Sexual Health Education for School Children in Japan: The timing and contents

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Introduction

Considering sexuality of young people in Japan today, most of them do not have accurate knowledge of sexually-transmitted diseases (STDs) and pregnancy. This is a major concern for their future. Because the percentage of people who stay unmarried in their entire life is low in Japan, almost no one can go through life avoiding sexual problems. People tend to believe that sexual behavior between two people not legally married is nothing special. This means that accurate knowledge about sexuality is increasingly essential to ensure a more meaningful life. There would be almost no sexual problems if people refrain from sexual activity before marriage or until they can be fully responsible for their own actions. However, in reality this is not the case. As a result, we must provide accurate knowledge to people about how to prevent STDs and how to avoid undesired pregnancies. Daily medical practice brings home the need for sexual education.

Current Status of Sexuality

Sexually transmitted diseases

According to the Ministry of Health, Labour and Welfare (MHLW) STD Central Surveillance Study Group, STDs are on an increasing tendency in Japan. The most common are chlamydia, gonorrhea, and herpes, but the increase in cases of genital chlamydia among women is particularly striking. The incidence rate by age for genital chlamydia is highest for women aged 20–24, followed by 15–19, indicating that the infection rate in the teens is quite high.

Annual changes in the number of HIV infections and AIDS cases (MHLW report) recently are also rising parallel with the increase in chlamydia infections. The infection route shows that infection between partners of different genders is increasing to about the same levels as infection between partners of the same gender, meaning that this is no longer the unique problem of homosexuals alone. The 2005 report showed that infection was highest between partners of the same gender, but about one-fourth of infections were due to conventional sexual activity between a man and a woman. Life expectancy for people with HIV has improved tremendously. The natural infection rate for mother-to-child transmission was about 30%, but this has been reduced to about 0.8% with the administration of preventive medicine and early Caesarean sections. However, as the rate of HIV infection falls in almost all developed countries, Japan is the only country in which it continues to rise. AIDS sneaks into the backyards of ordinary people.

Recently, human papillomavirus (HPV) infections have also become a problem. HPV is a very common virus and is not defined as an STD, but many people who have had sexual experience

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have been infected with HPV at least once in their life. Sustained infection with a high-risk HPV can lead to uterine cervical cancer. Accordingly, uterine cervical cancer occurs more frequently the younger a woman is when she begins to have sex. Recently, the detection rate for uterine cervical cancer or pre-cancer conditions such as dysplasia and carcinomas in situ has risen among young people, and the mortality rate among them is also rising. A vaccine preventing HPV was recently developed and has begun to be given in more than 100 countries. The most effective time for HPV vaccine is before a person is infected with HPV, before they have had sexual experiences. For this reason, the vaccination is recommended for girls in their low teens. It began to be used in December 2009 in Japan. The cost of the vaccination is covered by the government or health insurance in many countries, but in Japan it is still a voluntary vaccination paid for with personal funds.*2

Screening tests can detect uterine cervical cancer at an early stage, but the detection rate in Japan is still extremely low compared to other countries.

Many young people are ignorant of the facts that STDs can also be transmitted through oral sex with infected partner and that its diagnosis and treatment are difficult, and also do not know that condoms cannot prevent all kinds of STDs.

Pregnancy and childbirth

According to the MHLW's population statistics, 15,250 babies were born to women aged 19 or younger in 2007, accounting for 1.4% of all babies born. A review of the annual change with the birthrate in 1970 as the baseline shows that the birthrate is declining for women as a whole, but is rising markedly for women aged 16 or younger. The total number of reported artificial abortions in Japan is declining, but the figure turned upward from 1995 for women under the age of 20. However, this figure declined slightly through 2007 after peaking in 2001. The decline in the number of pregnant women has also likely had an impact.

Data in the catchment area for Ibaraki Prefecture Mito Health Center showed that artificial abortions for women under the age of 20 recently accounted for about 10% of all artificial abortions. Mid-term abortions from the twelfth week of pregnancy take a heavy toll both physically and economically, but accounted for 5.4% of all abortions in fiscal year 2006. Women under the age of 20 accounted for 16.5% of all abortions, but 28.3% of all mid-term abortions. We are currently in a situation in which the men who bear half of the responsibility suffer no physical impact, and there is also no social penalty.

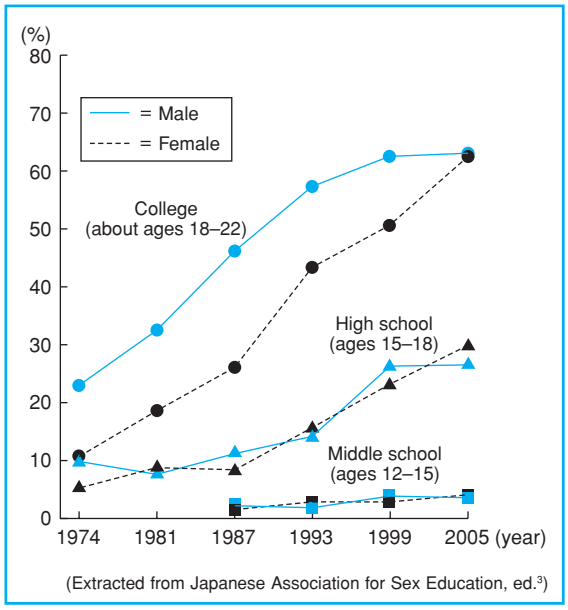

Fig. 1 Changes in rate of sexual experiences (nationwide)

At What Point?

Data indicates that women experience their first menstrual periods at a weight of 40–44 kg and the age of 10–14, with an average of 12.3 years ±1.0 years, but there are individual differences. According to 2002 data from the Research Group on Sex Education in Tokyo Kindergartens, Elementary, Middle and High Schools, and Schools for Disabled Children, a cumulative 12.3% of boys in the third year (ages 14–15) of middle school had had sexual experience already,

*2 In April 2011, the national government and municipal governments began providing public funding for voluntary vaccination against cervical cancer. Female students in the first year (ages 12–13) of junior high school through to the first year (ages 15–16) of high school are eligible for the subsidy up until the end of March 2012.

Table 1 Health education subjects for children and students according to stages of development

	Obstetrics and gynecology
Kindergarten	• Value of life* • Interacting with babies • Touching animals to confirm their warmth • Health (eating, sleeping, washing hands, gargling) • Working cooperatively with friends • Interacting with friends • Physical measurements
Lower grades of elementary school (ages 6–8)	• Importance of life, irreplaceable nature of life • Education on self-respect (ongoing throughout elementary and middle school) • Empathy for others (interaction with elderly people and the disabled) • Health (eating, sleeping, washing hands, gargling)
Middle grades of elementary school (ages 8–10)	• Origins of life, importance of life • Differences between male and female bodies (some believe that this should be taught in the lower grades) • Male and female genitalia (some believe that this should be taught in the lower grades) • Secondary sexual characteristics (breasts, pubic hair, height growth, first menstrual cycle, changes in voice, mastery) (throughout middle and upper grades) • How to interact with adults (using the Internet, etc.)
Upper grades of elementary school (ages 10–12)	• Secondary sexual characteristics (breasts, pubic hair, height growth, first menstrual cycle, changes in voice, mastery) (throughout middle and upper grades) • Emotions during puberty and male/female interaction • How to choose the correct information • How to interact with friends • Sexual contact • Preventing STDs, HIV transmission path, relationship between HPV and uterine cancer (ongoing in upper levels of elementary school and first year of middle school) • Avoiding becoming the victim of sexual crimes (some believe that this should be started in the lower grades)
First year of middle school (ages 12–13)	• Menstrual problems and ways of mitigating • Preventing STDs, HIV transmission path, relationship between HPV and uterine cancer (ongoing in upper levels of elementary school and first year of middle school) • Sex, pregnancy, contraception, masturbation (some believe that it should be taught in the upper levels of elementary school as well; sex, pregnancy, and contraception are taught throughout middle school) • Importance of gynecological checkups, economic aspects such as cost of childbirth and abortions • Risks of pregnancy and childbirth to mother and child, responsibilities involved in becoming a parent
Second year of middle school (ages 13–14)	• Unwanted pregnancies, artificial abortions • Prevention of compensated dating (some believe that it should be taught from the upper levels of elementary school) • Dating violence, avoiding becoming a victim of sexual crimes • Mobile phone dependence (taught throughout high school, beginning in middle school) • Media literacy
Third year of middle school (ages 14–15)	• Marriage • Pregnancy, childbirth, child-rearing (some believe that it should be taught from the first year of middle school) • Worries about sexuality • Homosexuality, gender identity problems
First year of high school (ages 15–16)	• STDs: Infection to the next generation and impact • Infertility • Late pregnancies, fertility
Second-year of high school (ages 16–17)	• Respect for human dignity • Romantic relationships between the sexes • Ways to ensure that all children who are born are wanted
Third year of high school (ages 17–18)	• Overall reproductive health

Notes * Importance of life (this is incorporated at each stage of development from kindergarten through high school, but it is particularly important to teach this topic through the middle grades of elementary school)
- The teachers must explain to the students' guardians in advance what they will be discussing from the middle grades of elementary school onwards.
- Students should receive a lecture from an obstetrician/gynecologist in the upper grades of elementary school and the first year of middle school.

(Extracted and modified from the JMA's School Health Committee.[5])

Table 2 Contraception used in pregnancies that were aborted

Total number of abortions: 876 cases

Contraception used or not, its methods	Number of cases	Percentage
No contraception	457	52.0
External ejaculation	174	19.8
Condoms	230	26.2
Certain: Worn from beginning to end of sexual act	(50)	(5.7)
Error: Inadvertent situation such as tearing or falling off	(24)	(2.7)
Mid-course: Worn halfway through sexual act	(74)	(8.4)
Uncertain: Condom was used sometimes and not other times, and/or forgot whether it was used	(82)	(9.3)
OC	2	0.2
IUD	2	0.2
Other*	14	1.6
Total	879	100.0

* Other includes BBT, rape, mistakes with emergency contraception, and unknown.
(Multiple answers)

(Extracted and modified from Adachi T.[6])

24.8% by the first year (ages 15–16) of high school and 37.3 by the third year (ages 17–18) of high school. The rate for girls was 9.1% by the third year of middle school, 25.5% by the first year of high school and 45.6% by the third year of high school. Compared to 0.6% of girls, 2.8% of boys responded that they had had sexual experience for the first time in elementary school (ages 6–12).

Similarly, 2003 data from the Ibaraki Prefectural Board of Education[2] showed a steep rise in young people who have had their first sexual experience during the spring vacation between the third year of middle school and the first year of high school, when they have finished studying for high school entrance exams and are released from school. The rate rises from 12.2% to 24.8% for boys and 11.4% to 29.1% for girls. In addition, 0.5% of elementary school students stated that they had already had sexual experiences. National data from the Japanese Association for Sex Education[3] showed that in 2005, 27.0% of male high school students (ages 15–18) and 30.0% of female high school students had had sexual experience. The rate rises to 63.0% for boys and 62.0% for girls by the time they reach college age (about ages 18–19) (**Fig. 1**).

Given the need to prevent STDs and unwanted pregnancies, encourage HPV vaccination, and address sexual crimes, sexual education should be introduced from elementary school, before children begin to have sexual experiences. In addition, children should be armed with the pertinent knowledge by the time they are in their second year (ages 13–14) of middle school, before graduating middle school, when the rate of those having sexual experience rises sharply.

To What Extent?

The issues of who should be providing sexual education, the extent of it, and how it is taught are extremely complicated. In the Ministry of Culture, Sports, Science and Technology's (MEXT) curriculum guidelines, the Q&A section on sexual education states that "sexual intercourse" and "condoms" will not be addressed in elementary school (ages 6–12). In middle school (ages 12–15), the effectiveness of condom use is discussed, but the correct method for wearing them is not addressed. Moreover, the word "sexual intercourse" is not used, but rather "sexual contact" is used when discussing AIDS and STD prevention. Conception and pregnancy is taught, but not the stages of pregnancy. However, according to 2005 report from Research Group on Sex Education in Tokyo Kindergartens, Elementary, Middle and High Schools, and Schools for Disabled Children,[4] when asked whether they knew the meaning of sexual contact, about 60% of students in the first year (ages 6–7) of elementary school and about 90% of the

students in the third year (ages 14–15) of middle school said that they did know, regardless of whether their understanding was correct or not.

In light of this situation, the health education subjects for children and students (draft) in accordance with developmental stages (**Table 1**) that the Japan Medical Association's School Health Committee[5] proposes broader. In Canada, where children receive sexual education from the age of five, the percentage of children who have sexual experience in high school is on the decline. Accordingly, we would surmise that repeated education from an early age so that children have accurate and specific knowledge would help prevent imprudent sexual behavior.

For example, many adolescents in Japan do not even know the time of the month in which women are most likely to become pregnant. Women should take their basal body temperature and know the days that they ovulate and their own endocrinological condition. Moreover, the failure rate of contraception is high for condoms, as indicated by the contraception used when women became pregnant and had abortions (**Table 2**). There are also STDs, including genital herpes, genital warts (condylomata acuminata), and hair lice, that cannot be prevented by condoms, even when they are used correctly. Birth control pills are extremely effective for contraception when taken correctly, and the failure rate is about 0.5%. The low-dosage birth control pills currently available also have ancillary effects, such as easing menstrual cramps, reducing the monthly flow, and regularizing the menstrual cycle. Students should also be taught about emergency contraception, which can be used to reduce the likelihood of pregnancy when birth control fails or a woman is raped.

Conclusion

Unlike high schools, most of which have a cross-section of students based on academic performance, public elementary and middle schools teach all children in the community. Nowadays, people cannot expect the traditional large family made up of family members of all ages, and there is no interaction with neighbors of different ages, such as at public baths. It has long been said that educational function of the family is declining, but it is extremely difficult to educate parents. However, children are educated in schools whether they like it or not. Students can be instructed repeatedly, and indeed this is essential. It does take time, but we have to wait until these children with accurate knowledge go out into society and change conditions. Delaying sexual experiences for as long as possible or abstaining from sexual activity until social conditions are right are effective methods of preventing STDs and unwanted pregnancies, but actual sexual behavior among young people now shows that this method is extremely difficult to rely on. Accordingly, practical education to prevent unwanted pregnancy and STDs together with education on morals and ethics are both essential, and should go hand-in-hand.

There are many doubts as to the effectiveness of group instruction in schools, but even if the knowledge is not directly useful when the student hears a lecture or attends class, it will come back to him/her when it is needed in the future. Moreover, some school administrators believe that they can just provide individual instruction if there are any problems. However, in group instruction, the questions of a student who is inwardly worried about something but too afraid to ask would likely be answered. Both group instruction and individual instruction are necessary. Teachers cannot exceed the MEXT's restrictions as long as they have a teaching position. This means that, in consultation with the schools, doctors who specialize in these sexual related problems should go beyond the restrictions to provide the knowledge that students need.

References

1. Research Group's Committee for Field Survey of Sexual Education in Tokyo Kindergartens, Elementary, Middle and High Schools, and Schools for Disabled Children, ed. 2002 survey on sexual activity of children and students: report of survey on sex consciousness and behavior of school children in Tokyo. Tokyo: Gakko Tosho; 2002;48–49. (in Japanese)
2. Ibaraki Prefectural Board of Education. Report of survey on sexual activity (second-year high school students); 2004. (in Japanese)
3. Japanese Association for Sex Education, ed. White paper on sex among young people, report on sixth national survey of sexual activity among young people. Tokyo: Shogakukan; 2007;13–15.

(in Japanese)
4. Research Group for Sexual Education in Tokyo Kindergartens, Elementary, Middle and High Schools, and Schools for Disabled Children, ed. 2005 survey on sexual activity of children and students: report of survey on sexual consciousness and behavior of school children in Tokyo. Tokyo: Gakko Tosho; 2005;31–32. (in Japanese)
5. Japan Medical Association's School Health Committee. School health committee report: new developments in school health education; 2010 Mar. p. 26–29. (in Japanese)
6. Adachi T. Research on prevention of repeated artificial abortions. An integrated research towards reducing artificial abortions based on nationwide survey: General Research Report. Child and Family Research, Fiscal year 2008 Health and Labor Sciences Research Grants (Chief researcher: Taketani Y); 2009 Mar. p. 218. (in Japanese)