education in schools. Most importantly, there is a change in the behaviour of the students after introducing age-appropriate and comprehensive sex education.

For the improvement of knowledge and attitude, we need to understand what were the contents or curriculum which made the students to change their behaviour. Effort is made to understand what should be the curriculum and who should deliver it here.

WHAT SHOULD BE THE CONTENT/CURRICULUM AND WHO SHOULD DELIVER IT?

Experts suggest that a good curriculum for sex and relationships education covers three areas: facts and information, relationship and interpersonal skills and values. (Stone and Ingham, 2006). Others add that it should also address perceptions of peer norms, attitudes and intentions (Kirby, 2006).

While some programmes continue to focus on human biology, reproduction, hygiene and marriage, others have expanded to include information on physical and emotional development and Sexually Transmitted Infections and HIV/AIDS. More broad-based curriculum also cover contraception, abortion and sexual abuse. Some programmes give young people the opportunity to consider diversity, marriage and partnership, love and commitment, and the law as it relates to sexual behaviour and relationships, together with consideration of social, religious and cultural aspects of sex (Stone and Ingham, 2006).
The development of critical thinking, for example about rights and gender, is also often encouraged, and skills developed in communication and decision-making. However, it is important that the content remains focused on sexual relationships and the sexual transmission of HIV if the programme is to have measurable impact on HIV infections. All sex and relationships education programmes are values-based. The key questions concern which (or whose) specific values, the extent to which these are made explicit, and whether or not they are open to scrutiny. Processes that clarify values about sex and relationships can be useful not only for students but also for teachers, school authorities, parents and communities. Sex and relationships education is delivered through a range of named programmes, including: sex education, family life education, population education, sex and relationships education, sex education and life skills education. The title of the programme may be a reflection of political or cultural sensitivity, indicative of the emphasis of its content, or a combination of the two (Gordon, 2008).

Experience in Kenya and Tanzania suggest that, even in contexts of severe resource constraints, it is possible to implement good quality sex and relationships education within primary school curriculum. The Mema Kwa Vijana (‘Good Things for Young People’) programme in Tanzania touched on community-based activities including condom distribution, health service and in- and inter-school elements. The most intensive component was a participatory, teacher-led, peer-assisted, in-school programme, comprising an average of twelve forty-minute sessions per year, held during school hours in Years Five to Seven of primary school (Gordon, 2008).
In Kenya (Brouillard-Coyle, 2005), groups comprising head teachers, resource or senior teachers and community representatives were trained to deliver HIV and AIDS education with a particular focus on prevention and care for those affected by HIV by infusing and integrating lessons across the entire school curriculum, with a focus on students aged between 12 and 14. Upon their return to school, graduates of the training provided training for their colleagues, delivered HIV and AIDS education in the classroom and implemented co-curriculum activities, such as drama, music, art, public speaking, writing, sports and exhibitions, within and across local schools.

The HIV epidemic has significantly raised the profile of the condom, which has become the most popular method of contraception for sexually active people. However, some argue the association between condoms and HIV also stigmatizes condoms (and their users). Given that two-thirds of young women whose partners use condoms are motivated by the desire to avoid pregnancy, and that it is more socially acceptable to raise the issue of condom use with a sexual partner in relation to pregnancy rather than HIV, more attention needs to be paid to highlighting the contraceptive benefits of condoms. The issue of condoms highlights some of the key tensions that can compromise the effectiveness of sex and relationships education, including community and religious sensitivities and teacher discomfort (Gordon, 2008).

A study on current programmes of sex education (James Lawrence et. al, 2000) in 105 selected schools in Britain was conducted by the authors. Study focused on the coverage of 23 topics on sex education in the select schools. Authors vouch that timing is a crucial element in sex education. In order to be most beneficial, sex education needs to be age-appropriate, thereby giving young people the information
they need at the right time in order to make informed decisions and to put them more at ease with the changes they experience. The following table provides the details:

Table 2.2: Percentage of 105 schools including each of 23 topics in any school Year 7-11

<table>
<thead>
<tr>
<th>SN.</th>
<th>Topic</th>
<th>Y 7</th>
<th>Y 8</th>
<th>Y 9</th>
<th>Y10</th>
<th>Y11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Parts of the body</td>
<td>85%</td>
<td>54%</td>
<td>61%</td>
<td>51%</td>
<td>35%</td>
</tr>
<tr>
<td>2</td>
<td>Contraception and family planning</td>
<td>45%</td>
<td>43%</td>
<td>82%</td>
<td>61%</td>
<td>52%</td>
</tr>
<tr>
<td>3</td>
<td>Puberty, differences in growth and development</td>
<td>84%</td>
<td>54%</td>
<td>46%</td>
<td>33%</td>
<td>28%</td>
</tr>
<tr>
<td>4</td>
<td>Sexual development: menstruation, masturbation, wet dreams</td>
<td>77%</td>
<td>50%</td>
<td>44%</td>
<td>37%</td>
<td>27%</td>
</tr>
<tr>
<td>5</td>
<td>‘Love-making’ i.e. arousal, foreplay, intercourse</td>
<td>37%</td>
<td>34%</td>
<td>60%</td>
<td>50%</td>
<td>37%</td>
</tr>
<tr>
<td>6</td>
<td>Fertilization, pregnancy and birth</td>
<td>61%</td>
<td>40%</td>
<td>44%</td>
<td>46%</td>
<td>33%</td>
</tr>
<tr>
<td>7</td>
<td>Sexually Transmitted Diseases, inc. HIV transmission</td>
<td>34%</td>
<td>34%</td>
<td>67%</td>
<td>68%</td>
<td>49%</td>
</tr>
<tr>
<td>8</td>
<td>Sex and the law</td>
<td>30%</td>
<td>32%</td>
<td>66%</td>
<td>46%</td>
<td>37%</td>
</tr>
<tr>
<td>9</td>
<td>Safer sex</td>
<td>26%</td>
<td>32%</td>
<td>72%</td>
<td>54%</td>
<td>45%</td>
</tr>
<tr>
<td>10</td>
<td>Homosexuality</td>
<td>23%</td>
<td>22%</td>
<td>50%</td>
<td>52%</td>
<td>38%</td>
</tr>
<tr>
<td>11</td>
<td>Relationships: listening, sharing, co-operation, tolerance</td>
<td>39%</td>
<td>38%</td>
<td>48%</td>
<td>37%</td>
<td>35%</td>
</tr>
<tr>
<td>12</td>
<td>Long-term relationships and marriage</td>
<td>30%</td>
<td>27%</td>
<td>49%</td>
<td>60%</td>
<td>45%</td>
</tr>
<tr>
<td>13</td>
<td>Changing relationships: separation, loss, bereavement</td>
<td>23%</td>
<td>34%</td>
<td>41%</td>
<td>40%</td>
<td>34%</td>
</tr>
<tr>
<td>14</td>
<td>Religious and cultural views, moral values and attitudes</td>
<td>24%</td>
<td>24%</td>
<td>40%</td>
<td>46%</td>
<td>38%</td>
</tr>
<tr>
<td>15</td>
<td>Family life: different types of families, changing families</td>
<td>27%</td>
<td>35%</td>
<td>38%</td>
<td>45%</td>
<td>35%</td>
</tr>
<tr>
<td>16</td>
<td>Sexual stereotyping</td>
<td>20%</td>
<td>30%</td>
<td>49%</td>
<td>41%</td>
<td>29%</td>
</tr>
<tr>
<td>17</td>
<td>Sexual harassment</td>
<td>13%</td>
<td>17%</td>
<td>29%</td>
<td>43%</td>
<td>39%</td>
</tr>
<tr>
<td>18</td>
<td>Talking about sexual topics</td>
<td>40%</td>
<td>33%</td>
<td>51%</td>
<td>45%</td>
<td>34%</td>
</tr>
<tr>
<td>19</td>
<td>Decision-making and personal choice about relationships</td>
<td>27%</td>
<td>35%</td>
<td>55%</td>
<td>44%</td>
<td>38%</td>
</tr>
<tr>
<td>20</td>
<td>Keeping safe and resisting pressure</td>
<td>34%</td>
<td>30%</td>
<td>50%</td>
<td>44%</td>
<td>41%</td>
</tr>
<tr>
<td>21</td>
<td>Negotiating about relationships</td>
<td>28%</td>
<td>28%</td>
<td>41%</td>
<td>46%</td>
<td>30%</td>
</tr>
<tr>
<td>22</td>
<td>Confidence in relationships</td>
<td>26%</td>
<td>23%</td>
<td>38%</td>
<td>40%</td>
<td>26%</td>
</tr>
<tr>
<td>23</td>
<td>Using services/agencies about sexual health</td>
<td>20%</td>
<td>24%</td>
<td>57%</td>
<td>60%</td>
<td>40%</td>
</tr>
</tbody>
</table>


It would seem sensible that basic education around puberty be delivered prior to girls experiencing menarche, widely accepted to be on average between the ages 12-13. It is therefore not surprising that 84 per cent of schools cover ‘puberty’ in Year seven, but a significant number are revisiting the topic in year nine.
One school was found to be covering ‘puberty’ for the first time in Year nine; two years after the average age of menarche and of little use for those girls who started puberty even younger. Similarly, over 50% of schools are covering ‘parts of the body’ at Year ten, when some young people are seriously considering becoming (or have already become) sexually active. It would be expected that there are other topics, such as ‘relationships’, where the classroom time allocated could be more usefully spent.

Mismatch between the coverage of ‘safer sex’ and ‘Sexually Transmitted Diseases’ can be seen here. ‘Sexually Transmitted Diseases’ are consistently covered more than ‘safer sex’ with the exception of Year nine. With the obvious overlap between safer sex and STD transmission, it would be reasonable to expect that the levels of coverage would be more similar. Further, factors influencing the teaching of sex education were identified by the authors.

It is hardly surprising that ‘teacher confidence/commitment’ was rated as a very important factor by the highest number of coordinators (91%). Also, given the subject matter and the need for the coordinator to provide a moral context without their personal beliefs entering the lesson, there is an understandable need for ‘other resources’ in this area (84%). However, the need for actual teaching time (‘space on timetable’), often suspected by health professionals as being one of the greatest constraints upon sex education programmes, was only rated as very important by three quarters of coordinators (74%).
Table 2.3: Factors influencing sex education – importance (sorted by percentage rating factor as ‘very important’)

<table>
<thead>
<tr>
<th>SN.</th>
<th>Topic</th>
<th>Not all important</th>
<th>Of some importance</th>
<th>Very important</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher confidence/commitment</td>
<td>5%</td>
<td>4%</td>
<td>91%</td>
</tr>
<tr>
<td>2</td>
<td>Co-ordination and leadership of programme</td>
<td>4%</td>
<td>11%</td>
<td>85%</td>
</tr>
<tr>
<td>3</td>
<td>Other resources</td>
<td>2%</td>
<td>14%</td>
<td>84%</td>
</tr>
<tr>
<td>4</td>
<td>Support of senior management</td>
<td>2%</td>
<td>15%</td>
<td>83%</td>
</tr>
<tr>
<td>5</td>
<td>Space on timetable</td>
<td>6%</td>
<td>20%</td>
<td>74%</td>
</tr>
<tr>
<td>6</td>
<td>Time for planning/differentiation</td>
<td>6%</td>
<td>29%</td>
<td>65%</td>
</tr>
<tr>
<td>7</td>
<td>Support of parents</td>
<td>5%</td>
<td>30%</td>
<td>65%</td>
</tr>
<tr>
<td>8</td>
<td>Support of governors</td>
<td>5%</td>
<td>31%</td>
<td>64%</td>
</tr>
<tr>
<td>9</td>
<td>In-Service Training (INSET)</td>
<td>4%</td>
<td>33%</td>
<td>63%</td>
</tr>
<tr>
<td>10</td>
<td>Teacher training (Initial Teacher Training – ITT)</td>
<td>7%</td>
<td>34%</td>
<td>59%</td>
</tr>
<tr>
<td>11</td>
<td>Support of outside agencies</td>
<td>4%</td>
<td>40%</td>
<td>56%</td>
</tr>
</tbody>
</table>


A high percentage (65%) of coordinators feel that ‘time for planning’ and ensuring they can tailor their provision to the needs of their students is very important. However, involving ‘outside agencies’ in helping to provide sex education was considered very important by the smallest number (56%).

Hostile press coverage over the past few years has clearly impressed upon schools the need to ensure that the policy and programme are developed in such a way that maintains the support of both the ‘parents’ (65%), ‘governors’ (64%) and ‘senior management’ (83%). To what extent this desire to involve all three parties is a result of a general nervousness toward sex education, or a belief in including all the stakeholders in the development process, is debatable.

A study of the condom component of the Primary School Action for Better Health (PSABH) programme in Kenya (Brouillard-Coyk, 2005) highlighted how inconsistent information about condoms was provided to young people. Teachers and community and church leaders believed in and presented abstinence as the only
effective way to prevent sexual transmission of HIV. As a result, they had difficulty developing a clear position on the use of condoms, a situation exacerbated by government silence on the topic and the conflicting positions taken respectively by social marketing campaigns and churches and leaders. This led teachers to often repeat negative and inaccurate messages on condoms.

Students recognized the contradictions in what they heard from teachers and other adults in their communities and turned towards peers with sexual experience and particular teachers who were more comfortable with the subject. Following training, there was evidence that an increasing number of young people were receiving information about condoms within their schools. By addressing the concerns raised by community disseminators of HIV information, it was possible for them to become more comfortable with condom messages, for the number of contradictory messages to decrease together with a corresponding change in the attitudes of young people towards condoms.

Curriculum needs to be updated and renewed based on the changing needs of the society. In the Netherlands, a new HIV/AIDS and STD prevention programme was compared to a previous one on the same subject, both designed for ninth and tenth graders. In its design phase, the new programme enlisted the participation of researchers, students, teachers and other school staff, something the old programme did not do. Results indicated that the new curriculum increased the consistent use of contraceptives markedly (Schaalma and Kok, 1996). Thus, it is very important to involve all the relevant stakeholders while designing or redesigning a sex education programme.
In his Advocate for Youth, an Advocacy Kit, Flinn, S. (1996) mentions that all comprehensive sex education programs teach about abstinence, and help teens build their skills to remain abstinent if they so desire. These topics include decision-making, negotiating health care and contraceptive use, disease prevention and avoidance of peer pressure. When abstinence is taught as the only option for young people, teens are denied information and skills that will be vitally important to them at some point in their sexual lives. Further, he gives tips for advocacy and for answering questions from the opposition.

International Planned Parenthood Federation (2007) offers a framework for organizing and developing advocacy campaigns and programmes. It outlines the various steps involved, including building support, shaping your message, reaching the public and the media, developing materials and dealing with the opposition.

International Planned Parenthood Federation’s (2006) Rights Resource Pack, a CD-ROM guide suggests for implementing a rights-based approach that focuses on practical ways to provide quality information, to ensure young people participate in all decision making processes, and to ensure that services are youth friendly, gender-sensitive and non-discriminatory.

The HIV epidemic has significantly raised the profile of the condom, which has become the most popular method of contraception for sexually active people. However, some argue the association between condoms and HIV also stigmatizes condoms (and their users). Given that two-thirds of young women whose partners use condoms are motivated by the desire to avoid pregnancy, and that it is more socially acceptable to raise the issue of condom use with a sexual partner in relation to pregnancy rather than HIV, more attention needs to be paid to highlighting the contraceptive benefits of condoms.
Global State of Sex and HIV Education: Desk-Based Review (Gordon, 2008)

In 2007, UNESCO commissioned a desk-based review of the global state of sex and HIV education in the formal education sector was conducted. The review was based on 22 key informant interviews with experts from Africa, Europe and North and South America, together with searches of published and grey literature obtained from the internet, databases and personal recommendation, as well as manual searching of key journals. The focus of the review was upon sex, relationships and HIV education programmes within the context of poorer countries, particularly those in sub-Saharan Africa.

A basic challenge encountered in conducting this review was the wide range of terms used to describe the educational activities, methodologies and processes that constitute sex, relationships and HIV education in schools. For the sake of clarity and simplicity, following consideration by its Global Advisory Group on Sex, Relationships and HIV Education, UNESCO decided to use the term sex, relationships and HIV education. Following are the key findings of the review (Gordon, 2008):

- Throughout the world, too few young women and men, including those who are living with HIV, receive anything approaching adequate preparation for adult sexual life. In many HIV and AIDS curriculum, discussion of sex is simply avoided or else the focus is placed, often exclusively, upon the potential negative consequences of sex. The positive values of sexual life, such as pleasure and reciprocity, are conspicuous in their absence, despite their health promoting potential.
- Schools provide a viable means of reaching large numbers of young people with sex and HIV education in ways that are replicable and sustainable, and given their number and proximity to students, teachers are best placed to deliver sex education. Peer educators can also provide useful support. With significantly more children attending primary than secondary school, it seems appropriate that the subject should be introduced at this level. However, space needs to be made in already crowded curriculum and teachers need to be given the skills, materials and confidence to undertake teaching on this topic.

- Barriers to the effective implementation of sex, relationships and HIV education in schools include inadequate resources and community opposition as well as authoritarian and didactic approaches on the part of teachers. In some settings, pervasive gender bias, sexual coercion and abuse conspire to render school itself a risky environment, especially for girls. Tackling this issue requires resources and commitments that go beyond the scope of what is possible within classroom-based sex and HIV education programmes.

- Negative outcomes associated with sexual behaviour are the result of both risk (at the personal level) and vulnerability (the socio-economic and cultural factors that put people at risk in the first place). While sex, relationships and HIV education can reduce risk, broader action is required over the longer term to tackle underlying issues of vulnerability.

- A range of approaches to sex, relationships and HIV education currently exist. These vary from those that seek to eliminate risk altogether (‘abstinence-only’ approaches), through to those that seek to reduce risk (for example, by encouraging delay of sexual debut or condom use) to those (far fewer in number) that seek to reduce vulnerability by addressing underlying factors that
contribute to sexual ill-health, such as poverty and gender inequality, abuse and violence.

- Whatever the approach, it is generally accepted that effective sex education curriculum include consideration of facts and information, interpersonal skills, as well as values and exploration of perceptions of peer norms, attitudes and intentions. Specific characteristics of effective curriculum have been identified in relation to curriculum development, content and implementation.

- Participatory and interactive methods can be employed for all aspects of the curriculum and are consistent with the specific competencies that sex, relationships and HIV education is intended to develop. However, these methods may be at odds with more authoritarian and traditional (and pervasive) styles of teaching and of teacher-student relationships.

- There is overwhelming evidence to demonstrate that sex, relationships and HIV education programmes can increase knowledge and affect values and attitudes. Some programmes have been successful at reducing the risk of unintended pregnancies and sexually transmitted infections (STIs).

- There continues to be a debate about the focus of sex, relationships and HIV education and whether the focus should be firmly upon what can be measured in strictly behavioural terms or whether it should be expanded to become a more all-embracing reflection of life as it is lived beyond the school gates. Clearly each approach will have implications for its design, implementation and evaluation.
Thus, effective curriculum broadly covers sharing information about human sexuality, growth and development, sexual anatomy, reproduction, contraception, pregnancy and childbirth, HIV and AIDS, Sexually Transmitted Infections, family life and interpersonal relationships, culture and sexuality, human rights, equality and gender roles, gender-based violence and harmful practices. Further, sex education content is effective when values, attitudes, social norms, interpersonal skills, relationship skills are included. Further, sex education should encourage students to assume responsibility for their own behaviour as well as their behaviour towards other people through respect, acceptance, tolerance and empathy. To conclude, teachers remain the most trusted source of imparting sex education at the school level.

**FACTORS CONTRIBUTING TO IMPROVING THE AWARENESS AND SUCCESSFUL IMPLEMENTATION OF SCHOOL-BASED SEX EDUCATION**

Although it may be premature to state that education programmes and provision of clinical services unequivocally reduce sexually transmitted diseases and unintended pregnancy rates, the evidence here for reductions in their antecedents suggests that such interventions have the potential to achieve those outcomes. This raises the question as to which features of past interventions are associated with reductions in sexual intercourse and in unprotected sexual intercourse. Several researchers have turned their attention to this question, most notably Douglas Kirby and his associates (Kirby, 1992; Kirby et.al., 1994; Kirby, 1995). The findings of these three reviews have given rise to a number of identifiable features associated with successful outcomes, which will be briefly described here.
The nine features identified in his 1995 review of 50 studies of interventions with young people below the age of 19 years are summarized below, as these supports and reflect his earlier findings. Kirby (1995) found that the following features were common characteristics of programmes that successfully achieved delays in first intercourse, and/or increased the use of contraception or condoms:

1. Social Influence Theory, Social Learning Theory or Cognitive-Behavioural theories of behaviour underpinned the interventions;

2. Programmes were focused on the specific aims of delayed intercourse and protected intercourse;

3. Interventions were at least 14 hours in length or there was work in small groups to optimize the use of time in shorter programmes (Vincent, Geiger and Willis, 1994 also flagged the limited effectiveness of single, isolated interventions);

4. A range of interactive activities such as role-playing, discussion, and brainstorming were employed such that participants personalized the risks and were actively involved in the process of developing strategies;

5. Clear statements were given about the outcomes of unprotected sex and how those outcomes could be avoided;

6. 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;

7. 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;
8. 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; and there was effective training for those leading interventions.

Additional issues raised in Kirby’s reviews and by other researchers (Christopher, 1995; Kelly, 1995; Schaalma et.al., 1996; Schaalma, Kok and Peters, 1993) were timing of education, the placement of school education within a broader context reinforcing and supporting the aims of classroom activities, and skills training. First, education programmes appear to have greater impact if they are given prior to the onset of sexual activity. It has been suggested that it may be easier to establish the desired patterns of behaviour from the beginning of sexual involvement, rather than trying to change pre-existing habits (Kelly, 1995; Schaalma et.al., 1993).

Second, although Kirby (1995) recommends that education be narrowly focused, this refers to the number of topics to be covered rather than the number of levels on which the same message is conveyed. Since most education takes place in the school context, a supportive environment beyond the classroom is desirable. This could mean having school-wide activities, making connections with sexual health centres located near the school, or incorporating sexual health messages in community activities. That is, the broader context of young people’s social environment could be engaged to reinforce the teachings made in the classroom. Third, the inclusion of skills rehearsal has proved pivotal to the success of sexual health/HIV programmes in improving young people’s confidence with, and acquittal of, sexual negotiation and communication (Ku et.al., 1992).
The Social Context: Gender

The social context of human sexual health has recently been receiving greater attention, particularly in the HIV/AIDS literature (Kippax, Crawford, Waldby and Benton, 1990; Kirby, 1985b; Moore and Rosenthal, 1990; Thomson, 1994). Choosing to have or not to have sex or to use condoms has social meanings, consequences, and implications for public and private identity (Hollway, 1984). In the British Women, Risk and AIDS Project (Thomson and Scott, 1991), which studied 500 young women 16 through 21 years of age, the authors examined the perceived appropriateness of the sexual health education the women had received.

This also highlights the relevance of gender in the delivery of education regarding HIV and sexual health. Male-to-female transmission of HIV, for example, was estimated in one study of sero-discordant couples to be 23% (Padian et.al.,1987). In the Masaka district in Uganda, prevalence of HIV in girls aged between 13 and 19 years old is 20 times that of boys in the same age group (The status and trends of the global HIV/AIDS pandemic, 1996). Increased risk arises out of not only a physical vulnerability, but also a social one. Often responsibility for contraception and STD protection is located with females. This is so even in the case of condom use, despite their being a male controlled prophylactic. Messages to that effect make use of the stereotype that women are responsible for their own sexual conduct and that of their actual or potential male partners. Women are implicitly asked to step out of their other gender stereotype of passivity and guide the sexual encounter to safety with respect to disease transmission. There is an inherent contradiction in asking women to ensure the use of condoms or discouraging penetrative practices, when their culturally legitimized role in most cultures is one of passivity (Waldby, Kippax and Crawford, 1993).
That is, the meanings and assumptions that currently define and inform young women’s and young men’s sexual lives are often at odds with the strategies proffered by education campaigns (Kippax et al., 1990; Lever, 1995; Thomson and Scott, 1991). This is most notable in steady or regular relationships where, in comparison to casual encounters, condoms are much less likely to be used consistently (Plitcha, Weisman, Nathanson, Ensminger and Robinson, 1992; Rodden et al., 1996).

**Implications for Programme Planners**

Designing high quality programmes is a major challenge for educationalists and policy makers (BMA Foundation for AIDS, 1997), often overwhelmed by the array of data and by pressures from public opinion. This review provides a foundation for policy makers to argue for the continued development of programmes on life skills, HIV and STD, sexual health, and reproductive health. The major points raised are these:

- 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 curriculum, giving clear statements about behavioural aims, and feature clear delineation of the risks of unprotected sex and methods to avoid it;
- Focus on activities that address social influences;
- Teach and allow for 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.

**Characteristics of Effective Evidence-Based Curriculum**

The characteristics of effective sex, relationships and HIV education curriculum have been identified, reviewed and updated. These comprise 17 key features in relation to curriculum development, content and implementation (Gordon, 2008).

**Curriculum Development**

1. Included people with expertise in different areas
2. Assessed the needs and asserts of the young people they were targeting
3. Used a logic model approach
4. Designed activities consistent with community values and available resources
5. Conducted pilot tests on some or all activities.
Curriculum Objectives (Kirby, 2007)

6. Focused on at least one of three health goals: the prevention of HIV, the prevention of other Sexually Transmitted Diseases, the prevention of unintended pregnancy.

7. Focused narrowly on specific types of behaviour that cause or prevent HIV, other Sexually Transmitted Diseases, or pregnancy and gave clear messages about them.

8. Focused on specific sexual psychosocial factors that affect the specified types of behaviour and changed some of those factors.

Curriculum Implementation

9. Create a safe environment.

10. Include multiple instructionally sound activities to change each of the targeted risk and protective factors.

11. Employed instructionally sound teaching methods that actively involved the participants, that helped participants to personalize the information, and that were designed to change specific risk and protective factors.

12. Employed activities, instructional methods and behavioural messages that were appropriate in terms of culture, developmental age and sexual experience.

13. Covered topics in a logical sequence.

14. Secured at least minimal support from appropriate authorities.

15. Selected educators with desired characteristics (whenever possible), trained them, and provided monitoring, supervision, and support.

16. Implemented activities to recruit and retain young people.

17. Implemented curriculum with reasonable fidelity.
Teacher training should be supported by national ministries, local school management and communities (James-Traore et. al., 2004). Experience in Tanzania (Plummer, 2006) suggests that problematic teacher-pupil relationships create one of the most significant barriers to potential programme success. Effective delivery of sex, relationships and HIV education is also hampered in some settings by sexual harassment or abuse of school girls (Uganda HIV/AIDS Control Project, 2008).

Implementation of sex, relationships and HIV education can be promoted through provision of teacher training; appropriate screening and selection of teachers charged with delivery of the programme; supporting schools in the development of an HIV and AIDS policy, and developing school-based health programmes that go beyond HIV or sexual health and are embedded in broader school development programmes that improve school functioning. The organizational characteristics of schools and a supportive community are important determinants of the success of HIV prevention programmes (Mathews, Boon et.al., 2006).

As well as having to compete in a crowded curriculum, sex, relationships and HIV education does not have the same status as other subjects, either for students or teachers. In part this is because it is usually non-examinable, but also because of the sensitive nature of the content, despite its potential importance to students’ well-being. For teachers of sex, relationships and HIV education there is rarely, if ever, a tradition of advanced training. Teachers are sometimes instructed to teach sex, relationships and HIV education despite lack of training, experience or interest. Taken together, these issues raise a question as to whether or not sex, relationships and HIV education is in need of professionalization (Warwick, et.al, 2005).
Comprehensive Sex Education in Nepal

The Family Planning Association of Nepal (FPAN), International Planned Parenthood Federation’s Member Association in Nepal, has been working in Nepal since 1959 and is a leading national Non-Governmental Organization in the field of sexual and reproductive health. The Family Planning Association of Nepal has implemented the Comprehensive Sex Education project, funded by the Danish International Development Agency (DANIDA, Ministry of Foreign Affairs of Denmark), for two-years from 2008 till 2010.

The goal of the project was to ensure the integration and implementation of comprehensive, gender-sensitive and rights-based sex education through the national curriculum (primary and secondary) in Nepal. The project focused on the creation of sustainable advocacy networks with stakeholders to promote Comprehensive Sex Education and undertake a national advocacy campaign. It worked with key stakeholders to adopt a broad based sex education curriculum and build skills to ensure its effective implementation. The project focused on the need to promote Comprehensive Sex Education to achieve sexual and reproductive health outcomes, as well as counter the numerous religious, moral and other challenges to Comprehensive Sex Education which exist at community, national and international levels. Following are the lessons learnt in the project:

- **Young People’s Involvement is Key to Success:** Young people’s involvement in all phases of the project proved to be a very effective strategy. Their participation in advocacy initiatives and small group meetings with key stakeholders made a difference in their receptivity to the message. The involvement of young people as trainers created a conducive environment for
open and friendly discussions on Comprehensive Sex Education and its impact on young people.

- **Evidence Generation**: Studies and reviews conducted by Family Planning Association of Nepal on the need for Comprehensive Sex Education in Nepal and the development of Information, Education and Communication material with reference to the latest national and international evidence and data were key support tools for the advocacy campaign. Many stakeholders understood the need for Comprehensive Sex Education by accessing such documents and encouraged Family Planning Association of Nepal to share them with a larger audience.

- **Involvement of Policy Makers and Government Officers**: Involvement of stakeholders like policy makers and government officials in various project activities created in them a sense of ownership and facilitated the creation of an enabling environment for advocacy.

- **Media Mobilization**: Involvement of journalists in activities in the field proved to be an effective way to enhance their understanding on Sex and Reproductive Health and young people. The journalists, who earlier avoided using sex-related words in their pieces, are the ones who now feel that information given is inadequate if these words are not spelt out. The collaboration established with the radio station and the programme run by young people proved very popular in helping many listeners to clarify their misconceptions about young people Sex and Reproductive Health and the effect of providing Family Planning Association of Nepal in schools. Further, media is supporting Family Planning Association of Nepal’s efforts in breaking the taboos on these topics in Nepal.
• **Integration** of Comprehensive Sex Education in other programmes of Family Planning Association of Nepal: Integrating some aspects of the Comprehensive Sex Education project with the ongoing activities on adolescents and young people proved useful in mainstreaming the project within Family Planning Association of Nepal.

**Review of Government Education Policies and Programmes Related to Comprehensive Sex Education in Nepal**

Review of Government Education Policies and Programs Related to Comprehensive Sex Education in Nepal in 2008-2009 was initiated to document government policies, identify major strengths and areas for improvement, regarding CSE-related policies, plans and programs. The study incorporated a literature review of the policies and programs and quantitative data from four schools (a total of 408 students were involved) in Kathmandu and Dhading districts. The highlights of the study findings were:

- The education on sex is incomplete for students up to secondary level and there is a need to draw attention of policy makers and program implementers to expand the coverage of Comprehensive Sex Education in the school curriculum.

- The students want to know more about sex for their age for which there is also the need to expand sex education in schools.

- Comprehensive Sex Education should be extended beyond the school curriculum, so that changes in culture and traditions is brought about to create receptivity in society.
Sex Education for Young People was studied by Nirantar (2008), a Centre for Gender and Education, New Delhi. It focused on why, what should be the nature and how to enable sex education. Following are the recommendations:

- The guiding principle of age appropriate information is a must to ensure that the content and style meet the needs and interests of a particular age group.
- Sex education must not be driven in an instrumentalist manner by the agenda of disease prevention.
- Sex education must not be fear-based and prescriptive.
- Sex education must enable young people’s right to information.
- The approach to sex education must affirm a positive sense of self and also a positive approach to sex.
- The framework has to be one of social analysis, based on principles of equity and justice.
- Issues of marginalization are of importance to everyone and not only those who might be at that time directly affected by it.
- Sex education should be rooted in existing lived realities and reflect the diversities that exist.
- A non-judgmental, participatory pedagogy must be used to transact sex education.
- Sex education requires and enabling policy environment.

Ross D, Dick B and Ferguson J (eds.) (2006) reviewed interventions to prevent HIV infections among young people in a wide range of developed and developing countries. They also propose ‘Go’, ‘Ready’, ‘Steady’ and ‘Do not go’ ratings for different types of interventions to determine whether these should be replicated, researched more or avoided.

LEVERS OF SUCCESS: COUNTRY CASE STUDIES (UNESCO, 2010)

Effective sex education provides young people with age appropriate, culturally relevant and scientifically accurate information. It also provides young people with structured opportunities to explore attitudes and values and to practice the skills they will need to be able to make informed decisions about their sexual lives. Sex education is an essential element of HIV prevention and is critical to achieving universal access targets for prevention, treatment, care and support (UNAIDS, 2006). While there are no programmes that can eliminate the risk of HIV and other sexually transmitted infections (STIs), unintended pregnancy, and coercive or abusive sexual activity, properly designed and implemented programmes can reduce some of these risks. The factors that contribute to successful implementation of effective school-based sex education at regional, country or local levels – so-called ‘levers of success’ – are less clear. The term levers of success is used to describe the conditions and actions that have been found to be conducive to the introduction or implementation of sex education. Such levers are both general and specific. General levers are those that are necessary for the successful implementation of any new programme (and which therefore apply also to sex education), while the successful implementation of sex education also depends upon specific levers, particular either to the nature of sex education or else to the social and cultural setting in which it is implemented.
Drawing from country experience in China, Jamaica, Kenya, Mexico, Nigeria and Viet Nam, and from regional experience in Latin America and the Caribbean, a publication was brought out by UNESCO in 2010 entitled “Levers of Success – Case Studies of National Sex Education Programmes”. These case studies throw light on the factors that can contribute to the successful development and implementation of sex education in the school setting. The studies were presented at a UNESCO-sponsored symposium at the International Sex and Relationships Education Conference in Birmingham, UK, in September 2009.

**Levers of Success: Country Case Study of China**

In the Chinese context, levers of success identified both in the literature review and through key informant interviews that:

- Political will reflected in a long-established and favorable policy context (in particular concerning family planning), which has shifted in response to changing global and national trends
- Identification and involvement of ‘allies’ among decision-makers
- Political commitment to addressing HIV and AIDS
- Development of in-service training for teachers and dissemination of appropriate materials
- Technical support (from UN partners and non-international governmental bodies) in relation to: sensitization of decision-makers, adoption of participatory learning methods by teachers, training and supporting a critical mass of advocates for sex educators, documenting and disseminating good policy and practice generated through pilot projects, and participation in international networks
• Promoting the participation of young people in sensitizing parents, teachers and leaders to the importance and urgency of sex education

• Documenting and disseminating evidence of the impact of sex education

• Opportunities for decision-makers to participate in school-based sex education through observation and dialogue with teachers and students.

**Levers of Success: Country Case Study of Kenya**

In the Kenyan context, levers of success include:

• Regional education initiative supported by the Association for the Development of Education in Africa (ADEA) and the Forum for African Women Educationalists (FAWE)

• Baseline research on the acquisition of foundation learning skills funded by the Rockefeller Foundation

• Using educational attainment data disaggregated by sex and age to justify the widespread introduction of sex education in rural primary schools

• Making the link between school-based sex education and improving the quality of education and retention, particularly for girls

• High-level political support

• Partnerships/collaboration with relevant ministries, universities and The Kenya Institute of Education (KIE)

• National programmes that are home-grown and that recognize and respect cultural and religious beliefs, while factoring in the current changes in lifestyles
• High-quality, evaluated and age-appropriate teaching and learning materials

• Sensitization of many stakeholder groups.

**Levers of Success: Country Case Study of Latin America and the Caribbean**

At both the regional and the country level, several levers of success have been identified in relation to Latin America and the Caribbean. These include:

• High-level and high-profile ministerial declaration in support of sex education, which in turn reflects extensive and collaborative advocacy, involving a range of national and regional actors

• A tradition of school-based sex education

• Considerable expertise in training on sex education that can be drawn upon in the development of new programmes

• Free distribution of school books

• Use of new technologies to provide teacher training on sex education

• Large-scale sensitization programmes to reach schools, administrators, parents, communities and religious leaders

• Active involvement of groups that advocate for the needs of young people.

**Levers of Success: Country Case Study of Nigeria**

Experience in Nigeria points to several levers of success, as follows:

• Creation of a national coalition on sex education

• Ongoing sensitization, advocacy and consensus-building activities to overcome resistance and to create and sustain support from parents, school administration, religious leaders and state governments
• Identifying and enabling key allies in the religious or local community to express public support for the teaching of the curriculum

• Addressing parent-teacher forums, responding to fears and concerns about Family Life and HIV Education (FLHE) teaching and promoting parent-child communication on sex, HIV and relationships issues

• Development of a national strategic framework preceding implementation of sex education curriculum

• Involvement of young people as partners in advocacy for and development of a sex education programme

• Provision of sexual and reproductive health services

• Endorsement by the country's highest level policy-making body

• Willingness to accept a change in programme name in order to make it less politically and culturally sensitive

• A curriculum that is learner-centered, thematically based, and oriented towards learning outcomes

• A cadre of teachers trained to deliver the curriculum

• Standard setting and monitoring work

• Working proactively with the mass media to influence the public discourse on Family Life and HIV Education (FLHE)

• High-level policy advocacy to sustain state government political and budgetary support for the implementation of the curriculum.
Experience in Viet Nam points to a number of important levers of success, including:

- The existence of a relevant policy framework

- Development of a national action plan

- Implementation of mutually reinforcing curriculum and extra-curriculum activities

- Strengthening of links between schools and communities

- Teacher training that provides detailed guidance for schools and teachers on specific topics to be taught and the amount of time required for each subject

- Guidance for schools in relation to appropriate budget allocations for sex education

- Development of a curriculum in which important messages about pregnancy prevention and HIV transmission are introduced at one grade and reinforced in subsequent levels

- Introduction of teaching and learning methods and principles for classroom teaching that are appropriate for sex education

- Helping teachers to respect textbook content, promote key concepts and behaviours, use active learning methods and avoid overloading students with information.
Summary of Levers of Success

Individually and together, case studies of national sex education programmes indicate the following important lessons for the successful introduction and effective implementation of school-based sex education:

- Sex education is a sensitive issue and is most likely to be effectively introduced and implemented when sufficient political will exists to support it.
- Even in settings that are socially and culturally conservative and where discussion of sexual matters has traditionally been taboo, it is possible to introduce sex education.
- The name and delivery mechanisms for sex education (e.g. formal, non-formal, extra-curriculum, teacher-led, youth-led) need to be selected with care.
- It is important to be sensitive to community concerns, but it is also important to ensure that programmes retain key elements of effectiveness.
- A considerable amount of international experience already exists in terms of teacher training and curriculum and materials development. International organizations can facilitate the sharing of this experience and its application and adaptation to different social and cultural settings.
- Inevitably, difficulties encountered in the implementation of sex education will reflect broader systemic problems within the education sector: limited resources; teachers who are over-burdened and insufficiently trained and supported; crowded curriculum that inevitably lead to the prioritization of subjects that are examined over those that are not.
• When necessary, governments can be held to account in relation to their responsibilities as signatories to relevant international agreements. However, it is also important, where feasible, to avoid making sex education a ‘political football’ – a vehicle through which the respective agendas of a range of competing political interest groups are pursued. It will be young people who pay the price.

Further, Levers of Success can be Summarized to Include:

• Commitment to addressing both HIV and AIDS and sex education reflected in a favorable policy context

• Tradition of addressing sex, however tentatively, within the education system

• Preparatory sensitization for head teachers, teachers and community members

• Partnerships (and formal mechanisms for these), for example, between education and health ministries and between state and civil society organizations

• Organizations and groups that represent and contribute young peoples’ perspectives

• Collaborative processes of curriculum review

• Civil society organizations willing to promote the cause of comprehensive sex education, even in the face of considerable opposition

• Identification and active involvement of ‘allies’ among decision-makers
• Support for in-service training for teachers and for the dissemination of appropriate materials

• Availability of appropriate technical support (such as from UN partners and international nongovernmental bodies), for example in relation to: sensitization of decision-makers; promoting participatory learning methods by teachers; and engagement in international networks and meetings

• Involvement of young people in sensitizing parents, teachers and decision-makers

• Opportunities for decision-makers to participate in school-based sex education through observation and dialogue with teachers and students

• Removal of specific barriers to comprehensive sex education, such as the withdrawal of homophobic teaching material

• Willingness to resort to international policy and legal bodies.

Thus, evidence-based sex education programmes reveal that comprehensive sex education is a sensitive issue. This can be successful when there is sufficient political will and if introduced with care, it can be accepted even in settings that are socially and culturally conservative. The name and delivery mechanisms for sex education must to be selected based on the target group. Involvement of all stakeholders is the key to success. At an international level, required curriculum, teacher training programmes and adequate materials are developed, tried and tested. Replication of best practices and available resources will surely make Comprehensive Sex Education successful.
In summary, the literature reviewed makes it clear that "Sexuality" in general and "Sex Education" in particular are much debated issues. And, keeping in view the demands and pressures existent in the present day world, the trend is most likely to continue. One striking feature that emerges from the studies reviewed is that, the studies, although heterogeneous in methodology, are more or less similar in their conclusion regarding the need for introducing sex education in schools, improvement in the knowledge, attitude and behaviour among students after introducing sex education and curriculum related to sex education. Most studies concur with the fact that introducing sex education in schools can bring positive changes among the students. Otherwise, it can lead to negative consequences for the individual, group, society and for the country as a whole.

In the course of the review, one may also notice the stark dearth of indigenous literature on most matters related to studies in the Indian context. Speaking or discussing on issues related to sex and sexuality is still considered as a taboo in India. Presently, studies on sex education in India are very few. With dramatic changes taking place after the horrendous gang rape of a 23-year-old girl "Nirbhaya" and subsequent recommendation by Justice J.S. Verma Committee Report to introduce sex education at the school level, this is an area with immense potential for research.
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