Arja Liinamo

17. Sex Education in Finland

Sex education is of utmost importance in the promotion of reproductive and sexual health. According to the Alan Guttmacher Institute those countries which have a positive and open attitude towards sex education also have made the most progress in the prevention of teen pregnancies and abortions (Jones et al. 1985). According to assessments of school programmes, sex education increases young people's knowledge about sexuality, leads to positive changes in attitudes, decreases instead of increases the number of those who have experienced sexual intercourse compared with control groups, and improves the use of contraceptives (Kirby 1989, Mitchell-DiCenso et al. 1997).

The attitudes in Finland towards sex education are positive. Schools, social and welfare services, the church and the media all provide sex education. Sex education in schools is offered as part of the curricula. In the field of health care, sex education concentrates on contraception and pregnancy as well as the prevention and treatment of sexually transmitted diseases. Information is given as part of health counselling of public health centres, family planning clinics, and school health care. Also in congregations, sex education is part of youth work and sexuality is discussed, for instance, in confirmation schools. In schools sex education is mainly provided by teachers (physical education, biology, home economics) and the school nurse. Both pupils and parents consider the sex education given in schools important and necessary.

Ideally, comprehensive sex education should be given in all schools in approximately the same way and extend to all age groups. In Finland this kind of extensive sex education also takes place by means of a sex education leaflet mailed by the Ministry of Social Affairs and Health. This journal with the name of *Sexteen* has been mailed since 1987 annually to all young persons reaching the age of 16. According to a study done in 1993 by the International Planned Parenthood Federation (IPPF) regional office of Europe (Vilar 1994), sex education was most easily available in Finland, Sweden, Denmark and Norway.

The sex education of adults is mainly integrated in activities associated with the fields of health and social affairs. Health checks and health counselling for adults include to a varying degree information on sexuality and sex life. According to reports by physicians and health counsellors themselves, the proportion of matters dealing with sexuality in client contacts at the end of the 1980s was about 2% among physicians and 4% among health counsellors. The initiative for counselling has usually come from the client (Laitakari and Pitkänen 1989). Sex education material intended for adults and information about

sexual topics is available in Finland. For example, the Family Federation of Finland provides sex education and information material for people of various age groups and organises training connected with sexual health and sex education for professionals in various fields. Sex counselling is offered by sexual health clinics in the largest cities, Helsinki, Tampere, Turku and Oulu. This chapter mainly discusses sex education for young people.

Introduction

The Finnish educational system is divided into compulsory education consisting of comprehensive school including primary and lower level (grades 1 to 6; ages 7 to 13 years) and upper level (grades 7 to 9; ages 14 to 16) and a gradeless upper secondary school (ages 17 to 19).

In national surveys that examined the sex lives of Finns (Sievers et al. 1974, Kontula 1993), people belonging to various generations were asked about the sex education they received in school. In 1971 28% of the men and 33% of the women belonging to various age groups (18-54 years) reported that they had received information about sexuality in comprehensive school (ages 7 to 16).

In 1992 the percentage of persons having received information in comprehensive school was significantly higher, 64% of men and 74% of women. In both studies the proportion of those who had received sex education in school increased steadily for each younger age group compared to the next older group. The percentage of those who indicated that they had received sufficient sex education in school in 1971 was 17% of the youngest age group (18-24 years old) and 2% of the oldest age group (45-54 years). In 1992 the corresponding percentages were considerably larger, 58% and 7%. The studies cited above indicated that no sex education whatsoever existed in schools in the 1950s. Subsequently sex education gradually became more common, especially in the 1980s.

Discussions about matters related to sexuality have also become more common in the homes, especially during the 1950s and the 1960s. According to Sievers et al. (1974), during the period from 1920 to the 1940s about a third of children received sex education in their homes and, of the children of the 1950s and 1960s, about one half had such education. The percentage of those who had received sex education in their homes in the beginning of the 1990s was over 60% (Kontula 1993). In 1971 about 10% of men and women (18-54 years) considered the information given in homes sufficient while in 1992 almost one third did so. Those who indicated they had received sufficient information in their homes were concentrated in the youngest age groups (18 to 24 years): 21% in 1971 and 52% in 1992.

About one half of the 15-year-old girls living in Helsinki, interviewed in connection with the *KISS* study at the end of the 1980s (Tirkkonen et al. 1989), reported they had not

talked about sexual matters with their parents. They felt discussing sexuality with their parents was embarrassing. The boys interviewed in the same study reported that they had had hardly any discussions about sexuality in their homes.

Evidently discussing sexuality and having been taught about it have become more common, at least among those who were young in the 1980s. This increase accelerated during the last 20 years. The number of those who have received sex education in school almost tripled from 1971 to 1992. In spite of this fact almost half of those who were young in the 1980s report not having received enough information about sexual matters in their homes or in school (Kontula 1993).

Most people seem to have confidence in the sex education given in schools. For example, a finding from a 1992 survey indicated that almost two thirds of men and women of various ages thought that sex education in schools does not lead youths to prematurely begin a sex life. Only about one fifth of the men and women in various age groups expressed fear that sex education would lead to premature intercourse and this view was most common among older adults: nearly one half of those who were over 55 expressed this fear. (Kontula 1993.)

Research on sex education given in schools has concentrated on examining the teaching at the upper level of comprehensive school (ages 14 to 16). There is no national data on the realisation of sex education at the lower level of comprehensive school or gymnasia or vocational schools. A study was carried out at the University of Jyväskylä looking at the opinions of pupils in the lower level and their parents concerning sex education (Nykänen 1996). Both the pupils and their parents expressed the opinion that sex education ought to have already begun during lower level of comprehensive school. (Nykänen 1996, Kannas and Heinonen 1993).

Sex Education in the Finnish Lower Level

A study was done in 1995 in Middle Finland among pupils in grades 2 to 6 (n= 89, ages 8 to 12) and their parents (n = 179) in order to examine their views on sexuality and sex education at the lower level. Pupils stated that they wanted matters related to sexuality to be discussed in school at the lower level. Over one half of pupils in sixth grade wanted sex education to begin in fifth or sixth grade, and almost one quarter of the pupils wanted to have sex education start even earlier. The pupils wanted sex education in the lower level to deal with puberty, liking someone special, providing information about girls for boys and about boys for girls as well as the birth of babies. The respondents considered detailed sexological information about intercourse more appropriate for the older pupils at the upper level. (Nykänen 1996).

The parents were asked about the right age to begin sex education in the home and in school. Most parents agreed that sex education ought to begin immediately after the

birth of the baby. The parents themselves had discussed questions with their children dealing with going steady, the birth of a baby and puberty. The parents of the oldest pupils in the lower level had also talked at home about contraception, sexually transmitted diseases, and in some families also about, homosexuality and sexual morals. More than one half reported that their children are asking questions dealing with sexuality at home. About 80% of the parents considered discussing sexuality with their children easy, while about one fifth of the parents considered it difficult (Nykänen 1996).

The opinions of the parents about the time of beginning sex education in schools varied from first grade to ninth grade. A majority of parents considered ages of 10 to 11 appropriate for beginning sex education. Almost all parents thought that sex education should be an essential part of the curricula in the lower level. The parents wanted sex education in lower level to deal with going steady, liking someone special, the birth of a baby, why babies are not always born in spite of such hopes and about the fact that one does not have to immediately experience everything. Additionally, the respondents hoped that education would deal with the importance of the family, contraception, taking responsibility and the right to make decisions concerning one's own body. However, parents did not know what their children were being taught in school. They wanted intensified co-operation and information about sex education in joint meetings of parents and teachers. The parents also hoped to get support for themselves in their parenting responsibilities, for instance, lectures directed at parents on the sexual development of children. (Nykänen 1996).

Sex Education in Upper Level

Pupils in the seventh and ninth grades of comprehensive school were asked in the *KISS* study (Kontula 1991, Kosunen 1993) about sex education given in schools in the years 1986, 1988 and 1992. A third of the pupils in grade seven and four fifths in grade nine had received sex education in at least one lesson designed for this purpose in their school during the ongoing school year. A teacher and school nurse and sometimes the school physician or an outside expert provided the sex education. The main emphasis had been on intercourse, going steady, contraception and sexually transmitted diseases.

The first national study in 1994 (see Kontula 1997) of sex education in the upper level of the comprehensive school occurred during the 1995-1996 school year in the transition period of the latest curriculum reform (see chapter 15 by Lähdesmäki and Peltonen). Kontula collected information from teachers in the upper level classes of the comprehensive schools (N = 412). Sex education had been included in some form in the curricula of almost all (94%) schools. About one tenth of the schools had a relatively detailed sex education plan. According to the replies, sex education in the seventh grade was most often in connection with hygiene or pupil counselling. In eighth grade, sex education was most generally included in health education, and in ninth grade in the

curricula of biology, family education, and also quite often in religion. According to Kontula sex education had been given according to various criteria in seventh grade to a substantial degree in about one third of the schools, in eighth grade in 60% of the schools and in ninth grade in three quarters of the schools. There were differences among various provinces of Finland: it was most successful in Middle Finland and North Carelia and poorest in the provinces of Kuopio, Oulu, Turku and Pori, and Häme. There were large differences among schools. Sex education was concentrated in the ninth grade and focussed on contraception and sexually transmitted diseases. Teachers in about one half of the schools estimated that sex education would be decreased in the near future.

Sex education in the upper level of comprehensive school has been monitored from the year 1996 with the School Health Promotion Survey co-ordinated by STAKES (National Research and Development Centre for Welfare and Health). The survey covered the majority of the upper level grades of the Finnish comprehensive school system. The purpose of the survey is to provide information about health and health promotion work directed to the local youths for the schools, municipalities and provinces. The surveys will be repeated in the same areas at intervals of two years in order to monitor health and health promotion activities for the young (Rimpelä et al. 1996).

According to the school health surveys of 1996 and 1997 (Liinamo et al. 1999a) about one half of eighth graders and three fourths of ninth graders reported they had had at least one class particularly designed for sex education in the previous academic year (1995 -1996 or 1996-1997). About one fourth of the eighth graders and ninth graders from various parts of Finland participated in the surveys. The results indicated large differences in sex education among various schools, municipalities and regions. In some municipalities and schools as many as 86% of the pupils indicated they had not received a single sex education lesson in the previous school year. On the other hand, there were several municipalities and schools where almost all pupils (97%) indicated they had received at least one sex education class. Thus, young Finns are not in an equal position to get sex education.

Sex education was most often offered in the ninth grade and the teaching emphasis was on going steady, contraception and sexually transmitted diseases. Teachers and the school nurse were the most common instructors of sex education. About one tenth of ninth graders had visited the family planning clinic of their local health centre in connection with sex education.

According to regional comparisons using data from the School Health Promotion Survey (Liinamo et al. 1999a) and the survey of Kontula (1997), greater proportions of pupils received sex education in the upper level of comprehensive schools in regions where sex education had been best organised (this includes regions in the middle and eastern

parts of Finland: Middle Finland, North Carelia, Southern Savo). Correspondingly, pupils who reported least exposure to sex education lived in the areas (such as the northern, religious areas around Oulu) where sex education was least developed according to the descriptions of the teachers as reported in the study by Kontula.

According to the follow-up survey (Liinamo et al. 2000) sex education decreased during the two-year follow-up time from the school year 1995-1996 to the school year 1997-1998. The number of pupils who reported participating in one or several sex education classes among ninth-graders decreased (79% vs. 70%) but remained stable among eighth-graders (63% vs. 62%). The providers of sex education and the content did not change. In a school-level analysis, an assessment was done of how extensive sex education is for eighth and ninth graders. In about one fifth of the schools the coverage of sex education remained on the same level, in 44% of the schools the coverage decreased, and it improved in about every third school. The proportion of schools with sex education with an estimated poor coverage increased from 14% to 25% during the follow-up period. In order to check the reliability of the survey, the replies of the pupils and the teachers in 25 schools concerning sex education were compared. In this study on the quality of sex education, it was found that the responses by both pupils and teachers were identical in 22 of 25 schools.

The quality of sex education

When adults and adolescents have been asked in various studies about their opinions of the quality and quantity of sex education they received in school, at least one half considered the amount of sex education inadequate. For instance, in the *KISS* study in 1986, one half of the adolescents aged 13 to 16 wanted to have more sex education in school. In the Finnish comprehensive school the main emphasis of sex education has been for ninth grade, when the pupils are 15 to 16 years old. A majority of both adolescents and adults wanted sex education to begin earlier, in the sixth and seventh grade, i.e., considerably earlier than sex education has usually been offered.

According to recent research data, sex education in schools is not very systematic and co-ordinated. Kontula (1997) found that only about every tenth teacher considered sex education in her/his school to be well co-ordinated. Often the teachers did not know what other teachers in their schools taught about the subject. The School Health Promotion Survey (Liinamo et al. 1998a,b; Liinamo et al. 1999b,c) examined sex education by asking questions of teachers and nurses. According to the results, teachers and health nurses at the same school often had different views about sex education in different grades. The content, goals and methods were rarely co-ordinated. The teachers and school nurses stressed the importance of improving co-operation and co-ordination of sex education and increasing the number of hours allotted to sex education. The majority of teachers and school nurses felt they needed further training to provide sex education.

According to several studies the main topics of sex education have been contraception, going steady, and sexually transmitted diseases. The tone of teaching has been criticised for emphasising the risks of sexual behaviour. The same themes are repeated in different grades, while many requested topics have been ignored. However, pupils want to discuss sexuality in more detail. For example, they want time to discuss emotional matters, loving and making love, talking with one's partner, masturbation and sexual minorities (Nykänen and Sironen 1996; Kontula 1991). Pupils interviewed (Liinamo et al. 1997) also criticised sex education in schools for being superficial.

Nummelin (1997) looked at the sex education pamphlets (n=31) used in Finland during 1988 to 1994 from the point of view of facts and cultural analysis. The Family Federation of Finland and the Ministry of Health and Social Affairs produced the majority of leaflets. An examination of the facts revealed that the pamphlets were usually written from a narrow point of view and considered only one or two themes. The topics most often dealt with were pregnancy and sexually transmitted diseases and their prevention, especially by condom use. The other half of the pamphlets had a wider perspective and included more themes. According to Nummelin the emphasis in both types of pamphlets was on facts. A cultural analysis of the descriptions and pictures indicated that sexuality was defined in terms of heterosexuality, sexual intercourse, and its risks and problems.

According to studies parents have received very little information about sex education in schools (e.g., Nykänen 1996; Liinamo et al. 1998a,b; Liinamo et al. 1999b,c). For example, in joint evening meetings of parents and teachers, information about sex education has only been given in a very few schools. The parents, however, would like to know how sex education is presented in school. According to Kontula (1997) parents have given feedback about sex education and expressed their views on its contents in 15% of upper level classes. Feedback from parents has mainly emphasised the significance and importance of sex education.

The most common methods used in sex education have been lectures and groups discussions. Videos have also been commonly used. Other methods, however, such as role practices, sociodrama or study visits have been very uncommon. Most sex educators consider their preparation inadequate and have wanted further education in the subject. According to Kontula (1997), teachers with specific qualities provided the most versatile teaching. Those who had participated in further training in sex education, thought that sex education in their schools had been rather well co-ordinated, taught in schools where the parents had given feedback about sex education, and found it easy to talk about sexuality used a greater variety of teaching methods.

According to Kontula (1997) those who provide sex education in the upper level consider the most important goals to be teaching responsibility, giving correct factual information and encouraging a natural attitude towards sexuality. The goals classified as least important

were teaching abstinence, teaching that casual relations are unsatisfactory and changing attitudes to perceive sexuality as a good and refreshing thing. The teachers wanted to avoid moralising and interfering with the choices of pupils. They did not want to give too many warnings about sex. Neither did they want to encourage it.

Assessing the Sex Education Magazines

The sex education magazines mailed by the Ministry of Social Affairs and Health to all 16-year-olds includes many topics, including the sexual experiences of young people, sexual fantasies, masturbation, the first intercourse, homosexuality, and sexual counselling available from the school nurse and school physician, and sexually transmitted diseases. An analysis was done on the reception of the 1992 magazine (Hannonen 1993). Adolescents' knowledge about the magazine and its reception has also been analysed in connection with the School Health Promotion Survey co-ordinated by STAKES. The 1997 survey was conducted two weeks after the magazine had been mailed to the target group that consisted mainly of ninth-graders in comprehensive school.

In 1992 97% of the adolescents (n=521) who responded to the survey had received a sex education magazine. A total of 72% of the respondents said they had read the entire magazine. The respondents considered the mailing of the magazine to adolescents necessary. The majority of respondents wished that it would be mailed to pupils who are one year younger, to 15-year-olds. The attitudes of the respondents towards the pictures, texts and the condom attached to the magazine were generally positive. The respondents were most critical about the articles dealing with homosexuality and masturbation. Almost everyone who had read the magazine had discussed it with her/his friends. About one half of the respondents had discussed the magazine with their mothers and every fifth with their fathers. In spite of the favourable reception of the magazine, less than half of the respondents reported they learned new information from it (Hannonen 1993).

According to the School Health Promotion Surveys about two thirds of ninth graders looked at the magazine. About one fourth reported they had read the entire magazine. At the same time, however, more than a fifth of the adolescents responded that they had never heard about the magazine. (e.g., Liinamo et al. 1998a,b; Liinamo 1999b,c). Compared to the 1992 edition of the magazine, the proportion of adolescents who read the magazine was significantly lower in 1997. The difference may be due to different sampling techniques. The 1992 survey used a mailed questionnaire with a response rate of 65%. It is possible that those who had read the magazine responded more than those who had not read it. The School Health Promotion Surveys were administered in classrooms to the whole class and that sample includes almost all pupils who were present in the classroom during the time of the survey.

In the year 2000, the name of the sex education magazine for adolescents was sent to homes of both 15 and 16 year olds and the magazine was given a new name ("*Itching that can not be scratched*"). In the subsequent years only 15 year-olds will receive this magazine. The decision to send the magazine one year earlier was made in response to feedback from pupils and teachers. This magazine is revised frequently in order to include current information and keep interest in it high.

Young People's Information about Sexuality

Finnish adolescents have reported in various studies that the most important sources of information about sexuality are friends, television and magazines as well as the teachers and school nurse (Hannonen 1993; Pötsönen et al. 1996). In interviews done at the end of the 1980s (Tirkkonen et al. 1989) both boys and girls stated that they have enough information about sexuality. Friends were the most important source of information.

The *KISS* Study of the 1980s and 1990s and the School Health Promotion Survey at the end of the 1990s examined the level of knowledge about sexuality of young people. In the 1990s the Health Behaviour of School-age Children (HBSC) study co-ordinated by WHO studied adolescents' knowledge and sources of information about AIDS. In addition, the level of knowledge and sources of information have been studied in some smaller studies. According to these it has been estimated that the knowledge of young Finns about sexual matters is relatively good. Often knowledge increases with age. It has been found in many studies that the knowledge of girls is better than that of boys. However, no significant difference was found between the genders in knowledge about AIDS.

The *KISS* study of 1986, 1988 and 1992 examined the sexual knowledge of seventh and ninth graders by asking pupils to agree or disagree with statements (Appendix 1) on sexual maturity, pregnancy and protection against sexually transmitted diseases. In 1986 and 1988 adolescents were well acquainted with the most common contraception methods. About 90% reported they knew how to use contraceptive pills and the condom. A total of 60% knew about the IUD and 45% were familiar with contraceptive foam. (Kontula et al. 1988; Kontula et al. 1992.) According to the *KISS* study the level of knowledge of adolescents significantly improved from 1986 to 1992. In 1992 about 80% of the 15 year old boys and 90% of the 15 year old girls knew the most important matters related to becoming pregnant and using contraception. In 1986 about one half of girls in seventh grade and about one third of girls in ninth grade did not know that the beginning of menstruation signified a possibility of becoming pregnant. In 1992 the percent of those who did not know this fact was 13% (Kontula 1997, Kontula et al. 1992.) According to the preliminary results of the School Health Promotion Surveys the level of young peoples' knowledge no longer increased by the end of the 1990s (Kontula 1997; Liinamo et al. 1998a,b; Liinamo et al. 1999b,c).

For 15-year-old adolescents living in Oulu and Helsinki (n = 429) in 1988 the following were recognised as sexually transmitted diseases: HIV (by 98% of the respondents), gonorrhoea (88%), chlamydia (75%), herpes (71%), syphilis (51%) and human papilloma virus (genital warts or HPV infection) (40%) (Hämäläinen et al. 1991). More than 98% of these adolescents knew that HIV can be transmitted through sexual intercourse, intravenous drug needles and syringes, and blood transfusions. On the other hand, one fifth replied that a non-symptomatic HIV carrier does not spread the disease. In the HBSC study of pupils in 1990 and 1994 (Pötsönen et al. 1994; Pötsönen and Kontula 1999) it was found that young people aged 13 to 15 were well acquainted with the modes of transmission of HIV. Adolescents living in the Helsinki area and in other cities knew more about AIDS than did adolescents living elsewhere.

The protective influence of condoms in the prevention of AIDS was quite well known as early as 1988: over 90% of 15-year-old adolescents knew this (Hämäläinen et al. 1991). In the HBSC study of 1994, 96% of 15-year-old adolescents knew that HIV infection can be prevented by using a condom and that the virus is not transmitted by handshakes. About 90% mentioned that the number of sex partners and not knowing one's sex partner influence the risk of HIV transmission.

According to the *KISS* study, knowledge that the statement "of all contraceptives only the condom protects against sexually transmitted diseases" is true, increased for adolescents from 1986 to 1988 (Appendix 1). In 1992 every tenth 15-year-old girl and about one fifth of the boys did not know this fact (Kontula 1997; Kontula et al. 1992). The correct answer to this statement was given in about equal proportions in both the *KISS* study of 1992 AND of School Health Promotion Survey 1998 (Liinamo et al. 1998a,b; Liinamo et al. 1999b,c).

According to the School Health Promotion Survey, in 1998 the statements that received least correct replies were "a sexually transmitted disease is sometimes unsymptomatic" and "a chlamydia infection can cause infertility". Only about one half of pupils in the eighth and ninth grades of comprehensive school knew that a sexually transmitted disease is sometimes totally unsymptomatic. Even fewer young people knew that a chlamydia infection may cause infertility, a little over 40% (e.g., Liinamo et al. 1998a,b; Liinamo et al. 1999b,c). This result is rather surprising considering the fact that the topic of sexually transmitted diseases (STDs) and contraceptive methods have been the most commonly taught topics in school sex education. It may also be true that sex education is superficial, as some pupils have claimed. In order to both reduce STDs and to protect fertility, comprehensive coverage of STDs needs to be a basic goal of sex education.

There are not many studies in Finland on the relationship between sex education and knowledge about sexuality. According to the HBSC study co-ordinated by WHO, those

young people who reported having a large amount of information from different sources had better knowledge about AIDS than those who reported receiving less information from fewer sources (Pötsönen et al. 1994). A mini-size intervention of one lesson on AIDS and other STDs was carried out in 1998 in the upper level of the Oulu and Helsinki comprehensive schools (Hämäläinen and Keinänen-Kiukaanniemi 1991). In this class knowledge about AIDS and STDs increased significantly for both girls and boys. It was found that in the control group this knowledge had increased among girls but not among boys. The researchers interpreted this as meaning that girls profit from the mere fact that attention is directed towards the matter (survey questionnaire), but boys need explicit information and teaching. According to the preliminary results of the School Health Promotion Survey, knowledge about sexuality among the young is somewhat higher in Middle Finland than in other areas under study (Liinamo et al. 1998a,b). In Middle Finland sex education has also been provided in a more effective way than in other areas of Finland (Liinamo et al. 1999b,c, Kontula 1997). In the HBSC study it was found that the AIDS information of the young is higher in the Helsinki region than in other areas of Finland (Pötsönen et al. 1994); in the Helsinki area young people had also received more education about this subject than in other areas (Kannas and Heinonen 1993). Data suggest that knowledge of young people about sexuality is better in areas where sex education has been organised more systematically and extensively than in other areas.

Discussion

Sex education for adolescents in Finland has decades of tradition. One of the strengths in Finland has been the co-operation between the teaching and health authorities in sex education for the young. From a sexual rights perspective policy makers have made considerable progress in guaranteeing young people their right to sexual knowledge and information. Nevertheless, there are still schools where sex education is quite inadequate. The quality of sex education varies very much according to individual municipalities and schools. This inequality of sex education is likely to have negative outcomes for those who receive less information.

Although adolescents get knowledge about sexuality from sources other than schools, school sex education has important significance for the promotion of sexual health. According to a study done in Great Britain at the beginning of the 1990s (Wellings et al. 1995), women and men whose main source of sex education had been the school had later used contraception more frequently than those whose main source of information had been friends or the media. Men who had received sex education in school had experienced sexual intercourse less often under the age of 16 than those who had received their sexual knowledge primarily from other sources.

It has been found in many studies that broad-based programmes which involve the whole community and which take into consideration both sex education and health services for the young are efficient in promoting the sexual health of young people (Orton 1994; Vincent et al. 1985). In Ontario, Canada pregnancies of young people decreased (1976-1981) more in communities where more sex education was given both in school sex education and in connection with sexual health services for the young in comparison to communities without such joint efforts (Orton 1994). Co-operation among the sectors of a community tends to increase the availability and efficiency of services. In the state of North Carolina in the United States a community-level intervention programme aimed at decreasing teen pregnancies in the 1980s significantly reduced the number of teen pregnancies in the target area. The opposite development occurred in the control area (Vincent et al. 1985). Participants in the programme included school authorities, congregations, and parents. The aim of this programme was to develop decision-making and interaction skills, to promote the self-esteem of the young, and to increase information about human reproduction and prevention of pregnancies.

It has been shown in recent studies on school sex education in Finland that sex education is given in the most extensive and versatile form in Middle Finland, which was one of the pilot areas in the programme Family Planning 2000 of STAKES in 1994-1999 (see chapter 14 by Ritamo and Kautto). Several educational events related to sexual health have been organised in this area with sex education of the young as their goal. Local government has actively promoted sexual health in both the education and social and welfare sectors. As a result of the Family Planning 2000 project, specialised studies in sexology and sexual health were begun at the Jyväskylä Polytechnic. In this Polytechnic it is possible for experts in the social and welfare and education fields to supplement their expertise in sexual health (see chapter 19 by Valkama and Kaimola).

The national curricula of the Finnish Ministry of Education (Ministry of Education 1994) specify that the organisation, goal and content of education should be determined by the school legislature. Although health and hygiene knowledge is not defined as an independent subject in the new school law, its importance is emphasised. The 1998 Committee Report states that "...family and interaction skills must be made an integrative subject and these shall be taught in all subjects and especially they shall be included in religion and ethics and civics" (See Liinamo et al. 2000, 62). According to recent findings, sex education has decreased in several schools and municipalities from 1996 to 1998 (Liinamo et al. 2000). The latest curriculum reform has reduced national guidance and increased the responsibility of individual schools and municipalities. This seems to have weakened the position of sex education in schools. At the same time, changes in the health care systems (e.g., population responsibility [see chapter 5 by Kosunen]) and the increase in the planning responsibility of the municipalities) and reductions of resources made by communities have also weakened health promotion in the social work and health care sector. It has been estimated that these changes will weaken the functioning

of school health care and family planning clinics, which have been of great importance in Finland in providing sex education and contraceptive services.

A clear challenge in Finland is the development of progressive curricula and teaching methods for sex education. In order for Finland to have an effective and progressive sex education programme for all young people, each school must systematically plan and co-ordinate the teaching of sexuality in different classes by different teachers.

When the emphasis in sex education is on sexual behaviour, mainly intercourse and risks associated with it, the young are likely to acquire a narrow view of sexuality and sexual health. The emphasis on contraception and sexually transmitted diseases is largely due to their association with medical health topics and factual material. Only a few sex education programmes in Finland attempt to approach sexual issues from the perspective of adolescents' social reality, in terms of broad sociological contexts, or using adolescent involvement/interaction teaching techniques.

According to international literature good sex education should increase pupils' understanding of sexuality, support the sexual development of the pupil and promote a broad understanding of sexuality and factors related to sexual health. A precondition for this is that sexuality and sexual development are discussed in a broad way in sex education. Pupils ought to receive sex education at a time when they can profit from it and thus receive the relevant information before each phase of sexual development. Sex education should aim at supporting and improving the knowledge of the young and a broader understanding of sexuality, as well as increasing discussion and social skills. Researchers have found that important factors determining the positive impact of sex education are, among others, clarity of goals, consideration of the age and cultural background of the pupils, the grounding of teaching in theoretical approaches, an adequate amount of time, versatile teaching methods and well-prepared teachers. (Wight et al. 1998; Kirby and Coyle 1997.)

New development and research projects have been started to promote sex education. These projects for the development of sex education materials are both grounded in theory and supported by empirical evidence. Methodological development work on sex education at the lower level is underway at the Department of Health Sciences of Jyväskylä University (Maija Nykänen). The Jyväskylä Polytechnic is starting a municipality-by-municipality development programme on sex education of the young. The goals of the project are to simultaneously develop sex education in schools and sex counselling and sex education at municipal health care centres.

In addition to adolescent sex education it is necessary to also develop sex education for children and the adult population. Sex education ought to begin in childhood and extend throughout the life span. This requires that support for the sexual development of the

child be included in the work of municipal child counselling clinics and the educational activities in day care centres. Sex counselling and sex education for adults ought to be developed by improving the ability of professionals within health care and social services to deal with questions related to sexuality in their client work.

References

Hannonen, S. 1991. Sexteen-lehden vastaanotto 16-vuotiaiden keskuudessa. (The reception of the Sexteen magazine among 16-years-olds. MSc Thesis in Health Care management, Helsinki University). Terveydenhuollon hallinnon pro-gradu –tutkielma. Helsingin yliopisto. Lääketieteellinen tiedekunta. Yleislääketieteen ja perusterveydenhuollon laitos. 1993

Hämäläinen S., Keinänen-Kiukaanniemi, S. 1991. Peruskoululaisten tiedot ja asenteet hiv-tartunnasta ja sukupuolitaudeista. Yhden hiv-valistusoppitunnin vaikutus. (Knowledge and attitudes of comprehensive school pupils on HIV infection and sexually transmitted diseases. The effect of preventive education). Terveyskasvatustutkimuksen vuosikirja 1991, 135-150.

Jones E., Forrest, J. D., Goldman, N., Henshaw, S. H., Lincoln R,, Rosoff, J. I., Westoff, C.F, Wulf, D. 1985. Teenage Pregnancy in Developed Countries: Determinants and Policy Implications. *Family Planning Perspectives*. Vol.17, no 2, 53-63.

Kannas L, Heinonen T. 1993. Seksuaalikasvatuksen arkea: Vaikenevat kodit ja myöhästelevät koulut. (Everyday life of sex education: homes are silent, schools are late). In Kannas L (ed.) Ihanan tukala seksuaalisuus. (Lovely, difficult sexuality). Sosiaali- ja terveysministeriön selvityksiä 1993:4, 117-143. Helsinki.

Kirby, D. 1989. Research on Effectiveness of Sex Education Programs. Theory Into Practice. 1989;28: 165-171.

Kirby, D. and Coyle, K. 1997. School-based Programs to reduce Sexual Risk-taking Behaviour. *Children and Youth Services Review*. 1997:19, 5/6: 415-36

Kontula, O. ja Rimpelä, M. 1988. Nuorten tiedot sukupuolisesta kehityksestä. (The knowledge of young people on sexual development). In Kannas, L. and Miilunpalo, S. (eds.). Terveyskasvatustutkimuksen vuosikirja 1988. Lääkintöhallituksen julkaisuja. Terveyskasvatus. Sarja Tutkimukset 8/1988. Tampere. 141-156.

Kontula, O. 1991. Nuorten tiedontarve. (Young people's need for information). In Kontula, O., Aaltonen, U-M., Björklund T, Lähdesmäki S. (eds.). Seksistä - kuinka puhua nuorille ? (About sexuality – how to talk to the young). Sexpo ry:n julkaisuja. Helsinki

Kontula, O., Rimpelä, M., Ojanlatva, A. 1992. Sexual knowledge, attitudes, fears and behaviors of adolescents in Finland (the Kiss study). *Health Education Research. Theory and Practice.* Vol. 7:1, 69-77.

Kontula, O. Sukupuolielämän aloittaminen. (On the conditions of beginning sex life). In Kontula, O. and Haavio-Mannila, E. (eds.). Suomalainen Seksi (Finnish sex). Porvoo: WSOY. 86-115.

Kontula, O. 1997. Yläasteiden sukupuolikasvatus lukuvuonna 1995-1996. (Sex education in the upper level 1n 1995–1996). Sosiaali- ja terveysministeriön selvityksiä 1997:3. Helsinki.

Kosunen, Elise. 1993. Teini-ikäisten raskaudet ja ehkäisy. (Teenage pregnancies and contraception). Sosiaali- ja terveysalan tutkimus- ja kehitäämiskeskus. Raportteja 99. Helsinki: Stakes.

Laitakari, J. and Pitkänen, M. 1989. Terveyskasvatus terveyskeskuksessa. (Health education in health care centres). Lääkintöhallituksen julkaisuja. Terveyden edistäminen. Sarja tutkimukset 6/1989. Helsinki: LääkintöhallitusValtion painatuskeskus. Helsinki.

Liinamo, A., Ritamo, M., Heimonen, A., Launis, T., Pötsönen, R., Välimaa, R. 1997. Taking Adolescents Seriously: Four Areas of Finland. In Hardon, A., and Hayes, E. (eds.). Reproductive Rights in Practice. Zed Books Ltd. London & New York. 146-169.

Liinamo, A., Koskinen, M., Rimpelä, M., Kosunen, E., Jokela, J. 1998a. Kouluterveys 1996 ja 1998 Keski-Suomessa. Seksuaaliopetus ja seurustelukokemukset. (School health in 1996 and 1998 in Middle Finland. Sex education and experiences of going steady). Länsi-Suomen lääninhallitus, 1998

Liinamo, A., Koskinen, M., Väistö, R., Rimpelä, M., Kosunen, E., Jokela, J. 1998b. Kouluterveys 1996 ja 1998 Pohjois-Karjalassa: Seksuaaliopetus ja seurustelukokemukset. (School health in 1996 and 1998 in North Carelia: Sex education and experiences of going steady). Itä-Suomen lääninhallituksen julkaisuja No 14, 1998.

Liinamo, A., Kosunen, E., Rimpelä, M., Jokela, J. 1999a. Seksuaaliopetus peruskoulujen yläasteilla. (Sex education on the upper level of comprehensive school). *Suomen lääkärilehti* 11/1999.

Liinamo, A., Koskinen, M., Peltoniemi, P., Tarkiainen, M., Rimpelä, M., Kosunen, E., Jokela, J.1999b. Kouluterveys 1996 ja 1998. Seksuaaliopetus ja seurustelukokemukset Lapin läänissä. (Sex education and experiences of going steady in the Province of Lapland). Lapin lääninhallituksen julkaisusarja 1999:2.

Liinamo, A., Koskinen, M., Terho, P., Rimpelä, M., Kosunen, E., Jokela, J. 1999c. Kouluterveyskyselyt 1996 ja 1998. Seksuaaliopetus ja seurustelukokemukset Turussa. (School health surveys 1996 and 1998). Turun kaupungin terveystoimen julkaisuja 1:1999.

Liinamo, A., Rimpelä, M., Kosunen, E., Jokela, J. 2000. Seksuaaliopetuksen muutos peruskoulujen yläasteilla lukuvuodesta 1995/96 lukuvuoteen 1997/98. (Changes of sex education in comprehensive schools 1995–1998. *Sosiaalilääketieteellinen aikakauslehti*.

Mitchell-DiCenso, A., Thomas, B.H., Devin, M.C., Goldsmith C. H., Willan, A., Singer, J., Marks, S., Wetters D., Hewson S. 1997. Evaluation of an Educational Program to Prevent Adolescent Pregnancy. *Health Education & Behavior*, Vol. 24 (3), 300-312.

Nummelin, R. 1997. Seksuaalikasvatusmateriaalit – Millaista seksuaalisuutta nuorille? (Sex education materials – what kind of sexuality for the young?). Stakes. Raportteja 206.

Nykänen, M. 1996. Näkemyksiä ala-asteen seksuaaliopetuksesta. Jyväskylän yliopisto. Terveystieteen laitoksen julkaisusarja 4/1996.

Nykänen, M. and Sironen, M. 1996. Hellitäänkö hedettä ? – 9.luokan oppilaiden, vanhempien ja opettajien näkemyksiä seksuaaliopetuksesta ja tukimateriaalina käytettävän videon kehittämisestä. (Is the stamen preferred over over the pistil? Views on sex education and the video to be used as supportive material of the pupils, parents and teachers on the ninth grade Jyväskylän yliopisto. Terveystieteen laitoksen julkaisusarja 3/1996.

Orton, M. J. Institutional barriers to sexual health: Issues at the federal, provincial, ans local program levels – Ontario as a case study. *The Canadian journal of Human sexuality*. Vol 3 (3), Fall 1994: 209-225.

Pötsönen, R., Kannas, L., Välimaa, R. 1994. Suomalaisten 13- ja 15 –vuotiaiden koululaisten aids-tiedot ja sosiademografisten tekijöiden yhteydet tiedontasoon. (The correlation of the knowledge on AIDS and sociodemographic factors of Finnish 13 to 15 year-old pupils with the level of knowledge). *Sosiaalilääketieteellinen aikakauslehti* 1994:31, 114-126.

Pötsönen, R., Kannas, L., Välimaa, R. 1996. Suomalaisnuorten HIV/AIDS –tiedonlähteet vuosina 1990 ja 1994. (Finnish adolescents' sources of knowledge concerning HIV/AIDS in 1990 and 1994). *Sosiaalilääketieteellinen aikakauslehti* 1996:33, 35-46.

Pötsönen, R. Kontula O.1999. Adolescents' knowledge and attitudes concerning HIV infection and HIV infected persons. *Health Education Research*, Vol 14 (4), 1999: 473–484.

Rimpelä, M., Jokela, J., Luopa, P., Liinamo, A., Huhtala, H., Kosunen, E., Rimpelä, A., Siivola, M. 1996. Kouluterveys 1996 –tutkimus. Kouluviihtyvyys, terveys ja tottumukset. Perustulokset yläasteilta ja kaupunkien väliset erot. (School Health Promotion Survey 1996. School contentment, health and customs. Basic findings from upper levels and differences between the cities). Stakes Aiheita 40/1996. Helsinki: Stakes.

Sievers, K., Koskelainen O., Leppo K. 1974. Suomalaisten sukupuolielämä. Sukupuolivalistuksesta ja –tietoudesta Suomessa. (Sex life of the Finns. On sex education and sexual knowledge).4. chapter. Porvoo: WSOY. 151-208.

Tirkkonen, J., Hukkila, K., Kontula, O. 1989. Tyttöjen ja poikien seksuaalikulttuurit. (Sexual cultures of girls and boys). Lääkintöhallituksen julkaisuja. Sarja Tutkimukset 15/1989. Helsinki 1989.

Vincent, M., Clearie, A., Schluchter, M. 1985. Reducing adolescent pregnancy throught school and community-based education. *Journal of American Medical Association*, 257: 24, 3382-3386.

Vilar, D. 1994. School sex education: still a priority in Europe. Planned Parenthood in Europe 23:3, 8-12.

Wellings, K., Wadsworth, J., Johnson, A. M., Field, J., Whitaker, L., Field, B. 1995. Provision of sex education and early sexual experience: The Relation examined. *British Medical Journal*, vol. 311, 417-420.

Wight, D., Abraham, C., Scott, S. 1998. Towards a psycho-social theoretical framework for sexual health promotion. *Health Education Research: Theory and Practice*. 1998: 13, 317-330.

Appendix 1. The percentages of girls and boys who replied correctly to statements concerning sexual knowledge by grade and gender in the KISS study.

	Girls, grade 7			Girls, grade 9		
Statement	**1986**	**1988**	**1992**	**1986**	**1988**	**1992**
The beginning of menstruation is a sign that the girl may become pregnant	56	74	86	66	79	87
The beginning of ejaculation is a sign that the boy has become sexually mature and may conceive children	61	73	86	84	89	92
A woman cannot become pregnant during her first intercourse	57	68	73	81	85	85
Of all contraceptive devices only the condom protects against sexually transmitted diseases	34	58	64	76	89	90
	Boys, grade 7			**Boys, grade 9**		
	1986	**1988**	**1992**	**1986**	**1988**	**1992**
The beginning of menstruation is a sign that the girl may become pregnant	29	50	58	36	54	69
The beginning of ejaculation is a sign that the boy has become sexually mature and may conceive children	57	70	78	80	80	85
A woman cannot become pregnant during her first intercourse	54	64	64	73	81	80
Of all contraceptive devices only the condom protects against sexually transmitted diseases	49	61	55	70	88	81