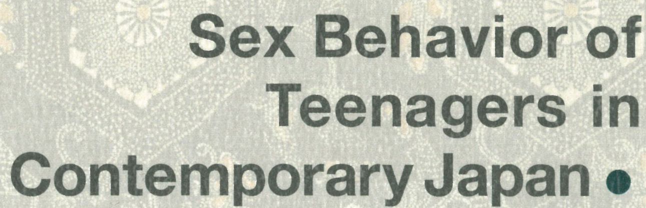

Sex Behavior of Teenagers in Contemporary Japan

— The WYSH Project —

MASAKO ONO-KIHARA

Sexual Behavior of Teenagers and Contemporary Japan

—The WYSH Project—

Masako Ono-Kihara

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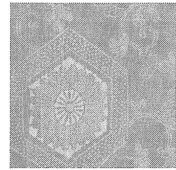
I dedicate this work to my mother Sachiko Ono and also my father Ryozo Ono; my father-in-law Michisato Kihara, and mother-in-law Yoriko Kihara who always lent me such affectionate support. I also dedicate this work to my husband and mentor, Masahiro Kihara, who supported the birth of this work, and to my beloved daughter Aya Kihara; further, to Professor Seiichi Ichikawa, Nagoya City University School of Nursing; Professor Shigeru Katamine, President, Nagasaki University; Honorary Professor Yoshiaki Kumamoto, Sapporo Medical University; Shudo Yamazaki, former director of the National Institute of Infectious Diseases; Tadao Shimao, President of the Japanese Foundation for AIDS Prevention; Ryuichi Kunitomo, Director of the Best Service Research Center, who opened my eyes to new perspectives on prevention; and to Susan Kippax, former Director of the Australian National Centre in HIV Social Research, whom I admire very much as a scholar and a woman.

Foreword for the English edition



Masako Ono-Kihara's book "Sexual Behaviour of Teenagers and Contemporary Japan: The WYSH Project" demonstrates remarkable prescience. Positioned within socio-epidemiology, it describes the changes in the sexual behaviours of young Japanese people in the context of a changing culture. It also provides a way forward to respond effectively to and help prevent the increasing infection rates in sexually transmissible diseases, including HIV, and the increasing numbers of unwanted pregnancies and abortions associated with these changes. It is extremely timely.

The argument developed in the book for the need for good sexual health education in schools is firmly based on a large number of studies for which the author was largely responsible. Masako Ono-Kihara clearly demonstrates how sexual behaviours have changed in Japan over the past two or three decades—particularly among young people. The evidence comes from a number of sources and captures the perspectives of young people, educators, and others concerned for the well-being of young people. It comes from extremely well designed surveys of these young people themselves—in schools and universities and also from young couples "out and about" in the streets of Tokyo, from an analysis of the media especially the role played by *manga*, and from interviews with key informants such as a school nurse and an obstetrician. Most importantly of all, the findings from the analysis of these data are informed by the astute and sensitive standpoint taken by the author. As well as being academically sound, the book is at the same time a very personal account.

The book does not stop here: it goes beyond documenting the changes in the sexual lives of young Japanese people and the ensuing

sexual health problems. Having developed a cogent argument for the need for good sexual health education in Japanese schools, Masako Ono-Kihara, outlines in detail how to do provide such education in Part 4 of the book—*What to do ?*. The program they have developed and which is currently aimed at middle and high school students, has won the support of the Ministry of Education, Culture, Sports, Science and Technology and a large number of schools have now participated with extraordinarily positive results.

In Part 4 of the book, the sexual health education program called *Well-Being of Youth in Social Happiness* (WYSH) is described. What makes it such an innovative and special program is its inclusiveness. The program targets not only young people but the people around them, especially their parents and their teachers. Its focus is on cooperation between the young and the old, between the students and the school officials, the local medical professionals, and parents. In Masako Ono-Kihara's own words, the aim of the program is to prevent adverse sexual outcomes by placing the program "within a framework of fundamental values that encompass a human way of life consisting of dreams and aspirations".

The book is addressed to people who are most concerned about the sexual behaviour and sexual health of young Japanese people: the young people themselves, their parents, their educators and teachers, and sexual health clinicians and allied workers. It is written in such a way that one can hear the voices of the young and their parents, the voices of the educators, the sexual health clinicians and nurses. It is written with warmth and love. So while it contains a great deal of scientific data, because it is written from the heart as well as the mind, the book is immediately accessible. Readers will enjoy it as well as learn a great deal from it.

December 1, 2010

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National Centre in HIV Social Research (NCHSR)
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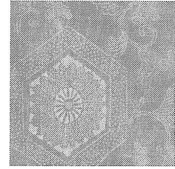
Australia

Preface for the English edition



This book is based on "*Judai no seikodo to nihon shakai*", a book published in Japanese by MINERVA Publishing Co., Ltd., Kyoto in 2006. I am delighted to present this English edition as the first publication of the Japan Child Foundation, which we recently established to promote the WYSH (Well-being of Youth in Social Happiness) Project and to which I serve as the Chairperson.

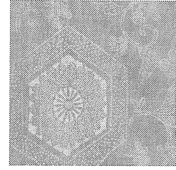
During the last three years, the WYSH Project has further evolved, accumulating data from additional surveys on more than 100,000 students and proving evidence of intervention. It has expanded nationwide, obtaining the official support from the Ministry of Education, Culture, Sports, Science & Technology, the Federation of All-Japan Senior High School Parent-Teacher Association and numerous local boards of education as the only evidence-based and culturally appropriate sexual health education for school children in Japan.

During the same period, I had a number of opportunities to communicate with researchers and public health practitioners from other countries and regions around the world, especially in Asia. Through such exchanges I became convinced that knowledge on the socio-cultural trends and changes in sexual behavior of the Japanese youth over the last twenty years will also be relevant to other countries, in the sense that similar situations are in emergence or might develop in there in the near future due to the rapidly progressing cultural globalization. I feel strongly obliged to publish this book in English to share this information and our experiences in a way that may help other countries and regions to develop culturally appropriate sexual health education programs in a timely fashion.

However, English publication requires a complex understanding of the publishing process. l owe a lot to the excellent work of translators Yu Ito and Justin Bonsey and to Teeranee Techasrvichien for careful proofreading. I also would like to express my special thanks to Tatsuya Matsuo and Takao Hirota, Sanko Publisher, Tokyo, Keiji Kadowaki and Riho Kamba, A-Wing Inc., Tokyo, for their enthusiasm for this English edition and their patience in considering my concerns over the format and design of this book down to the very detail. Without their understanding and cooperation, this edition could never have come into existence. Finally, I would like to extend my sincere gratitude to Professor Susan Kippax for all her encouragement and support for my work and the thoughtful foreword to this English edition.

January 14, 2011
Masako Ono- Kihara

Preface from the Japanese edition



Ryuichi Kunimoto, a renowned expert in commercial marketing, once praised the author of this work as a "*natural marketer*". I have always been impressed by the author's talent to connect to the youth, spot the issues concerning prevention, and integrate those issues in engaging programs. Naturally, theories are essential for the development of prevention programs, but theories are not more than frameworks. Putting flesh on these frames and shaping it requires artistic intuition and a strong feeling for the subject. I believe it is in this sense Ryuichi Kunimoto referred to the author as "*natural marketer*".

This work is the result of 8 years of great effort. I first introduced the author to HIV (human immunodeficiency virus) research in 1997. At that time, she was specialized on molecular epidemiology of cancer predisposition through the analysis of genetic polymorphism. I decided to entrust her with a national survey on sexual behavior, the first of its kind in Japan. As only very few previous surveys on sexual behavior existed in Japan, the author essentially had to start from the very beginning. In the main part of this book the author mentions how she approached the subject, but there is no doubt that it had been a difficult and strenuous time for her. Reactions of "experts" in the field towards a female researcher, whose name and professional status seemed to have appeared all too sudden, were mixed. For a long time, she had to confront indifference and cold looks. She shed countless tears when trying to approach schools and the administrators. More than once, I suggested abandonment of the project, but the author confronted and overcame all hardships with an extraordinary determination. I believe that what sustained her, were the strong affection of a mother concerned for the future of children, the glow-

ing smiles of these children in her classes, and her pride as a scientist with an important assignment. As a witness of all the struggles and as a collaborative researcher of many research projects, I would like to express my sincere admiration and compliments to the author.

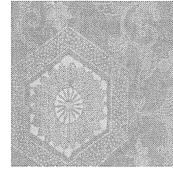
At times, I think of the author's cumbersomeness as a gift. The author is not a deft person. Preparing talks, prevention classes for school students or university lectures always consumes a lot of her time. Considering those she is going to address very carefully, she does her preparations diligently to an extent I often question as necessary. In the end, she has no choice but to cut back on her sleeping hours. She tires herself out and neglects her health, but never stops working, even if completely exhausted. She compiled this work in-between these busy hours and countless times I have asked her to abandon it. However, again and again, I witnessed how her cumbersomeness turned into a source of creativity. She would agonize over her preparations for a lecture or contemplate long hours over the meaning of expressions or remarks from teenagers she had overheard; or she would turn data upside down and inside out while continuously inspecting it. It was however during that occasions when she would come up with one new idea after the other, ideas on HIV prevention which have now begun to be known as the WYSH Project. Hence, cumbersomeness is a virtue.

This work is the first tangible product of the newly established academic field of *socio-epidemiology*. After having embarked upon HIV research, we soon became aware of the methodological limitations of epidemiology and sought for a new approach, in which we wanted to incorporate the social sciences. This led us to found the Department of Socio-epidemiology at the Kyoto University School of Public Health, as the first of such department. Socio-epidemiology is a multidisciplinary approach to public health, which integrates epidemiology with other fields such as biostatistics, qualitative methods, social marketing and behavioral science in order to analyze behavior and its social context in qualitative and quantitative details. It is also concerned with the development of socio-culturally appropriate prevention programs and their evaluation. This book effectively represents the first written work in which the author draws upon the strengths of *socio-epidemiology*. The reader will find that this work considers an extraordinary amount of qualitative and quantitative

data. One may also be impressed by the dedication with which a researcher of the medical field can conduct a deep social analysis. In contrast to books in other technical fields the reader may find this report easy to read and understand and should further note the impassioned intent to present solutions rather than to end on a critical note. This is the objective *socio-epidemiology* aims to achieve as a scientific field. It aspires to be "of use to the world" and it is the same the author wishes to achieve with this book.

The author feels strongly that she has not written enough, has not expressed herself well enough and has not sufficiently considered all issues. Yet, out of concern that the project would never come to an end, I strongly recommended proceeding with the publication. I may be scolded "I told you!" at some point later on, but this is something I am prepared for.

January 14, 2006
Masahiro Kihara, MD, PhD
Professor
Department of Global Health and Socio-epidemiology
Kyoto University School of Public Health



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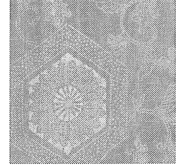
Part 1

Changes in adolescent sexuality

Chapter 1

Contemporary youth as seen from survey data



Previous surveys

The sexual behavior of Japanese adolescents is experiencing remarkable changes.

According to surveys conducted by the Tokyo Society for K-12/Disabled Sex Education every three years since 1984, the proportion of high school students with sexual experience started to increase in the 90s. Among girls, this trend was particularly pronounced, so that in the latter half of the 90s the proportion of female students surpassed that of the male. In 2002, the number of female third-year high school students who had had sexual intercourse amounted to 46%, that of male students to 37% of all students of the same grade and the same gender (Figure 1).

We initiated our own surveys on sexual behavior in the latter half of the 1990s. Soon after becoming involved in HIV research, we realized that no detailed data on sexual behavior in Japan existed. We were aware though that in order to establish an appropriate HIV prevention program, it was essential to learn the facts of the sexual behavior in Japan. In 1997, we therefore started to investigate surveys carried out in Europe and the United States. We also requested advice for the development of questionnaires from the Australian National Centre in HIV Social Research and the Department of Sociology, University of Chicago. The latter conducted the US National Health and Social Life Survey in 1992. Based on three preliminary surveys

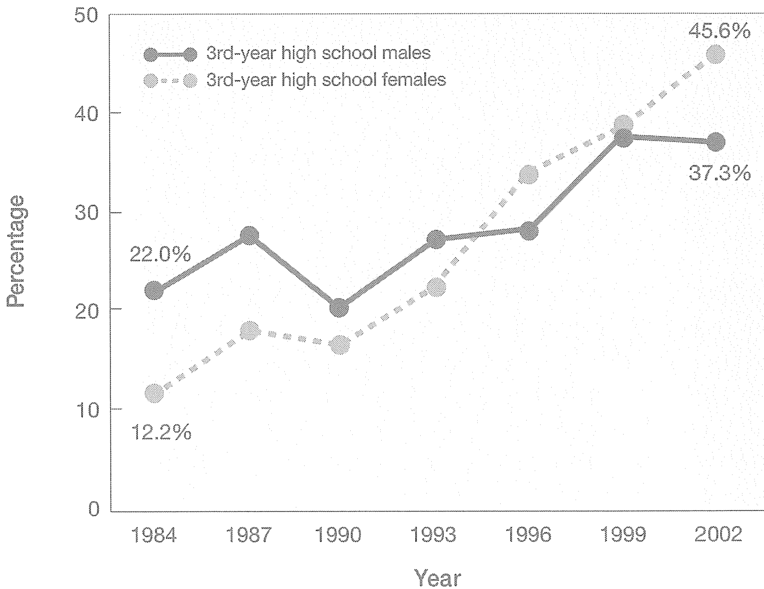


Fig.1 Proportion of students with sexual experience among third-year high school students in metropolitan Tokyo, 1984-2002

Source:Reproduced from the Tokyo Society for K-12/Disabled Sex Education 2002 survey report

we organized in 1998, we designed the National Survey of HIV/STD-Related Knowledge, Sexual Behavior and Sexual Attitudes of Japanese (shortly, National Survey of Sexual Behavior). It was conducted in June 1999 as the first of its kind in Japan.

The facts revealed by this survey were striking. Considerable discrepancies had emerged between younger and older generations. We found that the first sexual encounter occurred at a much earlier age than in the past. The number of sexual partners had increased and the sexual behavior diversified. The dating period before initiation of sexual relations had significantly shortened. We also observed that, long-existing gender differences had nearly disappeared or even been reversed. In addition, in contrast to our expectations, the proportion of men involved in commercial sex in the past year was higher among younger age groups (16% in the age group 18 to 24 years and 2% in the age group 55 years and older).

Being aware that capturing a complex cultural phenomenon such

as sexual behavior in only one or two surveys is utterly impossible, we continued our investigations. We focused mainly on high school students and at the end of 2005, we had collected data from over 150,000 respondents.

Our study design distinguishes itself through its combination of quantitative and qualitative approaches. Quantitative research generally refers to questionnaire surveys conducted in order to obtain numeric data on the proportion of people showing a certain behavior or attitude. The number of questions that can be posed in a questionnaire though, is obviously limited. Moreover, the motivation for the given response remains unclear. No information is revealed on *why* the survey participants behave or feel the way they report. We therefore integrated numerous qualitative investigations in our study design, that is, group interviews as well as individual interviews. Analysis of qualitative data often yielded unexpected insights and gave important clues on how to approach prevention. Such a combination and repetition of quantitative and qualitative studies allowed us to attain a deeper understanding of our concern with respect to the adolescents' lifestyle, values and sexuality.

As already mentioned, in June 1999, we conducted the first large-scale probability sample survey of its kind in Japan, the National Survey of Sexual Behavior. The same year, we conducted the Nationwide Survey of Sexual Behavior Among National University Students, targeting approximately 14,000 students from national universities all over the country. We realized how active also university students were sexually, but also how alarmingly limited their awareness of the human immunodeficiency virus (HIV) and sexually transmitted diseases (STDs) was. When the Japanese government lifted the ban on low-dose oral contraceptives in 1999, we were concerned about the possible effects this decision would have on sexual behavior and thought it important to document the situation before potential changes could occur. We therefore conducted two large-scale surveys within that single year.

In 2000 we focused on teenage couples in the metropolitan area of Tokyo. Our surveys showed that couples, in which partners mutually had had only one previous sexual partner accounted to only little less than 20% of all couples surveyed, suggesting extensive sexual networks among adolescents.

In 2001, we conducted a comparative study on the sexual attitude of parents, teachers and students, in order to gain insight into the environment adolescents grow up in. This survey revealed a significant discrepancy between adults and adolescents. The same year, we conducted a survey on sexual health education in elementary, middle and high schools of two outlying prefectures in Western Japan (in the following Prefectures A and B). The objective was to investigate the adequacy of the current sexual health education for contemporary adolescents. We found that sexual health education, including education in HIV and STDs was implemented in all grades, but that average class time was limited to only 2-3 hours per year.

Our first study on sexual behavior concerning high school students was launched in 2002. We conducted surveys on a total of approximately 5,000-10,000 male and female second-year high school students in Prefectures A and B. In Prefecture A, the survey was repeated in 2003. The trend of teenage elective abortions shown in local statistics clearly contradicted the deeply rooted belief of local educators and parents that the sexual behavior of local teenagers was "not like what it is in the city". Thus, we felt the urgent need to assess the true situation. As we had anticipated, the sexual behavior among high school students in outlying prefectures differed very little from that of their urban counterparts. 20-30% of the students were sexually active and were part of unprotected sexual networks. In other words, just as the sexual behavior in urban areas has changed, it equally has in outlying areas.

Based on our findings, we launched a prevention project in 2003 the WYSH (Well-being of Youth in Social Happiness) Project (see Part 4). At the beginning, it involved only two high schools in one prefecture, but soon it expanded, involving dozens of high schools in multiple areas of Japan. After several years of effort, our program has proved to dramatically improve adolescent HIV/STDs awareness. It has also improved adolescent sexual attitude by decreasing acceptance of sexual intercourse and promoted protected sexual behavior.

The purpose of this book is to shed light on contemporary adolescent sexuality and on the perspectives for prevention by presenting our studies. In the latter, the adolescents we refer to are teenagers up to and including high school students, although a major part of the findings might also apply to young people in their twenties. We pro-

vide details on the questionnaire surveys conducted so far at the end of the book (survey methods, sample size, response rate etc.).

Higher prevalence of sexual experience —Female teenagers in transition

Figure 2 compares the results of a survey we conducted in 2001 in outlying Prefectures A and B in Western Japan with data of the Tokyo Society for K-12/Disabled Sex Education. It can be seen that there is no significant difference in sexual activity of students in urban and outlying areas. The proportion of second-year high school students with sexual experience is 20-30% both in Tokyo as well as in outlying prefectures.

Another common characteristic in both studies is a higher prevalence of sexual experience among female students compared to their male counterparts. As mentioned earlier, the roles were reverse in the past until female students caught up and finally overtook the male. This phenomenon seems to have occurred in urban as well as outly-

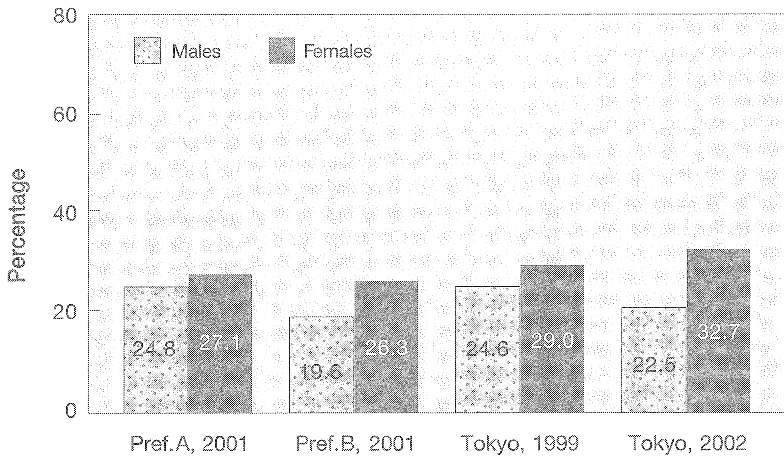


Fig.2 Proportion of students with sexual experience among second-year high school students in metropolitan Tokyo and outlying prefectures

Source:2001 Survey of High School Students in Outlying Prefectures; Tokyo Society for K-12/Disabled Sex Education 1999 and 2002 survey reports

ing prefectures.

As a matter of course, the age of the first sexual experience has dropped. Data from the National Survey of Sexual Behavior clearly illustrates this. Figure 3 shows the percentage of people in different age groups, who experienced their first sexual encounter during their teenage years. We can see that this percentage increases the younger the age group. In the group of people aged 55 years and older, 26% of males and 10% of females had their first sexual intercourse as a teenager. In contrast, it is nearly over 70% of the males and females in the group aged 18-24, without hardly any gender disparity. In other words, the age at which people make their first sexual experience has decreased. At the same time behavioral differences between males and females have diminished. This indicates that the changes in sexuality are much more pronounced in women than in men,

Figure 4 shows the proportion of sexually active people in different age groups, who had had 5 or more sexual partners in their life-

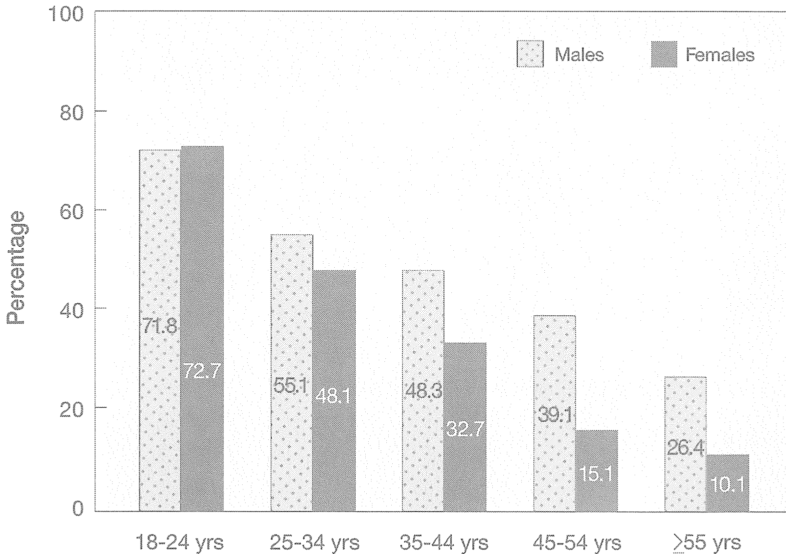


Fig.3 Prevalence of sexually active people who had first sexual contact as teenagers

Source: 1999 National Survey of Sexual Behavior; Ministry of Health and Welfare Study Group on HIV Epidemiology

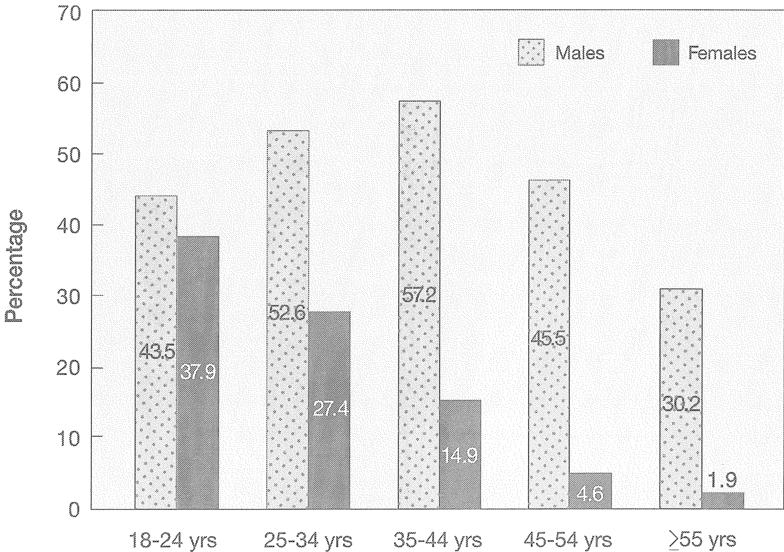


Fig.4 **Sexually active people who have had 5 or more sexual partners**

Source:1999 National Survey of Sexual Behavior; Ministry of Health and Welfare Study Group on HIV Epidemiology

time. Again, we find that the portion is higher in young women and that the gender difference, which amounts to 30-40% in the age groups over 35 years of age, almost disappears in the youngest age group. This set of data offers just a glimpse of the extent to which female sexuality has changed.

Sexual relations within one month

Now let us have a look at the dating period before sexual relations are initiated. From Figure 5 we can see that a high portion of young people already have sexual intercourse after a dating period only as short as one month. We find that in the age group 18-24 years this portion exceeds 50% of the sexually active individuals in this group.

The dating period before sexual relations are started has become shorter than in the past, but at the same time, also the relationship itself has become shorter. In the age group 55 years and older approxi-

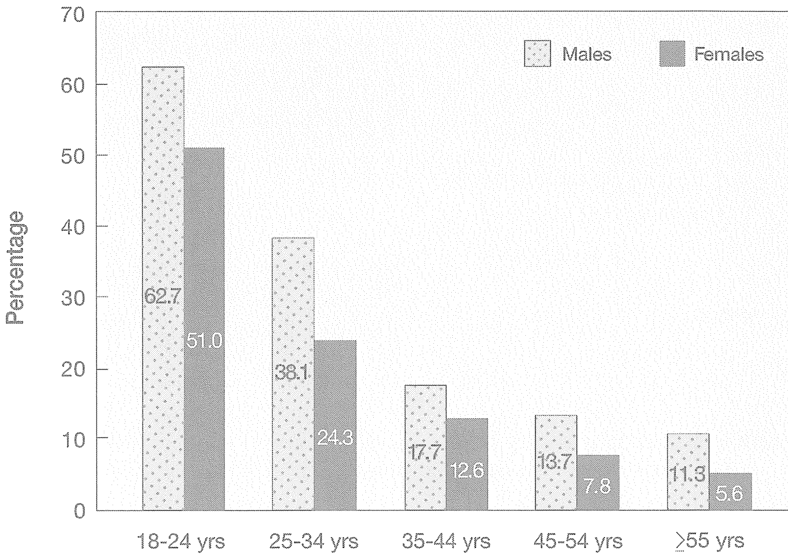


Fig.5 People who initiated sexual relations with their current partner within one month of dating

Source: 1999 National Survey of Sexual Behavior; Ministry of Health and Welfare Study Group on HIV Epidemiology

mately 30% of males and 50% of females responded that they are still with their first sexual partner. In contrast, this is the case for only 15% of the men and 18% of the women in the age group 18-24 years. In our interviews with high school students, the question: "How long have you been together ?" was answered more than a few times with: "one week". In a group interview, when a girl reported that she had been dating someone for 3 months, all other girls expressed their surprise; surprise which meant: "3 months is a long time". Basically, relationship turnover has become faster and adolescents are moving on after short periods of time.

Many partners—"Nothing to fill the time"

Let us return to the data on second-year high school students. Figure 6 shows the number of sexual partners students had had in their lifetime. We were astonished to find that, despite being only 16 or 17

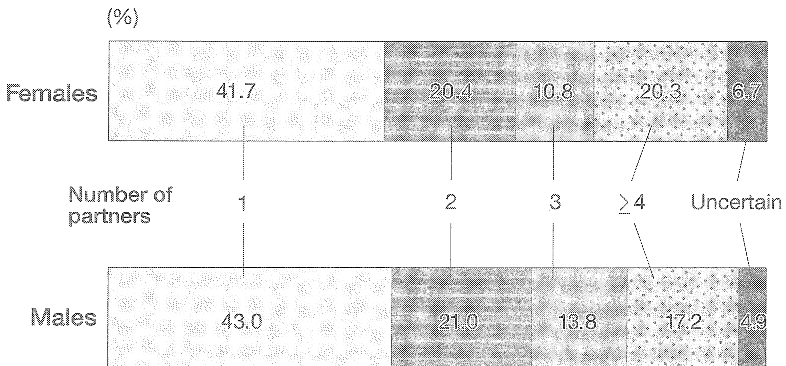


Fig.6 Number of lifetime sexual partners of second-year high school students in outlying Prefecture A

Source:2002 Survey of Sexual Behavior Among High School Students in Outlying Prefectures; Ministry of Health, Labour and Welfare Study Group on HIV Socio-epidemiology

years old, less than half of them had had only one previous partner. 20% of all sexually active respondents had had 4 or more previous partners. This amounts to an average of three partners per sexually active student.

Note, that the above does not refer to dating multiple partners at the same time. In each case the students interviewed were referring to the number of steady partners in their lifetime. However, as explained above, the relationships themselves are very short and partners often follow one after the other (serial monogamy).

We would also like to remind that the adolescents we interviewed are not in any way garish individuals such as the ones sometimes shown on television. Including the high school students who had had 4 or more previous partners, most of the students were wearing their school uniform, and were busy with homework and club activities. This may result from the fact that all interviewed students were introduced to the interview by the school principal and also needed to have permission from both their parents to participate in the study. Nevertheless, in an interview, in which I asked a female student, who had top grades in class, how many sexual partners she previously had had, I was surprised to hear her answer of "6 people ". I asked again,

wondering if she had perhaps misunderstood the question, but was confirmed that she was referring to the number of partners with whom she previously had been sexually engaged. She responded without any sign of disconcertedness and told me next, that she was preparing for the entrance exam of a national university.

Why do girls like her change their partners so often ? Posing this question to another high school student, I received an unexpected response: "There is nothing to fill the time". "There is nothing to fill the time ?" I repeated. Even now I can still remember my surprise. Later on, however, I should encounter this answer more often. Exposed to excessive media full of sexual information and strong peer pressure that pushes them to their sexual destination, young people seem to rush into physical relationships as a confirmation of affection to compensate their failure in establishing emotional connectedness. However, as demonstrated in the interviews, even with physical connectedness, they are likely to end up in the arms of many dating partner, because "There is nothing to fill the time".

Diverse dating partners

So what kinds of people do high school students get involved with ? Approximately 90% of the male students date other high school students. This is however true for only approximately 70% of the female students. The rest of them connect to people of varying age and from varying social classes including working adults, university students, and young adults who make their living with part-time jobs (Figure 7). It is important to acknowledge that the sexual networks of female students extends into the adult society.

The problem of girls getting involved with elder partners is the pronounced tendency of unprotected sex. We found that the use of condoms in such a relationship was particularly low. Interviews showed that there is a tendency for girls to rely on their adult partners in terms of contraception. Some girls are simply waiting for a chance to get married, which is partially the reason for the limited sense for contraception. These girls dream of "shotgun weddings" such as often shown on television or in magazines. As an example, asked what she would do if she got pregnant, a student's response was "I would be so lucky ! If I had a baby, then I could trap the guy into staying with

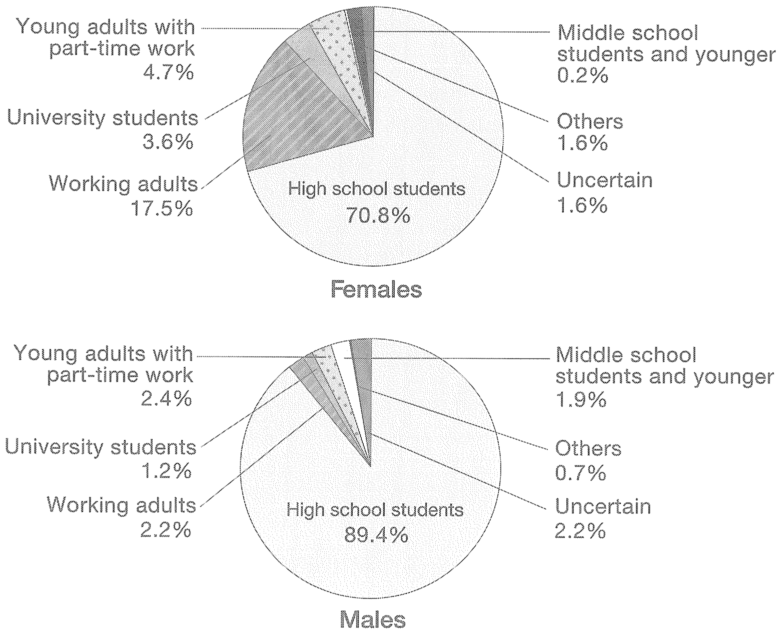


Fig.7 Dating partners of second-year high school students in outlying Prefecture A

Source: 2002 Survey of Sexual Behavior Among High School Students in Outlying Prefectures; Ministry of Health, Labour and Welfare Study Group on HIV Socio-epidemiology

me!".

However, as testified by a school obstetrician (Part 3) the fortunes of teen marriages are not always positive. All the same, media continues to broadcast only stories with happy ends. Unfortunately, too many young people get caught in this illusion. It goes without saying that unprotected sex with adults brings with it also a significant risk for STDs, including HIV as shown from the fact that among HIV positives aged below 20 years reported to the HIV/AIDS surveillance more than two-third are women.

Even elementary school students know what sex is

Sexual information was not always as readily available as it is now. Convenience stores, video rental shops, television, magazines and

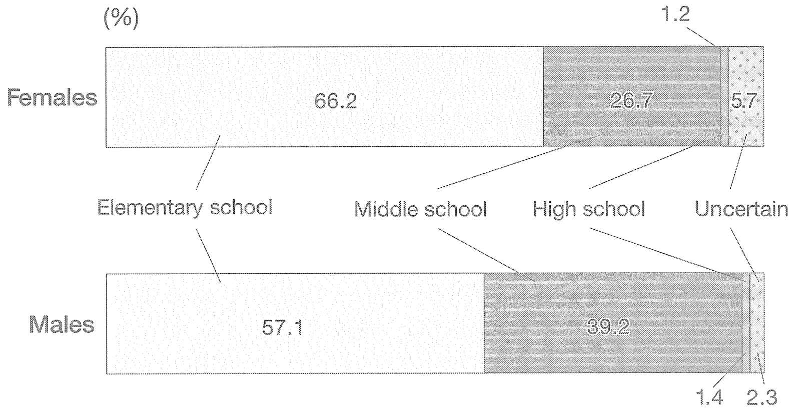


Fig.8 School level at which second-year high school students in Prefecture A first came in touch with sexual issues

Source:2002 Survey of Sexual Behavior Among High School Students in Outlying Prefectures; Ministry of Health, Labour and Welfare Study Group on HIV Socio-epidemiology

even the advertisements in the streets brim with suggestive material, readily accessible even for children. This is clearly reflected in our collected data.

A survey conducted in 2001 showed that most parents thought that their children first came in touch with sexual topics during middle school. However, a survey conducted in the following year revealed different facts. 57% of the male and 66% of the female high school students living in outlying areas of Japan responded that they had come in touch with sexual issues first in elementary school (Figure 8).

Another survey, conducted in 2004, that targeted all middle schools in City C in Western Japan, showed that 50% of all male and 65% of all female students had become familiar with sexual terms in elementary school. In other words, we are now living in a time, in which the majority of kids come to know what sexual relations mean, while still in elementary school.

Unbalanced knowledge

Even though sexual information is so pervasive that most children

have been confronted with it in middle school, the above-mentioned survey on middle school students revealed that less than half of the boys had heard about abortion. The limited knowledge of the male students was particularly pronounced here, but even 70% of the female students stated not to have known of abortion until their third year. Less than 30% of both genders knew that chlamydia was a sexually transmissible disease (Figure 9).

We can see that even though adolescents are familiar with sexual terms and relations, they suffer from an extreme lack of information on STD prevention, suggesting that this unhealthy imbalance emerges from the sources the students get their information from. Most boys and girls referred to their friends as such information source. Ranked second for male students was their health and physical education teacher, followed by *manga* as number three. In con-

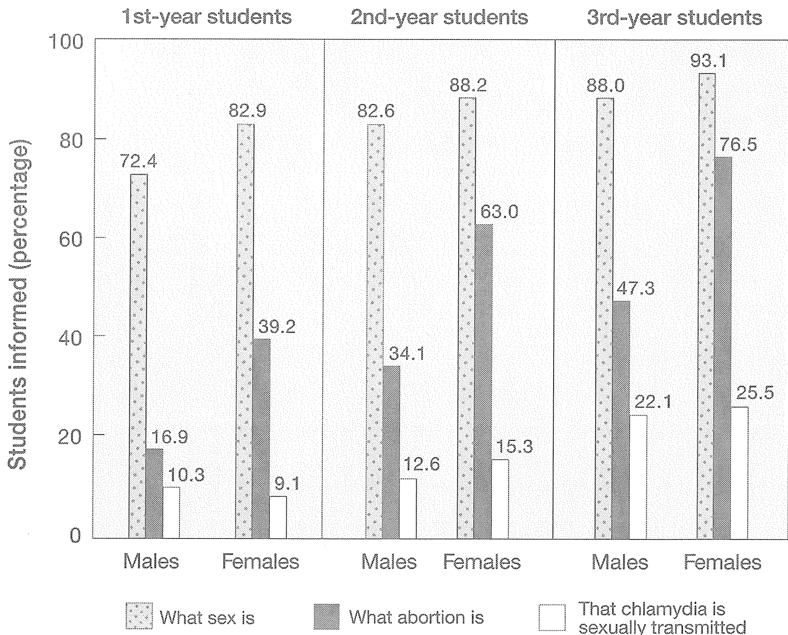


Fig.9 Knowledge on sex, abortions, and STDs among middle school students in City C, Prefecture A

Source: 2003 Survey of Sexual Behavior Among Middle School Students in Outlying Prefectures; Ministry of Health, Labour and Welfare Study Group on HIV Socio-epidemiology

trast, *manga* was ranked second for female students, followed by television dramas as number three. Obviously, none of the main information sources, except for the health and physical teacher is legitimate. Particularly the girls' reference to *manga* should alert us. The *manga* referred to are not the ones sold in the adult magazine corner, but the ones produced especially for young girls. By all means, I would like the reader to pick up a copy of a girls' *manga* at any arbitrary convenience store in Japan and take a look. The reader will be surprised how deceptively pornographic it is.

The regulations define so-called harmful books as material in which objectionable content exceeds 20 pages or one fifth of all pages. That means that anything less than 20 pages or less than one fifth of all pages can be freely distributed, even in places readily accessible for children. We urge *manga* publishers and illustrators to consider this fact.

Once, when teaching a class at a rural middle school, the principal approached me with the request to please choose my words carefully, since he believed that the students of his school were very innocent and sexually inexperienced. I therefore proceeded carefully, paying attention not to use the word "sex" even once. At the end of the class, I asked the students if they had any questions and several girls raised their hands. Expecting common questions such as on menstruation, I was caught unprepared being asked about adult toys, frigidity and Viagra instead.

After a moment of hesitation I asked the students in return if they knew what chlamydia was. Only 2 out of 38 did. Despite the flood of sexual information, it seemed that the children had no idea of which was truly of importance. Unfortunately, this is not a singular case.

Unbalanced and incorrect knowledge or belief is spread among the younger generations by word of mouth. I would like to give a few examples below. They are statements provided by the school nurse interviewed in Part 3 of this book.

> "People with allergies can't get HIV" (because of their potent immune system)
> "Good-looking guys can't get STDs or AIDS"
> "You can't get pregnant midway between periods"
> "If you wash yourself after sex, you won't contract anything or

get pregnant"
"You won't get pregnant if you jump up and down after sex"
"High school students don't get pregnant" (because they are not adults yet)

Many adolescents engage in sexual relations believing in such misconceptions. Even though it involves their most precious asset—their bodies—they remain in the dark about the essentials.

Adult videos and *manga*

Along with television, information from videos, *manga* and magazines are thought to considerably contribute to the trends in adolescent sexual behavior and to their bias in knowledge. Of course, adult videos and objectionable *manga* and magazines are not of recent advent. The number of copies sold though, exploded in the latter half of the 1980s. Since then they have become very easy to obtain by anybody and are sold at any corner of the country. As previously mentioned, girls' *manga* involve explicit sexual content, just as teen magazines picture nude women and tell "true stories" on teen's sexuality that may be perceived as casual or cool by teenagers.

The following is data on media that students have come across at least once. It is an excerpt from a survey on second-year high school students in outlying prefectures, conducted in 2003.

- Adult video ························· Males 75%; Females 34%
- Pornographic *manga* ··············· Males 82%; Females 74%
- Pornographic magazines ··········· Males 82%; Females 54%
- Adult Internet sites ················· Males 32%; Females 11%

Although we do not know how frequently encountered, we are aware that both males and females have considerable experience with the above media. Females are particularly disposed to *manga*, suggesting a connection with recent changes in female sexual behavior. Among the students who came in touch with these media for the first time during elementary school, as much as 18% of the male and 7% of the female students mentioned adult videos as their first encounter; 39% of the male and 27% of female students pornographic *manga*

and 33% of the male and 18% of the female students pornographic magazines. In other words, children are exposed to hard-core pornography from an early childhood.

These magazines, *manga*, and videos usually also picture oral sex and scenes of violent sex. Inexperienced adolescents may perceive these scenes as routine sexual behaviors. That nearly 80% of the sexually active 18-24 year old practice oral sex (1999 National Survey of Sexual Behavior) may be seen as a manifestation of this fact.

Wanting to be a high school student

Attitude towards sexual issues has changed dramatically. 95% of the middle school students in outlying prefectures have not been engaged in sexual activity yet, but what is their attitude towards it? Let us take a look at results from a survey conducted in City C in Western Japan. There are over 20 middle schools in this city and the survey considered 7,000 students from all of these schools.

We found that 20% of the first year, 30% of the second year and 40% of the third year students felt that it was acceptable to have sex as middle school students. Further, 35-50% of the first year, 50-60% of the second year and 60-70% of the third year students answered that it was acceptable to have sex as high school students. In both cases, the number of accepting female students exceeded that of the male (Figure 10). This indicates that middle school students have already come to accept sexual relations as a part of the high school experience. Moreover, regardless of their actual sexual activity, 70-80% of second year high school students agreed that having sex at their age was acceptable.

In the past, it was acceptable that university student had sex, but now high school students are the standard. This trend may continue. Considering how *manga* and weekly magazines influence elementary school students, it is worrying how much further the age threshold may fall.

I once interviewed a group of female middle school students in outlying prefectures with regard to the sexual behavior of high school students, in order to probe their opinion on why they thought sex was acceptable at high school age. One of the students answered, "A middle school student is a bit young for sex, but it would be acceptable

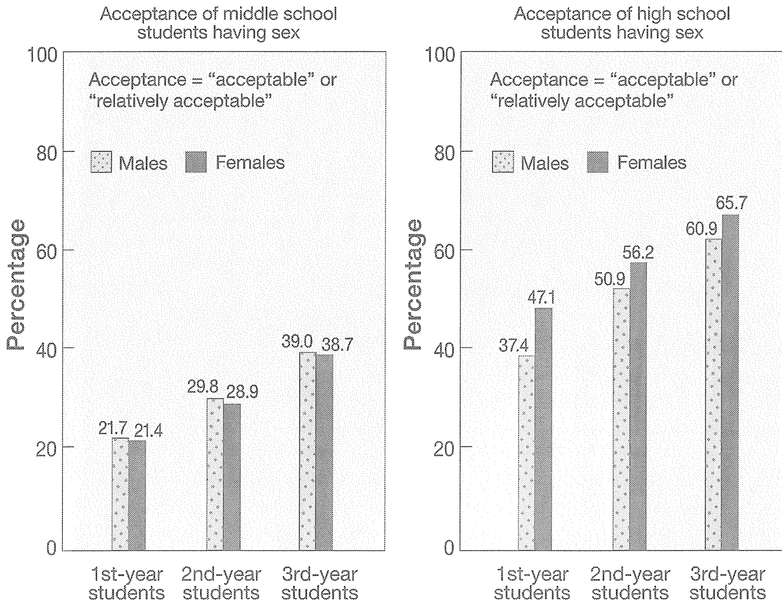


Fig.10 Sexual attitude among middle school students in City C, Prefecture A

Source:2003 Survey of Sexual Behavior Among Middle School Students in Outlying Prefectures; Ministry of Health, Labour and Welfare Study Group on HIV Socio-epidemiology

for a high school student". As a reason for why she thought so, she replied, "Because it would be bad for the partner". I asked what exactly she meant by "bad for the partner" and received the answer: "It wouldn't be good for the partner because middle school students' bodies are still immature, but it would be acceptable for high school students since they have better bodies". Another student replied to the same question, "You can't do it in middle school because you are still under compulsory education, but this is no longer the case in high school so it's okay". Yet another answer was "Because it's regulated by the law". "Law ?" I asked. "You can get married at 16, right ? So, the law permits high school students to have sex", she explained. Each of these answers caught me completely off-guard and puzzled me immense. During my high school years (early 1970s), sexual issues were almost impossible to imagine for middle and high school students. In contemporary Japan this norm has experienced an enor-

mous shift.

Survey results from national universities

Up to here, we have mainly presented data on middle and high school students. We would now like to go on to university students. From April to June 1999, just before the ban on the low dose contraceptive pill was lifted, we conducted a survey at 26 of 96 national universities nationwide. We targeted the first year and four year students, together totaling approximately 14,000 respondents. Although participation was limited to only 27% of all national universities, we were able to collect data on students from diverse regions from all over Japan, from Hokkaido to Kagoshima.

Results showed that the proportion of male as well as female students who had sexual experience was about 20%, reaching 60-70% by their fourth year of university. Female students were more active than male. Most university students are likely to have become sexually active by the time they leave university. Looking at the number of partners throughout their lifetime, 30-40% of the sexually active first-year students had multiple previous partners; 10% had 4 or more previous partners. Less than half of the fourth year students had dated only one person before, while as many as 30% of the male and 20% of the female students had been with 4 or more partners. These results show that the trend to short-lived relationships among adolescents had already been in development at the time this data was collected. This was in 1999.

Sexual networks

The salient feature of sexual behavior among Japanese adolescents is the development of unprotected sexual networks. The term "unprotected" refers to non-preventive, the term "networks" to the involvement with several partners, either at the same time or over time. Networks built on sexual relations are referred to as "sexual networks". These networks enforce the transmission of STDs between strangers. In the following we examine these sexual networks in more detail.

Figure 11 shows the results of a survey conducted in 2001 on couples in the streets of the Tokyo metropolitan area. 301 couples

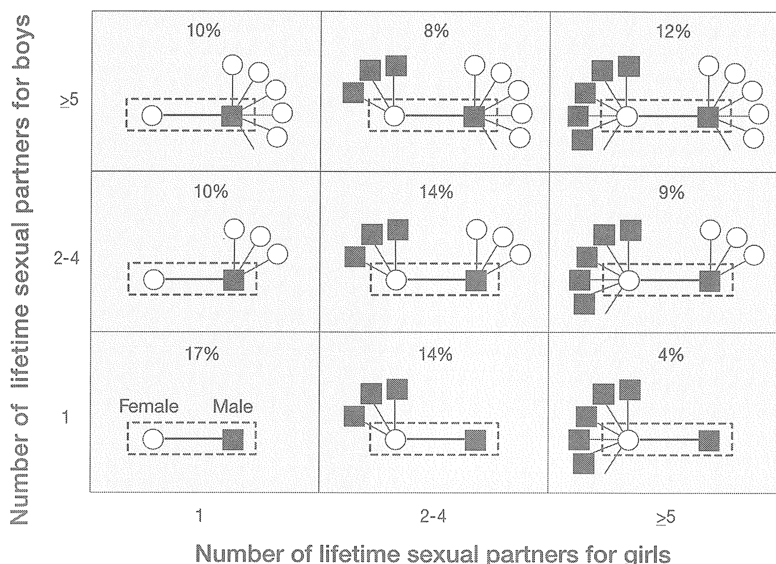


Fig.11 Sexual network patterns among teenage couples in the streets of metropolitan Tokyo

Source:Ministry of Health and Welfare Study Group on HIV Socio-epidemiology, 2000

volunteered to separately answer questionnaires. Surprisingly, in only 17% of the couples, both partners had been in a single previous relationship. Couples, where both partners had been in 5 or more previous relationship amounted to 12%. In 43% of the couples at least one of the partners had had 5 or more previous relationships. Again, some readers may imagine the couples we surveyed as flashy adolescent characters as sometimes appearing on television, but such couples tended not to participate in the survey. The couples that participated were rather mostly modest and reserved. If we recall the fact that the average number of lifetime sexual partners of second year high school students in outlying prefectures was three, the results of this couple survey become understandable. One might find these findings disturbing, but the importance lies in the fact that we have to be aware that adolescent sexual networks are nowadays omnipresent.

Unprotected sex

In the survey mentioned above, among second year high school students in outlying prefectures, only 30% of the sexually active students reported that they used condoms every time. It also became apparent that the contraceptive pill was not in use at all, meaning that unprotected sexual intercourse was rather the rule than the exception. This explains the recent increase in elective abortions and STD contraction among teenagers. Furthermore, we understand from our surveys that students who have already dated several partners tend to use less protection. Figure 12 presents data on second year high school students, showing that only 30-40% of those who dated their first partner always used condoms. This rate decreases the more the students experience other sexual partners. In the group of people who

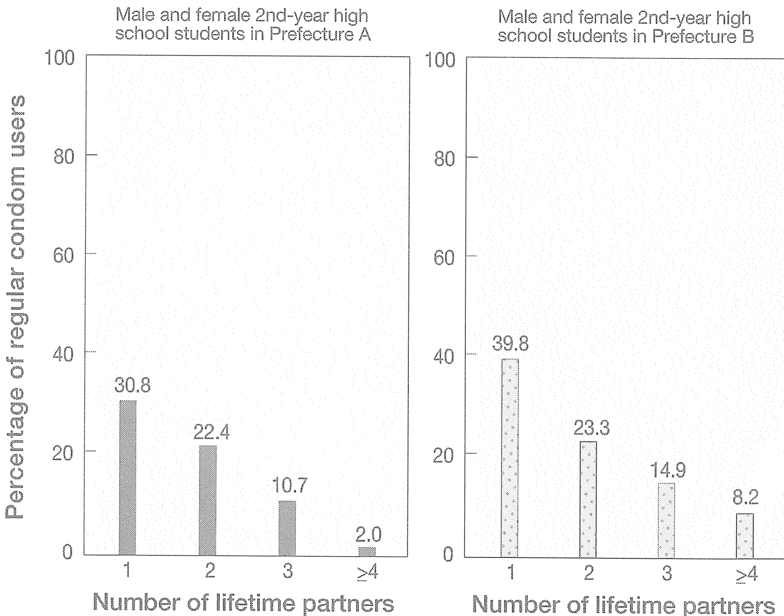


Fig.12 **Number of lifetime sexual partners and regular condom use**

Source:2001 Survey of High School Students in Outlying Prefectures; Ministry of Health and Welfare Study Group on HIV Socio-epidemiology

had dated 4 or more people, only a small percentage used condoms every time.

Interestingly, the same trend could be observed in both surveys on university students and couples in Tokyo mentioned above, suggesting that this was a common phenomenon among Japanese adolescents. This trend is in direct contrast to the situation in Western societies, where the use of condom increases with the increase of sexual partners or is at least as frequent. This trend of "More partners, less protection" is especially worrying when considering how HIV and STDs spread. The scientific term a person with numerous sexual partners is referred to as, is "core". A "core" is the cornerstone of a network, in the sense that they determine how fast and wide epidemics spread.

Why is there less protection when the number of partners increases ? Analysis of our interviews suggests that the longer people have been in relationships without an incidence of pregnancy the less they feel the need for contraception, their main reason for condom use. This fact was first revealed in a survey of national university students in 1999. As much as 98% of the respondents answered to a multiple choice question that the purpose of using condoms was contraception. Only 20% considered its purpose also for prevention of HIV and STDs. The same results were thereafter repeatedly confirmed in the high school student surveys.

We point out that oral sex is also a component of unprotected sex. According to the National Survey of Sexual Behavior, condoms are hardly in use during oral sex (3-9% in all age groups). However, STDs can be transmitted to the oral cavity and throat, and then again onto the genitals. As will be explained later, this is yet a very well known mechanism for STD transmission.

Most sexually active adolescents are not aware that they are at risk. This is illustrated in the following statements that fill the interviews: "I don't need any information at all"; "STDs do not concern me"; "I doubt I have anything and I doubt I ever will"; "I don't hear anything about that from people around me"; "I haven't had any problems so far, so it's fine as long as I'm having fun".

If unprotected sexual practices continue as they are, without a sense for infection risk, there is no doubt that the epidemic of HIV is already scheduled.

Sex lives and lifestyles

To complete our analysis, we present data on the lifestyles of high school students in outlying prefectures, which we found to be strongly associated with their sex lives (2001 survey on Prefectures A and B).

Let us first take a look at where these students usually spend their spare time. The most common response by far as a spare time location, was the *karaoke* (47%). 20-35% preferred convenience stores, game centers, fast food restaurants, or the house of a friend. According to the interviews, for the students, *karaoke* rooms are not only for singing but also a place for private conversation. Respondents mentioned that there, they can talk to each other without fearing to be overheard. Some of them also reported that it is a place where they sometimes have sex.

Next, we lay out the strong correlation between the possession of mobile phones and sexual behavior. Mobile phone service started in 1987 and spread rapidly after 1995. According to a nationwide survey which we conducted in 2004 jointly with the Federation of All Japan Senior High School Parent-Teachers' Associations, 90% of more than 13,000 high school students surveyed were regular users of mobile phones. The same survey also revealed that 22% of the male and 29% of the female students with mobile phones had sexual experience, whereas this was the case only for 5% of the male and 10% of the female students without mobile phones. This means, that the prevalence of sexual experience among those with mobile phones is four times higher for male and three times higher for female students (Figure 13).

Although we cannot go as far as to determine a causal relationship, we found that mobile phone use is potently also associated with the attitude to adolescence sex. 71% of the male and 61% of the female students with a mobile phone responded that high school student sex is acceptable, whereas for students without a mobile phone these proportions were 44% and 30%, respectively. Also the 2003 survey of middle school students in City C demonstrated a clear relationship between the possession of mobile phones and attitudinal acceptance of adolescent sex. An intuitive interpretation may be that communication by way of mobile phones cultivates attitudes that take

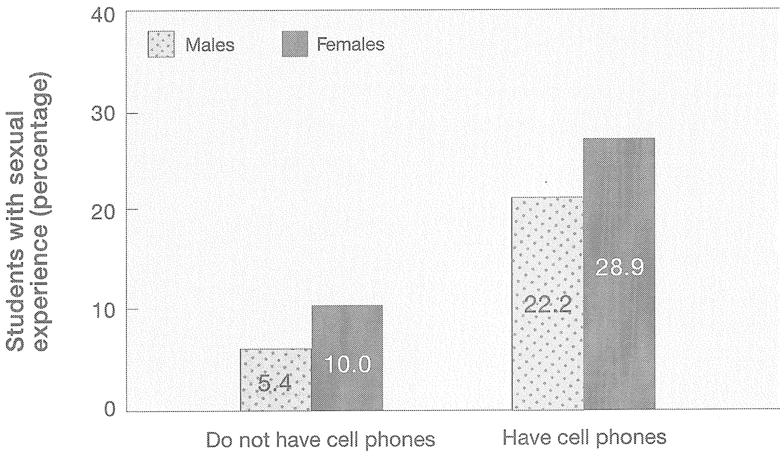


Fig.13 Relationship between possession of cell phones and sexual experience

Source:2003 National Survey by the Federation of All-Japan Senior High School Parent-Teachers' Associations

sexual activity for granted.

The access of online dating sites through mobile phones was more frequent than expected. Results showed that more than 10% of the second year high school students in outlying prefectures had experience with such sites, with the portion of female student being slightly higher than that of male (according to the 2003 survey of Prefecture A 14% for female and 11% for male students). Moreover, in a national survey on mobile phone usage conducted together with the Federation of All-Japan Senior High School Parent-Teachers' Associations in 2003, around 40% of the students who had access to such sites claimed to have actually met online partners in person. A school nurse in a rural district claimed that online dating sites were an important opportunity for adolescents in outlying areas to find partners. She also mentioned that some of them work to earn and save money in order to travel to the city during summer vacation and meet with friends they have met online. Some adolescents are misled by the impression to be well acquainted with their online friends through exchange of e-mails, making them feel comfortable to have sexual contact the first time they meet. Mobile phone companionship tends to

create a "secretive state of mind", diminishing emotional distance between people. The school nurse in Part 3 elucidates some examples.

It goes without saying that online dating sites hide dangers. In the above-mentioned survey with the Federation of All Japan Senior High School Parent-Teachers' Associations 10-20% of students who had met with online acquaintances reported that they had found themselves in dangerous situations. There is an urgent need to adequately educate adolescents about the risks and dangers of such dating sites.

Yet another aspect in lifestyle we investigated is drinking. According to the 2003 survey among second year high school students in outlying Prefecture A over 70% of both male and female students had experience of drinking and 1-2% were regular drinkers. Today, drinking appears to have deeply penetrated teenage lifestyle. When asked what he does after exams to relax, a high school student answered matter-of-factly: "I go to the pub". A veteran nurse at a school told of female students sleeping off their hangovers in the nurse's office during the day.

People, who drink, often find themselves having unprotected sexual intercourse. Our interviews revealed many of such instances happening to adolescents. In fact, 30-40% of the first to third year male and female high school students who drink (either occasionally or often) are also sexually active, whereas this is the case only for 5-10% for students who do not drink (2004 survey by the Federation of All-Japan Senior High School Parent Teachers' Associations).

Knowledge on HIV and STDs

The following shows an excerpt of the questions of our surveys on adolescent sexual behavior. The answer to each of these questions is either "true" or "false". Before reading the answers, we would like to ask the reader to try and answer the questions by themselves (ignoring the numbers in parentheses).

- HIV cannot be transmitted in pools or baths.
  (Males 66%; Females 71%)
- HIV cannot be transmitted by sharing eating utensils.
  (Males 66%; Females 79%)

- Chlamydia can be transmitted during sex. (Males 46%; Females 57%)
- STDs can be transmitted from the genitals to the mouth. (Males 39%; Females 41%)
- STDs can be transmitted from the mouth to the genitals. (Males 28%; Females 25%)
- An STD does not necessarily show clinical symptoms. (Males 32%; Females 43%)
- STD contraction makes you more susceptible to HIV. (Males 25%; Females 27%)
- The contraceptive pill does not prevent HIV or STDs. (Males 45%; Females 53%)
- Free and anonymous HIV testing is available at public health centers. (Males 35%; Females 34%)
- Actual contraction with HIV cannot be detected several days after transmission. (Males 19%; Females 32%)
- Advanced medicine can slow the progress of AIDS (Males 28%; Females 36%)

The correct answer is "true" for all of these questions. The numbers in parentheses show the percentage of about 5,000 male and female second year high school students in outlying Prefecture A (Survey 2003), who answered correctly.

Despite the comparatively high percentage of correct answers for the very basic knowledge such as the fact that HIV cannot be transmitted through eating utensils, baths, or toilets, we found that adolescents had very limited knowledge on HIV testing, the types and symptoms of STDs, their routes of transmission or their relation to HIV. In other words, HIV and STD awareness has not developed very much, even though now it is not only a concern of someone else anymore, but a concern of ours, too.

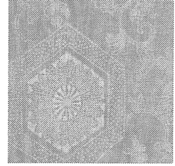
In fact, these results reflect the biases inherent to sexual health education in Japan. HIV/AIDS campaigns and educational strategies have been left unchanged, still relying on classic knowledge that fails to address the needs of contemporary adolescents. As will be discussed in Chapter 2, we are now in an age where we have to deal with HIV and STDs as "our own problems". That means that we have to revise our knowledge priority. Failing to do so will prevent adoles-

cents from protecting themselves.

Finally, as seen in the data above male students are generally less informed than their female counterparts, although they are in a more leading position in sexual relationships. We would like to emphasize that male teenagers are in particular need of a well-founded sexual health education.

Chapter 2

Sexual health deterioration



Along with the changes in sexual behavior, also came changes in adolescents' sexual health. The number of elective abortions, STDs, and HIV infections began to rise in the mid 1990s. Although Asia is on the verge of HIV epidemic to prevail throughout the whole region, Japanese adolescents, appear to be unaware of it, jumping into the fire instead.

Increase in elective abortions

Figure 14 shows the increase in elective abortions among Japanese teenagers. The thin lines correspond to abortions in individual prefectures throughout Japan (47 in total). The bold line shows the national average. What used to be a horizontal line until 1995 suddenly started to bend upwards. The extent of this trend in teenage abortions becomes apparent when looking at older age groups, where, during the same period, the number of elective abortions has either increased only very little or even decreased. This change in teenage abortions occurred in all parts of Japan concurrently without discrimination between metropolitan and outlying areas. Outlying prefectures even come top of the list (Names of the prefectures are not given in Figure 14).

However, not only the teenage abortions are increasing. Also for people in their early 20s the abortion rate rose, although at a slower rate and with a few years delay (Figure 15). We assume that this may

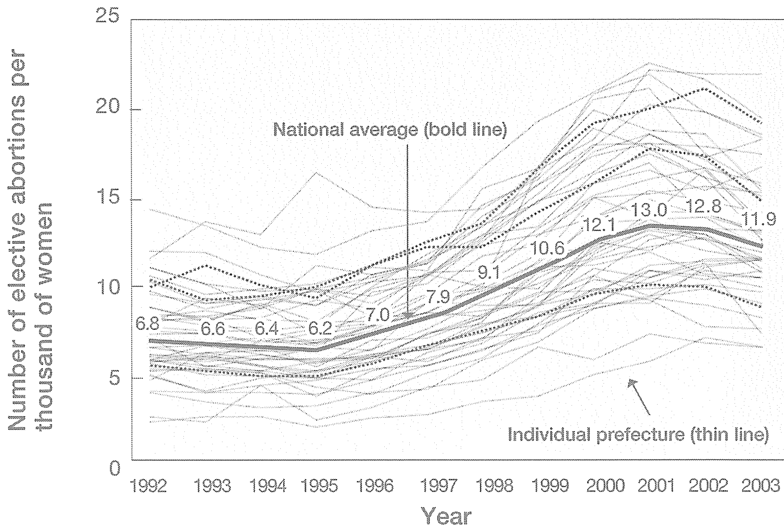


Fig.14 **Elective abortion rate among teenage women, all prefectures, 1992-2003**

Source:Reproduced from *"Boshi kenkō no omonaru tōkei"* (Essential Statistics on Maternal and Child Health); the fine lines in the figure represent individual prefectures

reflect the aftereffect of the increased sexual activity when this age group was in their teenage years.

In 2003, the national average number of abortions per 1,000 teenage women (including those sexually inactive) was 11.9. Adding the number of teenage births, this results in 18 pregnancies per 1,000 teenage women, which is roughly 2%. In other words, 1 out of 50 girls got pregnant in 2003, either giving birth or having an elective abortion. The chance of pregnancy multiplies when evaluating the numbers with respect to only those who are sexually active. As sexual interaction is becoming increasingly casual, we need to be aware that pregnancy is a problem adolescents may have to confront at any time.

Interestingly, data on recent abortions show a slight decreasing trend from 2001 to 2003. The extent varies, but a decrease has been observed in nearly 70% of 47 prefectures. However, domestic sales of condoms continued to fall during this period. Only 6 of all prefectures experienced a decrease in abortions with simultaneous decrease

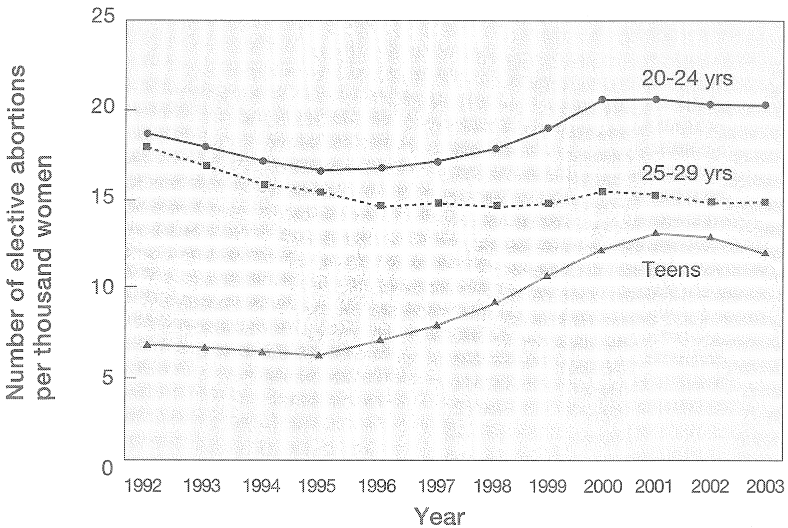


Fig.15 **Nationwide elective abortion rate among women in their teenage years and 20s, 1992-2003**

Source:Reproduced from *Boshi kenkōno omonaru tōkei* (Essential Statistics on Maternal and Child Health)

in STD incidences. Abortion pills seem to be increasingly available through Internet, which suggests that the decrease in the rate of "reported" abortions does not necessarily reflect the real situation. Medical doctors also point out the possibility of fewer doctors reporting abortions since fetus disposal has increasingly become a social problem. More studies are needed to investigate the possible cause of the decrease in reported abortions.

Increase in STD incidences

The most typical STDs among both male and female adolescents are chlamydia and gonorrhea. Women are predominantly disposed to chlamydia, while the number of cases for either STD is approximately the same for men. Incidences of both diseases began to surge in the 1990s.

Figure 16 depicts the frequency of chlamydia and gonorrhea cases by gender. We can see that chlamydia as well as gonorrhea

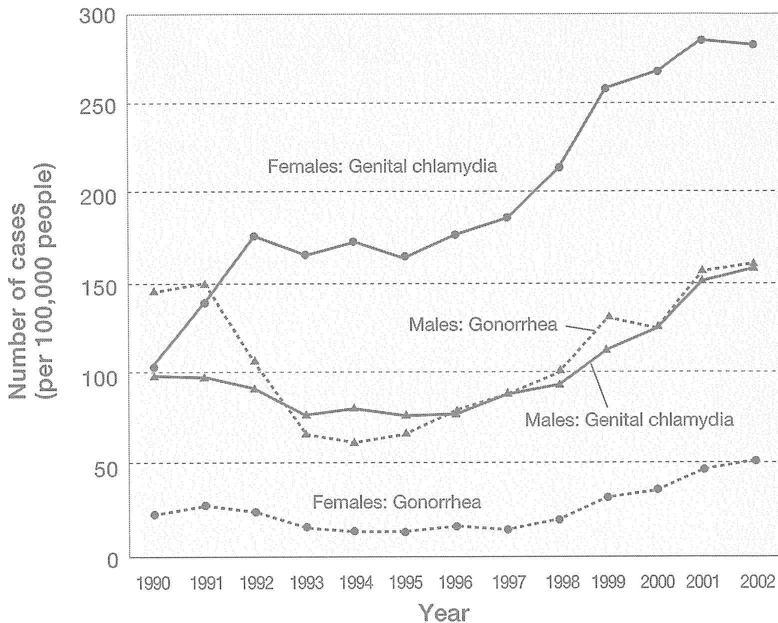


Fig.16 Incidences of chlamydia and gonorrhea cases, 1990-2002

Source:Ministry of Health, Labour and Welfare Study Group on STD Surveillance; Yoshiaki Kumamoto, et al

infections increase around 1995. Similarly to the case with elective abortions, this phenomenon is not limited to urban areas. According to a survey on chlamydia infections, conducted in 2000 on obstetric-gynecologic patients in an outlying prefecture, 30% of the pregnant teenagers and nearly 40% of non-pregnant teenage patients were infected with chlamydia. Moreover, a recent report from a urinalysis of university and high school students in an outlying area revealed that nearly 10% of these students were infected with chlamydia. According to Dr. Yoshiaki Kumamoto (Professor Emeritus, Sapporo Medical University), the number of people—mostly young people—currently infected with chlamydia, is estimated to be over 900,000 nationwide including the asymptomatic cases.

Approximately 80% of the women infected with chlamydia and 50% of those infected with gonorrhea develop no symptoms. It is therefore difficult for them to even notice infection. Among men, approximately 50% of those infected with chlamydia are asymptomatic.

In the past, syphilis and gonorrhea were the most prevalent STDs, both of which are symptomatic. The most prevalent STDs now are only weakly symptomatic or even asymptomatic and hence spread under the surface.

So, if there are no symptoms, why do we worry? As I will discuss below, the diseases mentioned above can turn malicious when left untreated and cause lifelong problems.

Another common misapprehension is the assumption that STDs can only be transmitted through genital contact. The transmission of STD-causing pathogens to the throat or oral cavity has increasingly become common due to the pervasiveness of oral sex. The pathogens of nearly every STD can infect the throat or oral cavity. Moreover, in most cases they show nearly no symptoms other than a mild sore throat. Since only very few people use condoms during oral sex, pathogen transmission from the mouth to the genital has become another major pathway for the spread of STDs. Interviews with clinicians confirmed that patients predominantly contracted STDs orally, rather than through the genitals.

STD infections among both men and women have slightly declined in the last several years, but extreme caution is still necessary.

STDs—Consequences can be serious

In women, chlamydia and gonorrhea bacteria travel up the cervix, giving rise to inflammations. Inflammation of the endometrium, the inner membrane of the uterus, can induce miscarriage or premature birth. Inflammation can also affect the fallopian tubes (or oviducts). The interior of the fallopian tubes is covered with ciliated cells, which are in turn covered with tiny hair-like protrusions (cilia). Cilia movement sends the ova or egg from the ovaries to the uterus, but inflammation by bacterial infection kill these ciliated cells. Eggs cannot be transported anymore and remain in the fallopian tubes instead. Fertilization of such eggs results in a so-called ectopic pregnancies, in which the fallopian tubes can rupture and hence create life-threatening complications.

Further, repeated inflammation causes the walls of the fallopian tubes to become thicker and harder and may eventually obstruct the fallopian tubes. This impedes traveling of the eggs resulting in per-

manent infertility. If the bacteria then move further and reach the abdominal cavity, they induce painful inflammation of the tissue surrounding the liver. Immediate medical attention is then required.

With respect to infection in men, chlamydia and gonorrhea are known to cause epididymitis (inflammation of a curved structure in the back of the testicle in which sperm mature). This condition interferes with the formation and passage of sperm, and can eventually lead to sterility and prostate inflammation (prostatitis).

The impact of STDs does not stop here. STDs can play a major role in HIV infection. Both males and females become more susceptible to HIV once they have contracted an STD. According to the Centers for Disease Control and Prevention (CDC) of the United States, a person infected with chlamydia or gonorrhea is 2 to 5 times more susceptible to HIV. Through ulcers (lesion of the mucous membrane) caused by syphilis or genital herpes, males become 10 to 50 times more susceptible to HIV, females 50 to 300 times.

In detail, HIV attacks cells of the immune system called CD4 lymphocytes. Hence, chances of contracting HIV increase, where immune cells (including CD4 lymphocytes) gather. This is the case in mucous areas, where an immune response to an infection by STD pathogens is induced. Damage to the mucous membranes such as ulcers further increases infection risk.

Women are generally several times more susceptible to contracting STDs through sexual activity than men. This is due to their genital mucosal surface, which consists of the entire surface of the vagina and thus much bigger than that of men. In young women, the soft mucous membrane (columnar epithelium) protrudes into the cervix, making them more susceptible to STDs and HIV than older women.

STDs also have significant implications for cervical cancer. The best-known STD in this respect is the human papilloma virus (HPV), a virus, which causes genital warts and exists in many different varieties. Some of these are carcinogenic and believed to induce cervical cancer. The Journal of the American Medical Association recently published a study that showed that contracting chlamydia also triples the risk for cervical cancer. In Japan, cervical cancer among young women (late teens to early 20s) has recently begun to climb. A task force of the Ministry of Health, Labour and Welfare issued a report in March 2004, which lowered the recommended age for regular

cervical cancer screening from 30 to 20 years.

It is crucial that women are familiar with the above aspects of their bodies and the related risks. Of course, body awareness is important for men, too, but additionally there is a need to educate them on the delicateness and vulnerability of the female biology.

Increasing prevalence of HIV

According to the national HIV/AIDS case surveillance in Japan, the number of HIV and AIDS cases continues to rise (Figure 17). (Note: HIV cases denote the people infected with HIV but are in a latency period of commonly 5-10 years and AIDS cases denote those who have passed the latency period and developed clinical symptoms.) This fact concerns all age groups, but since 2000 concerns particularly younger age groups. Plotting the number of HIV cases of

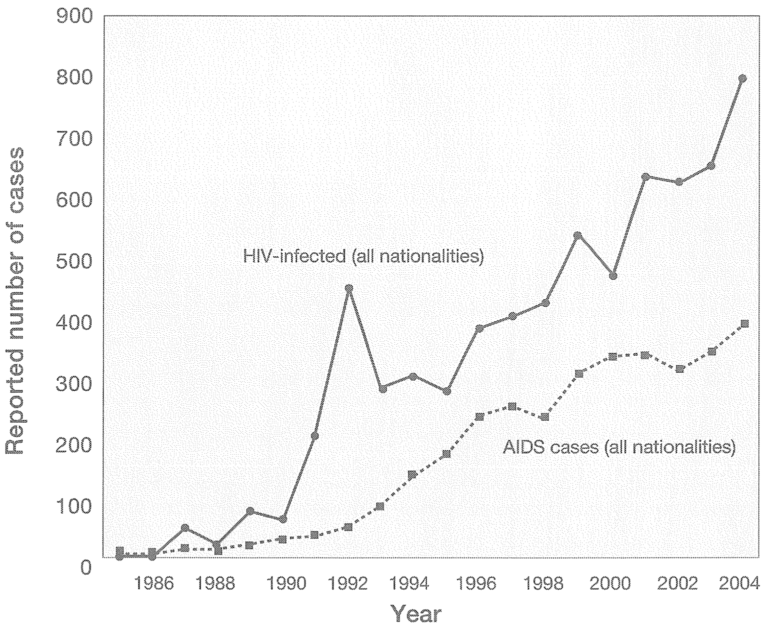


Fig.17 **Reported number of HIV-infected individuals and AIDS cases in Japan, 1986-2004**

Source:Ministry of Health, Labour and Welfare 2004 Annual Report on AIDS Surveillance

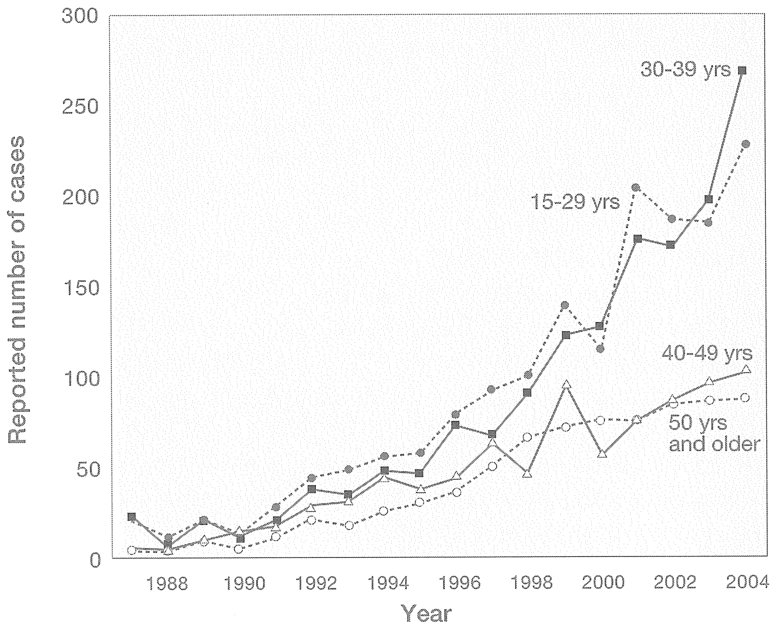


Fig.18 Reported number of HIV-infected Japanese by age, 1988-2004

Source:Ministry of Health, Labour and Welfare 2004 Annual Report on AIDS Surveillance

Japanese for each year, we see a slight increase in the age group 40 and older, but the slope is steeper for age groups under 30 (Figure 18). HIV prevalence in donated blood also continues to rise, suggesting that the increase in reported HIV cases is due to a growing epidemic, rather than simply due to a higher number of people getting tested.

This development is not entirely unexpected. As mentioned above, a substantial increase in elective abortions and STDs incidences has been observed among young people since the mid-1990's. Recalling the connection between unprotected sex, STDs and HIV, it is not surprising to find HIV infections to increase with some delay.

In the last several years an increase in the reported HIV cases was observed not only in Tokyo, but also in many other districts of Japan including Kinki, Tokai, Kyushu, Shikoku and Chugoku. Fortunately, only a few women and teenagers are infected yet, but the phenome-

non is gaining momentum.

Not only the number of HIV cases, but also the number of AIDS cases is increasing. This may sound obvious, but is in fact only the case in Japan. In all other developed countries the number of AIDS cases has sharply declined since the introduction of the so-called combination therapy, Highly Active Antiretroviral Therapy (HAART), in 1996, which drastically slows AIDS development when started at an early stage of HIV infection. (Note: Curative medicine for HIV has yet to be developed, i.e. HAART is a life long therapy.)

The HAART is available in Japan, too, but delayed detection of HIV infection prevents lowering AIDS cases. Implication of delayed diagnosis can be serious. Even with the HAART, the fatality rate of people detected only at the stages of AIDS is as high as 15%. In addition, a prolonged time period before diagnosis of infected people, increases potential transmission of HIV to their partners without their knowledge and thus fuels the epidemic.

Recently, we increasingly observe cases, in which the AIDS patients are only in their early 20s. Considering that these are not cases of mother-to-child infection and that the latency period of the disease is 5 to 10 years, it is almost likely that these patients have contracted the virus in their teenage years. Presumably, they did not notice the infection until they developed symptoms. That it spreads silently is one of the most frightening aspects of HIV.

According to a mathematical prediction, the number of people infected with HIV in Japan, including those who have not been tested but excluding AIDS cases, will exceed 20,000 in 2005 and reach around 50,000 by 2010. Taking the possible influence of HIV epidemics in other countries, especially in Asia, into account, the future course of the epidemic in Japan could be worse than expected.

Unsold condoms

Japan was once known worldwide for its fair share in condom usage, but this is not the case anymore.

Figure 19 shows the number of domestic condom shipments from 1993 to 2003 (Statistics on Trends in Pharmaceutical Production). After peaking at 680 million units in 1993, shipments declined continuously, having plummeted to 430 million units by 2003. The dif-

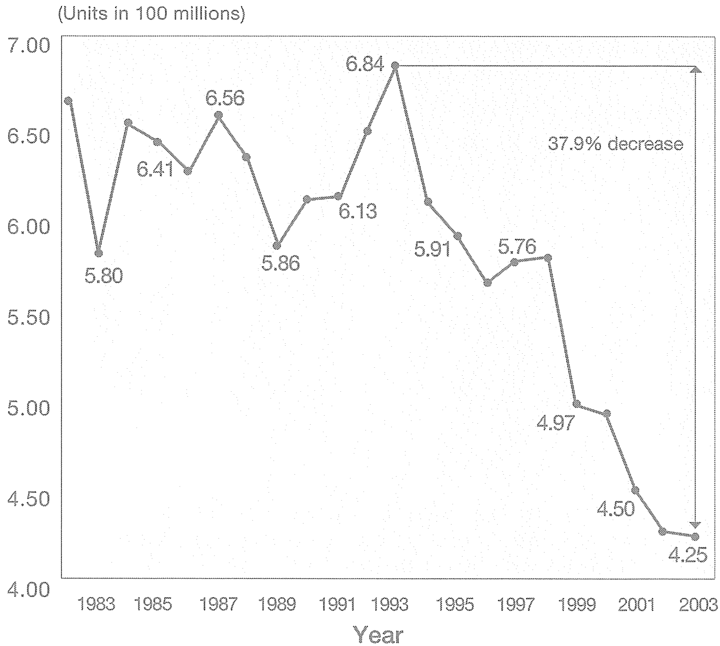


Fig.19 Domestic shipment of condoms, 1983-2003

Source:Statistical Survey on Trends in Pharmaceutical Production

ference of 250 million units equals a 38% decrease. During the same period of time, the national population of the 15 to 49 year old decreased only slightly (by 2-3%), while the sexually active population expanded, due to the increasingly earlier age people become sexually active. The fall in condom shipments therefore clearly reflects less usage of condoms, in other words, more unprotected sex. Condom manufacturers have devised, developed and launched one product after another with all sorts of innovations in thickness, color, shape, packaging and more, but nothing seems to stop the decline in sales.

In the following we will present data that boldly verifies this decrease in condom use among adolescents. So far, this is the only data in Japan observing the change in condom use over time. Figure 20 shows data from a high school in the Kinki district. This school conducted three surveys on sexual behavior, carried out in 1995, 1998, and 2000. Results show that condom use at the first sexual

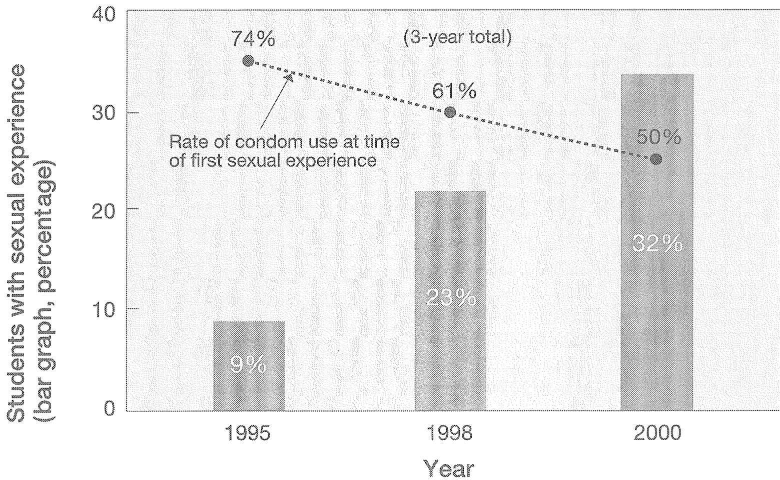


Fig.20 Prevalence of sexually active students and condom use at time of first sexual intercourse among female students at a high school in the Kinki region

experience decreased dramatically from 74% to 50% even though the rate of sexual activity skyrocketed from 9 to 32%.

We can only guess what the real reason for this trend is, but if people's attitude towards condoms has not changed, the condom sales should be increasing with the ever younger and therefore growing sexually active population. We therefore believe that something has changed people's attitude.

Our assumption is, that the aforementioned trend concerning growing popularity of media such as adult videos and girls' *manga* etc., has had a pervasive influence. This media rarely, if ever, depicts safe sex practices, but with their availability even for elementary school children, the behavior exhibited in these media is likely to become imprinted in adolescents' minds as a model for how sexual practices should be.

Some experts also point out the biased campaign for birth control pills, which deliberately compares the failure rate of condoms when used typically to the failure rate of birth control pills when used perfectly. (Note: According to a recent paper published in the U.S., the failure rate of condoms amounts to 15% when used typically and 2%

when used perfectly. The failure rate for the contraceptive pills when used typically amounts to 8% and to 0.3% when used perfectly.)

Accidental coincidence ?

Figure 21 depicts teenage elective abortions, STDs, HIV, and condom shipments in a single graph. It can be seen at once, that at the same time domestic condom shipments started to decline, teenage elective abortions, incidences of STDs as well as the reported number of people infected with HIV started to increase. Although a definite causal relationship between these changes is difficult to establish, it is hard to believe that these trends have occurred in such way by chance alone.

Sexual networks and epidemics

The term sexual network has already been used a number of times in this book. Here, we would like to stress it once more to emphasize

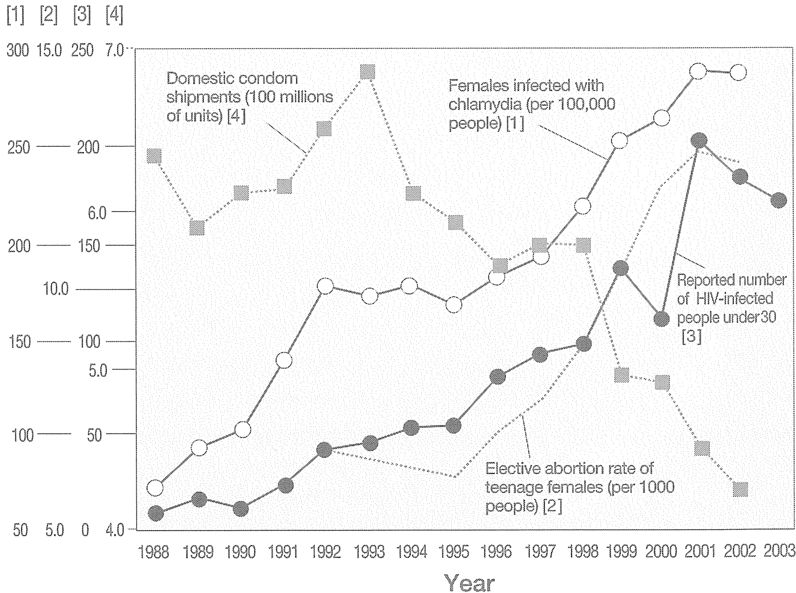


Fig.21 HIV, chlamydia, abortions, and condom shipments,1988-2003

the impact of its structure.

It might be surprising, but to say, that HIV and STDs spread through sexual intercourse is not entirely true. A more accurate statement is that HIV and STDs spread when sexual relations are intertwined to form a network. In other words, if most sexual relationships are exclusive, these diseases do not spread. Figure 22 outlines the sexual network behind the HIV epidemic detected in a small town in Mississippi, United States, which appeared in the Mortality and Morbidity Weekly Report of the Centers for Disease Control and Prevention (CDC) of the United States. Seven individuals were diagnosed with HIV in this town. All of them were part of a network of sexual relations as shown in the diagram. It was unclear which infected individual was the primary source, but it was found that more than 40 people of both sexes were connected through sexual relations and that HIV spread through this network.

In general, sexual networks are not evenly structured. Like the network represented in the diagram, they are extremely irregular. Many lines converge to a few of the persons in the network. Other people are connected only to a single other individual. This network, however, extends over the limits of current relationships. It also connects to all sexual partners in the past, naturally including former boyfriends and girlfriends.

As explained before the group of people on which most of the lines are concentrated is called the "core". These few people play a significant role in the formation of sexual networks and therefore have critical impact on the overall safety of the network. In other words, if the core engages in unprotected sexual practices, diseases spread. On the contrary, if the core practices safe sex, transmission of diseases is halted. The core is thus the crucial target for prevention efforts.

Protection even with a steady partner

In Figure 22, many people are connected to the core through a single line. They might think that they were not at risk for HIV infection since they were monogamous. However, it can be seen from the same figure, that in a society with developed sexual networks, the campaign "Sex with multiple unspecified partners is risky" on its own, is

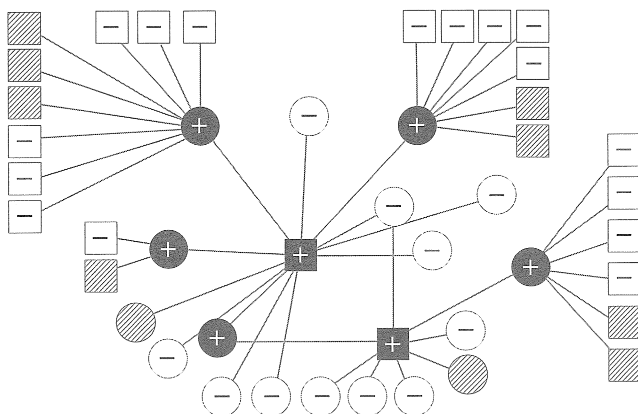


Fig.22 **Sexual network and HIV infection in a town in Mississippi, United States (squares=males; circles=females; black=HIV-positive; white=HIV-negative; gray=untested)**

Modified from: MMWR, Sep. 29, 2000/49 (38): 861-864

not sufficient anymore.

The survey on national university students presented next proves quite convincingly, what we have learned about sexual networks. Figure 23 shows the sexual behavior of both male and female national university students who were diagnosed with STDs in the past year. Only a few of the male students had been involved with only one partner. In contrast, approximately 60% of the STD infected female students responded that they had been in a relationship with only one specific partner. Having to worry about safety even with a single partner is a major issue in a "networked society".

We recall that average number of lifetime partners of sexually active second-year high school students in outlying prefectures was about 3. Regular use of condoms was practiced by only 30-40% of them (see Figure 12 on page 21), and people who were involved with multiple partners use condoms less frequently than monogamous persons. In fact, the average number of partners of the persons involved in the Mississippi (Figure 22) was no more than 2. That implies that the dimension of the unprotected sexual network of today's youth ex-

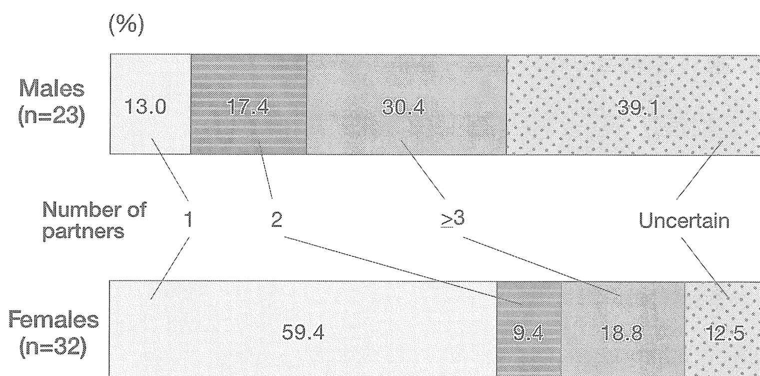


Fig.23 Number of sexual partners within the last year of STD-infected university students

Source: 1999 Nationwide Survey of Sexual Behavior Among National University Students; Ministry of Health and Welfare Study Group on HIV Epidemiology

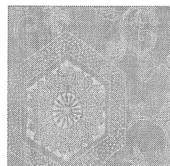
ceeds that in Figure 22.

The message "Sex with multiple unspecified partners is risky" alone is outdated in the "networked society" of today. We have to append that "Preventive sexual practice is crucial even for monogamous persons". Japan's Ministry of Education, Culture, Sports, Science and Technology incorporated our data in their "Guidance Manual for the Prevention of Sexually Transmitted Diseases 2002" and emphasizes this point.

Part 2

Why these changes ?

Why these changes?



In Part 1, we gave an overview on today's adolescent sexuality and the associated sexual health issues. We also mentioned that even though we are on the verge of an HIV epidemic throughout Asia, the sexual behavior of adolescents continues amplifying the risk of spreading the disease. How did we end up in this situation?

"Social vulnerability" is sometimes cited as the responsible factor for accelerated HIV and STD spread. In low-income countries, poverty and socio-cultural issues often deprive people of opportunities for education and as a consequence also the choice of practicing safe sex. Men working long time away from home tend to be cut off from society and alienated from information and services. Women without education are often forced into prostitution for survival. Conflicts and wars affect society's stability and exacerbate situations as mentioned above. The term "social vulnerability" refers to the web of social and cultural factors that underlie problematic issues in society.

In Japan, however, the social situation appears to be stable. Yet, HIV and STDs are spreading. So what is Japan's "social vulnerability"? In this part of the book, we would like to share our own understanding of the vulnerability of Japanese society by laying out the multifaceted issues contemporary adolescents have to face.

We have already mentioned that since 1999 we have analyzed a huge number of interviews and questionnaires regarding adolescent sexual behaviors. While doing so, we have had the opportunity to interact with many people of various professions, school nurses, teach-

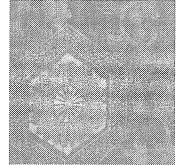
ers in charge of sexual health education, experts in sex education, as well as principals, parents, members of boards of education or Parent and Teachers' Association (PTA), municipal leaders, local and national news media, directors from the Ministry of Education, Culture, Sports, Science and Technology and the Ministry of Health, Labor and Welfare, public health practitioners, politicians, physicians, religious leaders, and so forth. These encounters were all of great importance for us and enabled us to get clearer insight into the social and organizational structures, attitudes, and the relationship between adolescents, all of which we were originally unfamiliar with. As a consequence, we gained deeper understanding of the social context in which contemporary adolescents are embedded.

Through our observations and experience, we came to the conclusion that adolescents suffer under intense pressures from sexual information while being provided only poor social support with regard to both social services (the provision of information and care) and human connectedness (see Chapter 6). The metaphor of boats floating without an anchor may apply to contemporary adolescents. Exposed to strong winds and rains, a drifting boat can capsize at any moment.

Chapter 3

The pressure of sexual information

— An increasingly pornographic society



Over 10 years ago, I lived in the United States for a period of two and a half years. At that time, I was surprised at the wholesomeness of television programs. I cannot remember seeing a single pornographic magazine in any store in town. Of course pornographic magazines existed, but they were always set apart from regular magazines and only accessible for certain age groups. Judging from a recent case in the U.S. where a television company was fined over a million dollars for sexual content, these standards are still valid.

Similar to the idea of designated smoking zones, such specific restrictions in the U.S. prevent those for whom sexual information is not suitable from being exposed. Japan, however, is literally incontinent. Upon entering a convenience store, visitors from abroad are shocked at the rows of magazines with naked women on the covers. Those who tentatively flip through one of these magazines are often irritated by what they find inside. It is incomprehensible how these images can be left unregulated to such an extent.

The situation is similar for the pink leaflets that can now be found everywhere in the streets of Japan. In Kyoto, my current hometown, telephone poles and booths as well as walls in train stations and entertainment areas of the city center are covered with advertisement leaflets full of obscene photos. As a resident of this internationally renowned tourist city, I feel as ashamed for this seamy side of the city being exposed to the world. Most probably the same scenario applies to other parts of Japan.

The leaflets we are talking about here, mainly advertise sex businesses so-called *Delivery Health* (officially, Non-brothel-based Sex Business Type 1, that features callout service for prostitutes). This novel type of sex business created in the late 1990s has lately shown a dramatic increase in number. After being approved in accordance with the 1999 amendment of the Law on the Control of Amusement and Entertainment Businesses, these *Delivery Health* businesses proliferated rapidly. According to the Police White Paper, the number of these businesses reached 2,700 the year the law was amended and soared to 17,000 in 2003, surpassing all other businesses in that branch. Considering that the total number of traditional *Soapland* businesses (most traditional type of brothels, where the client is officially offered a bath) and *Fashion Health* businesses (businesses that offer oral sexual practices) has long remained unchanged (less than 2,500), one can see how rapidly the new industry of *Delivery Health* business has grown (Figure 24). Estimating from the current situation, hundreds of thousands of young women are believed to be involved in this type of sex business.

Unfortunately, advertisement is not limited to the streets. The pink leaflets can now even be found in our private mailbox. Within a single year (2002 to 2003), over 200 of these pink leaflets have landed in my apartment mailbox. Flyers replete with available services and suggestive photos on the front and adds for recruitment on the back. They are thrown into every mailbox and scattered all over the floor in the entrances of apartment blocks. These leaflets do not only sexually stimulate the adolescents but also get them in touch with the "kind offering" of simple and high-paying part time jobs. Considering the possible deleterious influence on children, this is simply unacceptable. An acquaintance was sighing in frustration, saying that those who prefer not to see such obscene images or information can only live with their eyes closed. Similar to how people have the right not to breathe secondhand smoke, society must also provide for "the right not to see" and "the right not to show (to the children)".

Returning once again to the subject of media available to adolescents, we find that *manga* nowadays is almost completely pornographic. This is not only the case with adult-oriented *manga* magazines, but also *manga* magazines and books for young people widely sold in convenience stores and bookstores. Girls' *manga* contain ex-

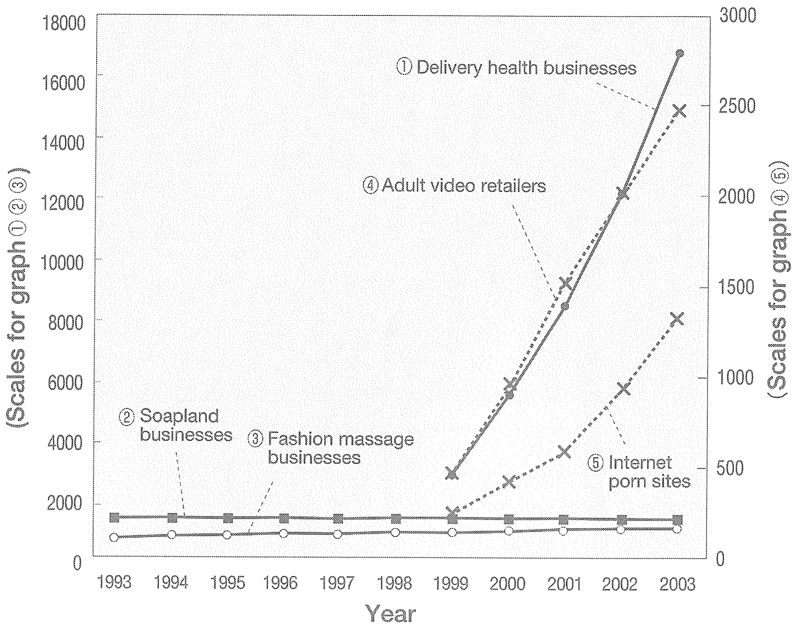


Fig.24 Number of sex businesses by category, 1993-2003

Source:2004 Police White Paper

plicit sexual content starting on the very cover, taking advantage of the "20 pages or one-fifth" regulation mentioned earlier. In addition, magazines with reader's columns print "true stories" woven from neither truth nor lies, creating the illusion that the extraordinary is daily occurrence. Most girls' *manga* adopted the strategy of featuring reader's columns in the 90s to increase sales, offering cash awards for submitted reader stories they accept for publication. In this way, commercialization of girls' sexuality was initiated. Suggestive articles on girls appear in almost all adult magazines and have been sharply rising in number since the mid 1990s.

At the beginning of the 1990s, adult videos became openly available for rental at video shops and for purchase on the Internet. Referred to as the "Adult Video Rental Business" (Non-brothel-based Sex Business Type 2), this business counted 462 companies in 1999, but climbed five-fold in a short period of time, reaching 2,485 in 2003 (2004 Police White Paper) (Figure 24). Thus, all kind of porno-

graphic videos are now easily available. Along with the trend to decreasing average age of the costumers the commercialization of sex continues to increase in scale year after year.

Throughout the 1990s Japanese society indeed experienced an intensification of its pornographic culture, but this trend was particularly pronounced among adolescents. As mentioned in Part 1, 50-70% of the interviewed high school students responded that they came in touch with sexual information as early as in elementary school, and the majority of both third-year middle school and high school students answered that they thought sexual relations were "acceptable" for high school students. According to our survey, 12% of these students first viewed adult videos while in elementary school, but by their second high school year nearly half of all the students had watched one.

In our 2004 survey conducted together with the Federation of All-Japan Senior High School Parent-Teachers' Associations we found that Internet is growing as a major source of sexual information at an alarming rate (Figure 25). Results showed that the proportion of the high school students who responded that they gained access to sexual information through the Internet, either in their elementary or middle school years, was higher among the students in lower academic years.

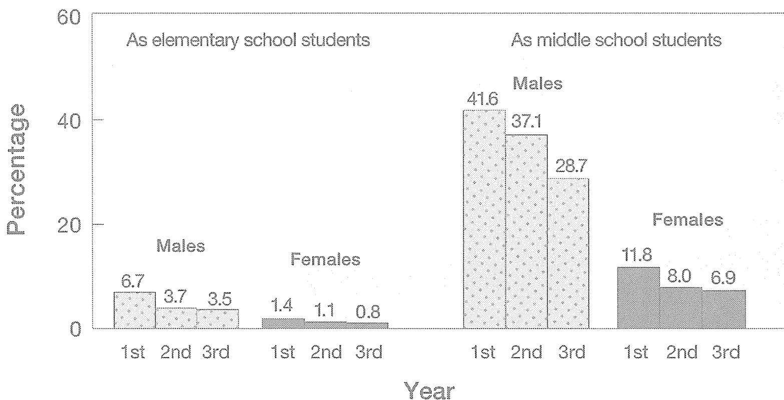


Fig.25 High school students who had access to adult Internet sites as elementary or middle school students

Source:2004 National Survey by the Federation of All-Japan Senior High School Parent-Teachers' Associations

It appears that the Internet has contributed for sexual information to rapidly permeate into lower age groups.

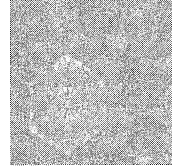
The amount of the available information and the difficulty to regulate it, as well as the easy access have made the Internet the "ultimate" medium for porn. This raises concerns about its future impacts. Businesses offering pornographic images over the Internet are officially referred to as Image Delivering Sex Businesses. There were 229 such businesses in 1999. This number has increased six-fold to 1,334 until in 2003 (Fiscal 2004 Police White Paper) (Figure 24).

In contemporary Japanese society, adolescents are exposed to immense sexual information already from infancy and it seems to get worse. The impact is reflected in the frequently conveyed impression of adolescents that "Everyone is doing it". This galvanizes them into sexual behavior. It becomes part of the peer pressure in adolescent society, where nobody wants to fall behind the crowd. In our interviews, we repeatedly witnessed this pressure. Often, adolescents would start their answers with, "I'm a little behind everyone else, but..." and "It's a little embarrassing, but...".

Politicians, educators, and parents need to speak up about the incontinence of sexual information. I personally feel that it is time for Japan to intensify regulations to a level that is at least comparable with that of other developed countries.

Chapter 4

Adolescents with poor social support



Irresponsibility of the mass media

Mass media such as television and newspapers are often referred to as "public" media, but what characteristics do present-day media show to qualify as such? Considering the flood of sexual material, it is highly questionable how seriously broadcasting companies internally discuss journalism ethics or standards.

I am certainly not the only one who senses the imbalance in freedom of expression and responsibility. Japanese media has for example not shown sustained interest in HIV issues after settlement of a HIV-tainted blood scandal in 1996. Failing to cover these issues is equivalent to giving society the message that HIV is no longer of social concern. As a result, interest of politicians, government, citizens, and youth in the HIV issue has waned. Improvised television programs which often feature young people of garish appearance and behavior also create the illusion that sexual issues only apply to "exceptional" individuals living in large cities.

Over the course of many years, we confronted the realities of common high school students' sexuality as illustrated in Chapter 1. Proper coverage and reproduction of such realities in mass media is crucial to raise public interest and improve support for the sexual issues of adolescents.

Poor political leadership

We believe that adolescent sexual issues have developed into a major national concern. If left as they are, they are likely to cause significant damage to the Japanese society. Of course this damage does not mainly concern money, but just to give an illustrative example of potential social damage: AIDS treatment amounts to JPY2.5 million per person per year. If 100,000 people needed treatment, a staggering amount of JPY250 billion of medical expenses would be necessary each year. Moreover, as there is no complete cure for AIDS, this burden would extend into the future, absorbing a considerable part of the national budget.

It is time for politicians to obtain the insight necessary to direct society through this issue. HIV spreads latently and by the time we realize, it has already grown irremediable. The history of HIV epidemic is just a repetition of such scenarios. For this reason, strong political leadership is needed while the disease is still in its early stage.

Countries that have been successful in the fight against HIV have without exception demonstrated this kind of leadership. It is regretful that despite this troubled situation, Japanese politicians, in central as well as local governments, have so far failed to demonstrate such constructive leadership.

Lagging awareness and outdated sexual health education at schools

As mentioned earlier, sexual health education at schools does not meet the needs of the times. Previous surveys have shown without exception, that among middle school, high school and university students, knowledge of HIV testing and STDs lags far behind basic knowledge of HIV/AIDS. Education in the past concentrated on the perspectives of human rights and the issues around living with people infected with HIV. It was taught that HIV is not transmitted through handshakes, at the workplace, or by sharing baths or eating utensils. However, past education has been inadequate in introducing STDs and HIV as everyone's concern. We have already reached the point where this alone is not enough anymore, but adequate reorientation in

prevention education has yet to be implemented.

The biggest obstacle in this respect is the reluctance of schools to acknowledge reality. A number of school nurses told me that students with problems often visited their office for advice, but that they were in many instances unable to share such information with school administrators or other teachers, because of the school's policy which orders expulsion or suspension of "troublesome" students. Frequently, I had to witness school nurses' anguish in the divide between students and school. Under these circumstances, schools will continue to be blind.

Although the situation is slowly changing, a deeply rooted reluctance of schools to conduct behavioral surveys remains. Just as academic teaching cannot be improved without testing the academic abilities of the students and as adequate medical treatment is not possible without diagnostic tests, without facing the issues adequate sexual health education cannot be installed or developed and without such education, the problems will stay. It is thus crucial to contemplate the issues now and find a solution in response to the growing sexual problems.

Poor measures for combating HIV and STDs

In most cases, measures in Japan for combating HIV are limited to events planned around the World AIDS Day, lacking strategic and daily activities. If there are any measures at all, they usually only involve distribution of ready-made pamphlets and posters in public and at schools along with occasional lectures in the community. These activities have now been repeated for many years without assessing their effectiveness.

It is obvious though, that the information has not reached the people, thus allowing for such an increase in STD infections, elective abortions, and HIV infection. If we simply keep repeating conventional measures, claims that prevention programs are intentionally neglected will become justified. For the sake of our children, it is time to take a thorough look at what is being done and what has to be done for prevention.

As already mentioned above, only one-third of high school students are aware that free and anonymous testing is available at public

health centers. Only half of the general public knows that it is available at all. Moreover, public health centers are usually not easily accessible by public transport besides that service hours are inconvenient. People also fear they may run into acquaintance during their visit.

Lack of information on available testing and the defects in easy to access testing opportunities impede early disease detection and early treatment. This is the cause of the exceptional increase in AIDS cases in Japan, although being a high-income country and even after availability of the highly effective antiretroviral therapy since 1996. Furthermore no public STD testing and treatment services are available for adolescents in Japan, which provide easy access with respect to cost, atmosphere, and location. As STDs are often asymptomatic, it is difficult to estimate to what extent STDs will spread if the current situation is left unchanged.

At the beginning of our research, we were shocked by the policy-based contradictions within the government. As far as we could find out through our investigations, at least 10 prefectures prohibited either the distribution or sale of condoms to minors. In certain municipalities, offices controlling the distribution and sale of condoms and other offices distributing condoms were located in the same governmental building without knowing about each other's activities. This situation is absurd. If our adult society is to account for the flood of sexual information, then it is our adult society that must take responsibility to change social conditions that impede young people from taking preventive behaviors.

The generation gap

A wide gap between the sexual attitudes of different generations exists. For example, to the question of how acceptable sex among high school students was, approximately 80-85% of the second-year high school students in outlying areas responded that it was "acceptable" or "relatively acceptable". In contrast, only around 10% of the questioned teachers and parents responded similarly (Figure 26). To give another example, 55% of the male second-year high school students and 67% of the female answered that they were introduced to sexual information in elementary school. However only 27% of the male

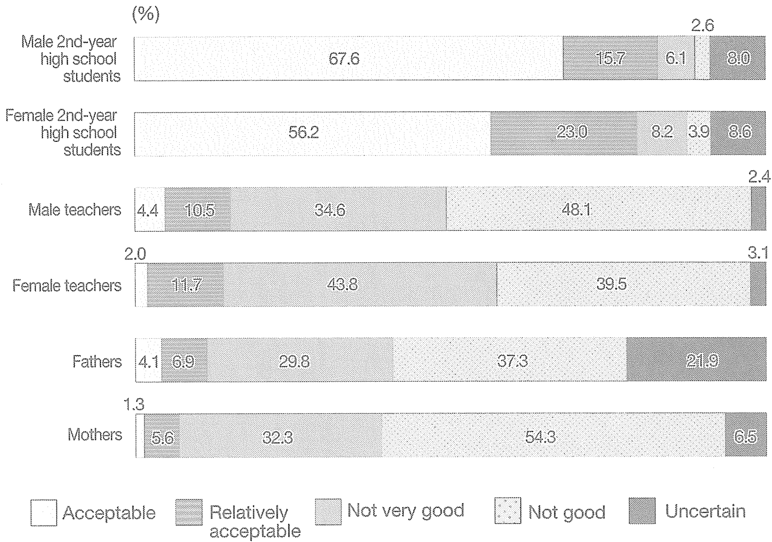


Fig.26 **Attitudes towards having sex as a high school student, outlying Prefecture B**

Source:2001 Survey of Sexual Behavior Among High School Students in Outlying Prefectures and Survey of Attitudes Among Parents, Adolescents and Teachers; Ministry of Health, Labour and Welfare Study Group on HIV Socio-epidemiology

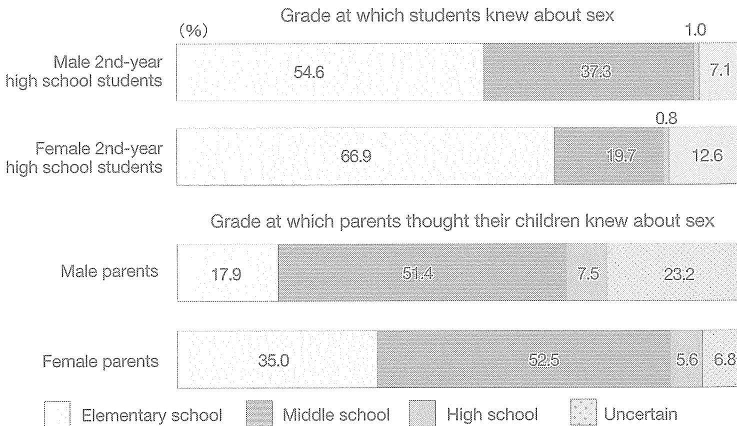


Fig.27 **Differences in when children first know about sex and when parents think their children first know about sex**

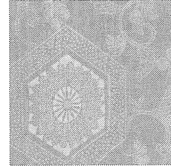
Source:2001 Survey of Sexual Behavior Among High School Students in Outlying Prefectures and Survey of Attitudes Among Parents, Adolescents and Teachers; Ministry of Health, Labour and Welfare Study Group on HIV Socio-epidemiology

and female parents thought that their children had heard about sex during elementary school (Figure 27).

When I was a high school student over thirty years ago, for both parents and children the idea of high school students having sex was absolutely out of question. At that time, I did not feel a big generational gap with respect to sexual attitudes. In other words, the significant attitude gap that now exists between parents and children is likely to have arisen and widened rapidly within the last few decades. Furthermore, because it developed with such a speed, parents, health administrators, and educators have yet to catch up. Ironically, this situation that has turned into a mechanism that prevents sexual health education has been created by the Japanese society itself.

Chapter 5

Lost connectedness



Human connectedness has the power to convey information, norms, rules and values and offers emotional support. In this way, it helps maintain the social ecology. However, as many readers may have noticed, phenomena resulting from social decline have begun to manifest throughout the Japanese society.

Decline of the home

Let us first consider the home. By its very nature, the home holds various functions as a place of affection, discipline, education, protection, relaxation, entertainment, and so forth. Mealtime serves as a time for enjoying each other's company, it is the time when families can reach out and communicate. Recently, in Japan, the term "*koshoku*" [eating alone] can often be heard. This modem terminology refers to children who eat alone at home, a word with a very sad meaning. With the beginning of the 1990s, the portion of *koshoku* children started to rise. Now, 30% of third year middle school students are said to be eating at home alone. Opportunities to eat together and therefore the chance of family conversation have thus drastically diminished.

The decline in family connectedness is mainly due to the different schedules imposed nowadays on the lives of family members; parents' overtime at work or children's lessons and after-school prep courses. Presumably social interaction is also reduced through the

layout of modern homes, in which each family member can reach their own room from the entrance without passing other rooms. Individualized means of communication through mobile phones cause similar effects. Compared to the days when there was only one telephone in the living room, parents nowadays have very little idea about whom their kids are socializing or spending their spare time with. While living under the same roof, family members live separate lives.

Given the circumstances, it is little surprising that the bonds and norms within families are falling apart and that the family's ability to protect the child has weakened. Staying out until late at night and so-called "*petit iede*" (short-term runaways) of children are believed to be the result of this situation.

As shown in Figure 28, data from our behavior studies at high schools revealed that students, and especially female students, who

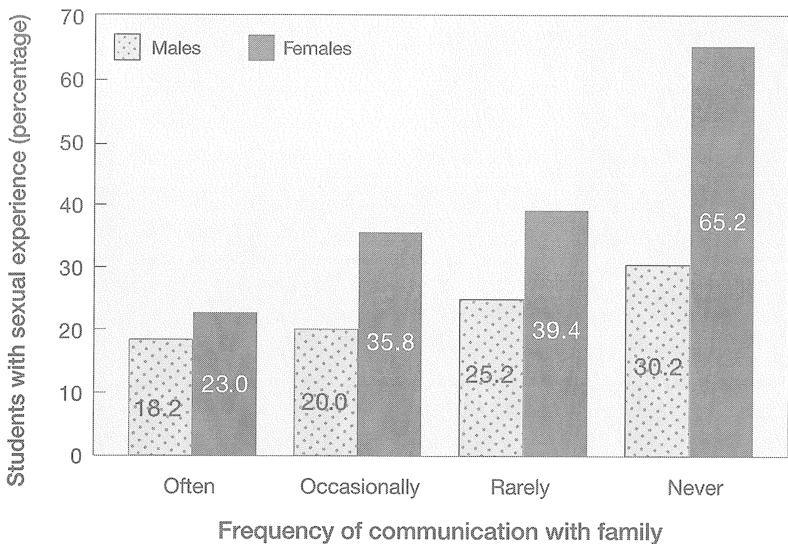


Fig.28 **Relationship between the sexual experience and communication with family among second-year high school students in outlying Prefecture B**

Source:2001 Survey of Sexual Behavior Among High School Students in Outlying Prefectures; Ministry of Health, Labour and Welfare Study Group on HIV Socio-epidemiology

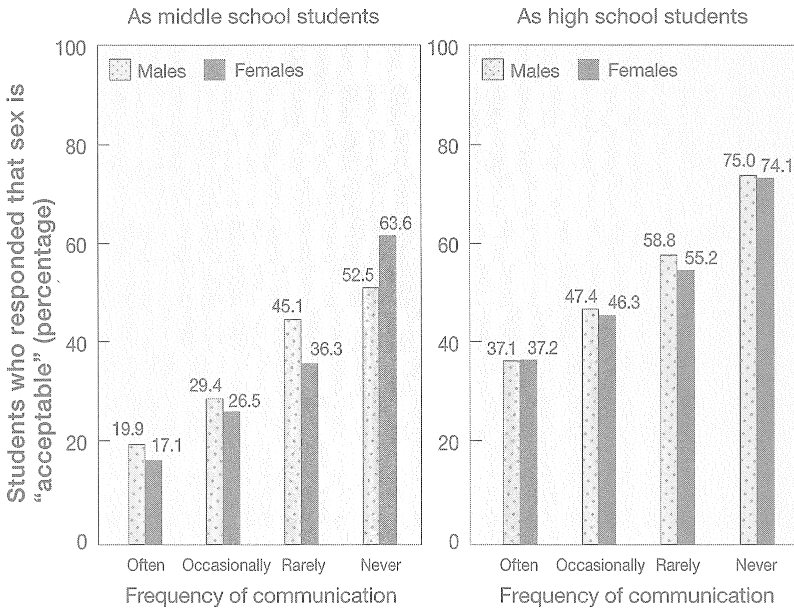


Fig.29 Relationship between sexual attitudes and communication with family for middle school students in City C, Prefecture A

Source:2003 Survey of Sexual Behavior Among Middle School Students in Outlying Prefectures, Ministry of Health and Welfare Study Group on HIV Socio-epidemiology

communicate very little with their families, are sexually more active. Even for middle school students, we found a close relationship between students (both male and female) who do not communicate with their families and their acceptance of sex at middle and high school age (Figure 29). The acceptance rate is 2-3 times higher for teenagers who often communicate with their family and those who do not at all. This relationship can be understood as a result of the declining family connectedness.

Decline of communities

Communities have also undergone a significant change. Neighborhood adults used to have significant presence for children, praising, scolding, and helping them. Older children in the neighborhood used

to hold a similar educating position with respect to younger children. Villages, towns and neighborhood associations held events (children's parties and festivals), which functioned as important settings for the development of social skills. The human connectedness of community held great significance as a place for children to cultivate and grow.

Such a human connectedness has declined due to individualistic lifestyles and changes in living conditions afforded by life in apartments. As a motorized society the advent of shopping malls makes local shopping districts obsolete and weakens human connectedness within neighborhoods. The role the community once fulfilled in conveying information, norms, rules and values and providing social support seems to have disappeared.

Changes in human relationships among children

Children predominantly used to play in groups. With dominant and less dominant individuals, children explored and learned naturally how to find their place in a group. Playing together reinforced social behavior.

However, watching my own daughter play, I noticed something peculiar. We had invited four or five of her friends and although they were all in the same room, they were not all playing together. Each child was either playing by themselves or in a pair with another child. When they got tired of playing they went home one by one. They did not appreciate playing in a group of 3 or more. That is when I felt how human connectedness had changed.

After-school prep courses are another culprit in this matter. As they have become an everyday affair, they significantly reduce children's spare time. Moreover after video games appeared in the 1980s and subsequently became many children's main playmate, adolescents have become more accustomed to the virtual reality on the "screen" than to "real persons". Spare time activities have been transformed into closed activities in virtual space and distanced themselves from social activities.

As already indicated before and laid out in detail in Part 3, the emergence of mobile phones pervasively influences human relationships. Children often register even hundreds of people as "friends"

and exchange a number of e-mails or calls everyday. However, the relationship with such "friends" is usually shallow. Furthermore, our survey results suggest that private communication through mobile phones lower the threshold for sexual relationships.

Decline of schools

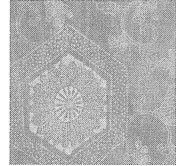
School used to be a place to pass on knowledge and a society where kids establish connectedness with other students and teachers. It was a place where norms and rules of social living were assimilated while improving oneself through hard work. Schools were orderly places and teachers were respected.

The fact that "class disruption" (disorder in the classroom) has become increasingly common during the last decade shows that such ideals are almost lost. More specifically, teachers and students have lost connectedness to each other or rather teachers have lost their authority. Class disruptions however do not result from this alone. There is no doubt that the weakened transmission of norms and rules outside the school environment, i.e. in the home and community, as described above, is contributing its part.

In other words, class disruptions cannot merely be attributed to a lack of leadership on the part of teachers, but are rather a symptomatic manifestation of deteriorating connectedness at home, in the community, among the children themselves, and within the school.

Chapter 6

The vulnerability of Japanese society and the 1990s syndrome



The structure of Japan's social vulnerability

Depicting all related elements referred to in the previous chapters in a single diagram yields Figure 30.

Adolescents at the center of our concern are surrounded by teachers, their family, the community, friends, peers and older peers. From all of them they used to gain information, learn norms, rules and values, and obtain emotional support in the past. With the decline of human connectedness this system is not working properly anymore.

Adolescents are also surrounded by mass media, school education, and the public health sector. However, these institutions fail to provide adolescents with adequate support (i.e. the provision of adequate information and services). We emphasize again, that social support is truly substandard.

At the same time, adolescents are exposed to intense sexual information and pressure from society and friends. Like boats drifting in the storm without anchor, adolescents are incited to engage in unprotected sex, thus compromising their sexual health.

Unfortunately, adult society refuses to take responsibility, trying to shift it onto others. Everybody seems to look for somebody to hold responsible for the current situation. We realized this soon after we began our prevention activities. While in actuality responsibility lies with each and every one of us, it seems as if the media was pointing to anybody other than themselves, politicians pointed to the govern-

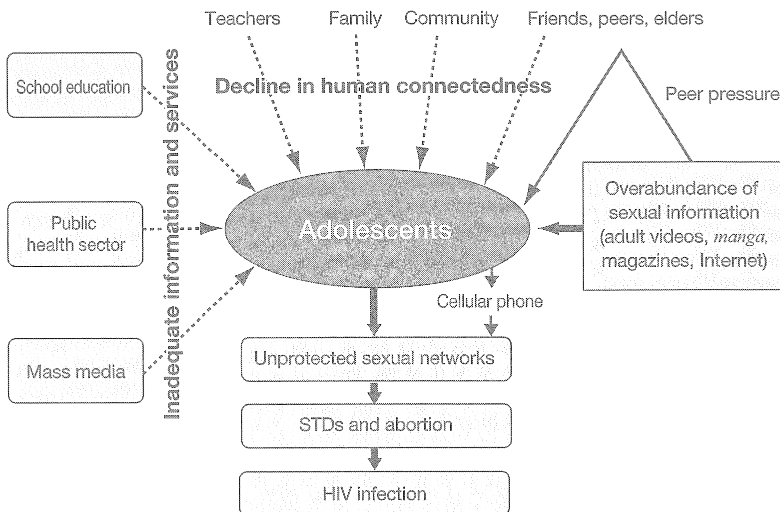


Fig.30 Adolescent sexual behavior and society (connectedness model)

ment, people to the politicians and the government, families to schools, schools to families and the public health sector, and public health sector again to schools. This never ending shifting of responsibility paralyzes action so that the burden ultimately falls on the adolescents.

The point we want to make is that these aforementioned defective social structures are the essence of Japan's social vulnerability. The mid 1990s may be the time when the extent of social vulnerability may have passed the threshold.

"It takes a village to raise a child" —The importance of connectedness

An African proverb says, "It takes a village to raise a child". It indicates that a good social environment is essential for the growth of a child. Human beings develop through connections to various people, including friends, family, teachers and neighbors and it is from these people information, norms, rules and values are passed on to them.

This is also where they derive emotional support. Supported by this connectedness, children grow and develop a solid awareness of their own presence and environment.

As mentioned, this connectedness has waned and the "village" that raises the child is gradually disappearing from Japanese society. The loss of connectedness is not only a concern in Japan but throughout the world. Adolescents in societies with dwindling connectedness are thought to develop a number of "symptoms". These include a diminished sense of social belonging, alienation, loneliness, low self-esteem, boredom, intolerance of others, and a lack of motivation; the list goes on. Many studies have shown that these symptoms can also affect sexual behavior.

The 1990s syndrome

Since the 1990s Japanese adolescents have gone through numerous changes. In invited lectures, when mentioning the rapidly rising incidence of STDs and abortions from the mid-1990s on, I am frequently asked, "Why is that ?". I sometimes counter this with a question of my own: "What do you think ? Have you noticed any changes in the 90s ?".

Throughout the 90s, I lived in Yokohama, a large city close to Tokyo. Some significant changes among adolescents I witnessed during that time were changes in fashion; loose socks (socks originating from boot socks for mountain climbing, adopted by Japanese school girls) and short skirts; both males and females teenagers started to dye their hair brown or blonde, and piercings became fashionable. The age of young people of such appearance continued to lower in front of my eyes. I remember being perplexed seeing many young people on trains talking to each other in loud voices or producing a mirror from their bags and painstakingly putting on makeup. More and more adolescents could be seen crouching on the floor in trains or in front of convenience stores to rest. It seemed bizarre how they behaved as if nobody else was around. It was then when smoking became common for both male and female high school students.

The aforementioned "*petit iede*" (short-term runaway) phenomenon has gained controversy since the latter half of the 1990s. Combining "*petit*", the French word for "small", with "*iede*" (Japanese,

run away from home), this term literally means to run away from home for a short period of time. The phenomenon of "class disruption" has escalated since the 1990s. Unable to remain seated, students often walk around and talk to each other during class, rendering teaching impossible. Not only has this behavior recently started to rub off onto lower grade students, but has even become a problem in first-grade classes of elementary schools now.

Innumerable other phenomena of dysfunctional social behavior have beset adolescents from the 1990s to the present, including short temperedness, bullying (*ijime*) in schools, truancy, suicide, domestic violence, social withdrawal, sugar daddy business, and spray-painting graffiti. Readers can probably come up with their own list.

Looking at the multitude of social problems among adolescents that emerged in the 1990s, we urgently have to make ourselves aware that many important functions of family, school and community were compromised by the development and economic affluence we gained from the rapid economic growth of post-war Japan. Though materially affluent, the foundations of society have started to crumble through the loss of connectedness.

Connectedness is vital to maintain the ecology of society. If nature lost its ecological integrity, the earth would become a barren wasteland. The same applies to society.

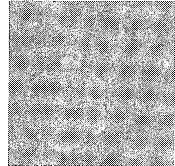
We have come to refer to the various issues that beset adolescents in the 1990s as the "1990s syndrome". We believe that the issue of sexual behavior is part of its symptoms.

Part 3

Perspectives of an obstetrician-gynecologist and a school nurse

Part 3

Perspectives of an obstetrician-gynecologist and a school nurse

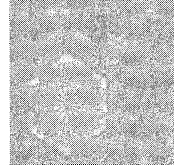


In Parts 1 and 2, we gave an overview over the current adolescent sexuality and its social implications, based on our survey data. In the following part, I would like to present experiences of a local obstetrician-gynecologist and a school nurse who used to work with high school girls; two women who have come in close contact with the issues adolescents face. With their accounts on how they experienced adolescents in real life, I would like to substantiate our view of adolescents as we have portrayed them through our survey data and other available information. They also undermine our conclusions on the contemporary Japanese society.

The two women, who kindly agreed to contribute to this part of the book, are from different professions and live in different geographical locations, namely, a metropolitan city and a local city, which are over 600 kilometers apart. The reader will nevertheless find that their views and experience on adolescents have much in common.

Chapter 7

Testimony of an obstetrician-gynecologist



Doctor Kiyoko Iesaka is an obstetrician-gynecologist (OB/GYN) in the city of Maebashi in Gunma Prefecture and is in charge of adolescent outpatients. We discussed our data with her and provide additional information from her experience in the medical profession of over 20 years.

Unexceptional patients

—What patients visit your clinic ?
They are 13 to 19 years old. Since the same patient may visit 2 or 3 times per month, the total number of patients per day is generally around 25. The waiting room is usually pretty busy as patients tend to come with friends or boyfriends. Some adolescents go to school; others have either dropped out or are working.

—For what reasons do they seek examination ?
Mainly because of sexually transmitted diseases (STDs). The most common reasons after that are menstruation, pregnancy, and contraception. About 10 years ago, pregnancy was prevalent, but just after the mid-1990s the incidences of STDs suddenly began to rise. Hearing this, people might think that adolescents who visit an OB/GYN come from exceptional backgrounds, but this is not the case. Looking at the survey data on sexual behavior of average high school students in Gunma Prefecture, for example, compared to patients at my clinic,

there is only minimal difference in the age at which the students first had sex.

"I didn't think I would get pregnant"

—What are your adolescent outpatients like in the examination room ?
Guys sometimes accompany the patient into the examination room to find out what is happening. Teenage boys are uncommon, usually these persons are in their 20s. When a teenage boy first comes face-to-face with the seriousness of pregnancy, he is unable to express himself very well. Even if he says something, it usually does not make much sense. Pregnant girls often say, "I really didn't think I would get pregnant". You might find it difficult to believe, but it seems that they are not aware that their bodies are already developed enough to become pregnant.

Further, girls are usually disadvantaged in terms of contraception and sex. Guys tend to control the situation while girls tend to be passive, even if they have sex without proper precautionary measures. There are also girls who have had abortions or STDs more than once.

—I hear that patients who recently had to have abortions do not take it very seriously.
I hear that too, but that's not my impression at all. Perhaps it is only the media spreading this rumor without even knowing the truth. These girls may look unconcerned, but the truth is that they are suffering a lot to have either failed contraception or had an abortion. They often hide a considerable amount of pent-up emotion. In this sense, I do not want these kids to be judged through a biased color lens.

—I had a similar feeling towards this issue. A middle school student told me about a friend who had had an abortion but who laughed all the way through it. But then I had the opportunity to watch a video on abortion with that girl who aborted and she cried throughout the entire video.
This is probably because interpersonal relationships make it difficult to outwardly express emotion. Many adolescents put on a joker face

when with their friends, just as if nothing has happened. But what these adolescents really want is to cry, be held and be comforted. I feel they need someone to take over this consoling role for them.

Steep increase in abortions among 16 year-olds

—Please tell me more specifically about the situation of teenage abortions.

The Ministry of Health, Labour and Welfare only publishes data aggregated into age groups comprising 5 years, but the data from my clinic allows us to see what is happening for each age group. Ten years ago, the number of abortions at my clinic was about 90 per year. This number exceeded 200 in 2002. Looking at the girls between the age of 15 and 19, we see that the number of abortions among 16 year-old girls has risen tremendously, multiplying by 20 times during the period between 1992 and 2002. By comparison, this number has risen by 5 times among 15 year-olds, 3 times among 17 year-olds, 2 times among 18 year-olds, and 1.5 times among 19 year-olds. The rate of increase is higher among younger individuals. In interviews, only 5% of the 15 year-old and 8% of the 16 year-old teenagers reported that they always use condoms.

Increase in births as an alternative goal

—Is abortion the only problem among teenage girls ?

We need to keep in mind that not only abortions are increasing but also teen births. Statistics counted 16,000 teenage births in 1995, but by 2001, this number had increased to 21,000. Though an increase of only 5,000 births, this means that per 1,000 teenage women the number of births has jumped from 3.9 to 5.9, an increase of 50%.

For a relatively large number of girls the motive for giving birth is their hope to marry their partner, showing that they are more concerned with marriage than birth. They therefore give up pregnancy, as soon as marriage has turned out to be hopeless. I never witnessed teenage girls who were determined to be a so-called single mother and raise the child alone.

—Does everything go well for those adolescents who do get married ?
Teen marriage has increased since 1998. As the number of teen births also started to increase around that time, this suggests that these marriages are arranged due to unplanned pregnancies. But in addition to marriage, there has also been a tremendous increase in teen divorce.

It is clear that even marriage initiated by childbirth ultimately does not provide the kind of safety in life these girls hope for. It is also for this reason that I strongly recommend contraception for adolescents.

Vicious circle of transmission

—How is the situation concerning STDs ?
As I explained above, STDs are the most common reason for visits at my clinic. Adding the patients who are incidentally found to be infected to those who came to test for or treat STDs, about a quarter of my patients suffer from STDs. Among these, some even have multiple STDs. Chlamydia is the most common, followed by candida and then human papilloma virus infection.

To deter the spread of STDs, not only women but also their partners must be treated, but this is extremely difficult. I once tried to find out the treatment status of male partners. I asked 19 teenage women infected with chlamydia whether their current male partners had received treatment. I then asked each of the women whether they had been able to inform all their sexual partners within the past year about their infection and whether these men had gone for testing and received treatment. These 19 women had been with a total of 51 men in the past year, 2.7 people per person in average. Each of the 19 women was in treatment. However, I was only able to confirm 7 of their partners as being treated. Five men had been informed of the infection, but it was unknown whether they had sought testing or treatment. The remaining 39 men could not be contacted. In other words, there was the distinct possibility that a majority of the partners were infected, but did not receive treatment.

These men are likely to continue infecting other women. I have been working hard to try to interrupt the chain of transmission, but have just realized what a difficult task this really is.

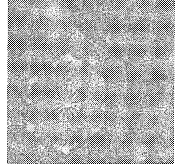
Sex is an act with low hurdles

—What is your message for us ?
In a survey of all high school students in Gunma Prefecture, 80% answered that sexual relations at their age were acceptable. Adults need to know that sex is an act with a low hurdle for today's adolescents. Unexceptional, normal adolescents admit having sex. These adolescents, who are not aware that they could become pregnant, could come to my clinic at any time. These adolescents, pregnant or with STD problems, could be your own. This is how I would like everyone to feel towards the issue.

Maebashi in Gunma Prefecture is a provincial city with a population of 320,000 people. As pointed out in Part 1, elective abortions have increased throughout the country. We thus assume that OB/GYNs in all parts of Japan have felt the same changes and share the view of the gynecologist interviewed here. In fact, we have heard similar accounts from virtually every OB/GYN we have come in contact with, whether urban or rural.

Chapter 8

Testimony of a school nurse



As the next witness we would like to introduce a school nurse who has dealt with diverse issues of students at a girls' school for over 30 years. She was attending to students who visited the nurse's office and fought a lonely battle to help students with their problems and provide them with sexual health education.

The nurse's office—The school oasis

—What kind of place is the nurse's office for middle and high school adolescents ?

The nurse's office is like an oasis for adolescents. Different students come in, from those who come to sort out their feelings before going to class, those who come to take a nap during lunch, those who want to be hugged in a motherly way to those who come and bring their lunch. They come to ask me about all kind of things. Among them are a number of issues related to sex.

Changes in adolescents and parents

—From the perspective of a school nurse with 30 years' experience, what has changed in these last years ?

Essentially, I don't think the concerns and interests of adolescent girls are any different from what they used to be. However, children 10-20 years ago visibly had more energy. They were organizing parties and

even raising money for it. So we could easily identify their activities and gave them advice when necessary. Recent adolescents are much less interactive than before.

Parents, too, seem to have changed. In the past, when a girl got calls from her boyfriend very often, parents would get angry, demanding, "Why are you on the phone for so long ? Hang up soon !" Sometimes the father would hang up saying "Don't call her again, you're being ridiculous". Parent-child arguments happened all the time. Parents and kids would face off in battle with each other.

These battles disappeared around 1994-96. Now parents and children keep a certain distance and do not get too involved with each other's lives. Parents never see their child and never know what they are doing. These are the changes I have observed.

Adolescents who assume "Everyone is doing it"

—What did you observe in the sexual behavior of adolescents ?
Talking to the kids, they tell me, "Everyone is doing it (sex), everyone thinks that way". But when I actually show them the data from surveys of high school students, they tell me "No way ! That isn't true. I thought it (the proportion of students who have sexual experience) was around 80%".

Kids these days hang out in small groups who share the same values and never interact with groups with different values. Their range of association is extremely limited. It seems as if their own friends are everything to them, making them believe that they represent "everyone".

Sex worker training video

Once, I asked a group of students who had gathered in the nurse's office, to show me the video they were watching. Watching the video together with several other teachers interested in sexual health education, I was shocked at what I saw. In the video, a girl of about high school age was giving a "cheerful" and detailed explanation of how to pleasure a man. One of the girls had been given this video by her boyfriend. It gave the impression of a "sex worker training video" explaining how to serve a man. My colleagues and I were shocked all

over again that adolescents were getting their information from something like this.

Adolescents who cannot refuse

At another occasion, I was asked by another teacher to talk to a girl who's behavior, for whatever reasons, this teacher just could not understand. After talking to her repeatedly, she finally confessed that she had been harrased, receiving frequent sexual approaches from many boys over the mobile phone. She was worried because she wanted a lot of friends, so that even if she did not want to (have sex), she would give in to the pressure when meeting these people in person.

In the nurse's office, I suggested "sandplay" to her (a process which encourages self healing by depicting one's own world through the use of sand and toys). She placed herself in the lowest position compared to the many boys around her. Luckily, she gradually recovered over time. I believe that she visually reoriented herself through "sandplay" and was able to free herself from the influence of the media-induced image of "how girls are".

Talking about pregnancy

There were quite a few girls who came to me for advice on pregnancy. They come to the nurse's office because they cannot talk to their families and there is nowhere else to turn to for advice. The girls who come to ask for help are psychologically still stable, but many other girls suffer alone. In most cases, they use over-the-counter pregnancy tests to determine whether they are pregnant and are relieved if the results are negative. But the truth is that many girls do get pregnant.

Pregnant adolescents generally fall into one of the three general categories of those who can talk to their parents, those who depend on their boyfriend, and those who cannot talk to anyone at all.

Adolescents who decide to talk to their parents encounter different responses. Some parents support the daughter and encourage her to have the baby, saying that they will take care of the baby since they are still young enough. There are more and more cases like this.

This seems an odd parent-child relationship to me, where the roles of responsibility are confused. Other parents do not know what to do and panic. These include parents who insist on their daughter giving birth even though the girl herself is against the idea because she wants to continue school and go to university. Only extremely seldom do parents severely reproach their child.

It is common for adolescents who cannot talk to their parents to first talk to their friends. They are then usually urged to tell their boyfriends and eventually do so. At a certain point the two of them secretly visit a clinic for an abortion. Sometimes they ask the boyfriend's mother for money to do so.

However, as mentioned above, there are also adolescents without anyone they can depend on. One day, for example, a physical education teacher approached me. He told me that during gym class one of his students was behaving strangely, running around deliriously, jumping down from high places, and moving in unusual ways. I called the student and asked if something was bothering her. I was stunned to hear her answer: "I wanted to abort a baby ... so I thought if I jumped and exercised a lot, then ... ".

Talking about STDs

Lately, my office is visited by 2-3 students a month, who complaining of itch. It tells me that the number of adolescents infected with STDs like chlamydia and candida must have gone up in recent years. On graduation day a girl was brought into the nurse's office with severe abdominal pain. Intuitively suspecting a gynecological condition, I recommended her mother to take her to a clinic for an exam. There, the doctor handed the mother a note saying that her daughter was infected with "chlamydia salpingitis". To my surprise, a girl who saw the note blurted out that she had once been infected with chlamydia as well. I witnessed the spread of STDs with my very own eyes.

Occasionally, students came to my office saying that they want to go to a clinic but were anxious what to tell their parents, from whom they need their insurance card first. A visit at the gynecologist is not easy for a teenage girl; people often look down on such girls. It is of course a problem that an adolescent contracts a sexual disease at all,

but if we do not create an environment that makes it easy for them to get tested and receive treatment, the disease will destroy the adolescents' health. Seeing that happening breaks my heart.

Adolescents addicted to mobile phones

—What do you think about the problems with mobile phones ?
There are a number of facts on mobile phones that shed light on the mentality and the nature of human relationships of adolescents. Mobile phones are now their core means for keeping relations with friends. The dozens or hundreds of phone numbers and e-mail addresses stored in the phone's memory are confirmation of their existence and give them emotional stability. I know students who just panicked when their mobile phones were confiscated by their teacher. (Note: Mobile phones were not allowed in this school.) It would not be inappropriate to use the term "mobile phone addiction" or "mobile phone obsession".

Adolescents these days are afraid to be alone and the anxiety apparently becomes unbearable if they are not connected to someone all the time. Even if only shallow relationships, I suspect that they need to be on the phone or sending text messages at all times. (Note: According to the nationwide survey on mobile phones we conducted in collaboration with the Federation of All-Japan Senior High School Parent-Teachers' Associations in 2003, high school students send an average of 20 text messages and also receive an average of 20 text messages per day. In other words, they collectively send and receive about 15,000 messages per year.) I suspect sexual relations may be an extension of this kind of relationship.

Relationships in the age of mobile phones

One incidence made me especially aware of how shallow relationships have become in the age of mobile phones. After having had an abortion, a first-year high school student came to my office because she was not feeling well. She told me how it happened that she had had to have an abortion:

"I missed the last train after going to a concert alone. I wasn't sure what to do, so I sent an e-mail to a guy who had been my cyber friend

for a long time, to see what I could do. It happened that his house was really close to the concert venue, so I followed his e-mailed directions and went to his house. My cyber friend's house had a contemporary layout and was constructed so that I could go directly from the entranceway to his room without any other family members seeing me. So, he let me spend the night and even though we had just met for the first time, we had sex and then I left the next morning without anybody seeing me and caught the first train to school. I told my parents the night before that I had missed the last train but that they should not worry because I was going to stay at my friend so-and-so's house".

This student got pregnant after having had sex once with someone she had met the first time. She may have thought that there was no way she could get pregnant, but soon missed her period and worried day in and day out what to do. She then finally told her cyber friend that it looked like she was pregnant. He found her a cheap and easy place to have an abortion on that very day, gave her money, and she had an abortion without her parents even finding out. However, what surprised me most came after that. Asking her what would happen next, she answered unconcernedly, "And it was over. I didn't want to see him anymore and he said he didn't want to see me. It can't be helped".

This story made me wonder what relationships are, in the age of mobile phones. In reality, the girl was not unconcerned at all. When I asked her if she was really okay, she suddenly burst into tears. She even had visited a temple to pray for the aborted fetus. She asked, "What happens to the aborted baby ? Will they give it a proper burial ?" But she put on a facade of being calm and collected around others. Otherwise, she would not be able to go on living. "Everyone is doing it, so I am fine doing it", she said unconcernedly, but the wounds hurt her deeply when she was alone.

Parents who cannot prevent it

—How are parents coping with this situation ?

The parents are worried, of course. Once, a girl's parents came to talk to me crying the whole time, "We don't know what to do. How did she turn into such a child ?" Indeed, parents do not know what to do

and they cannot stop these awful incidents from happening.

This is because they have already lost their chance to protect their kids. They would have had to stop their daughters from staying away when it really mattered, even if it would be by physical means. Now, a simple call from their daughter is all that they receive, "We're having a good time over at my girlfriend so-and-so's house. I'll be home tomorrow. Bye !" There is no easy way back once the situation has gone out of control that far.

Parents these days seem to belong to either extreme of the spectrum. Generally speaking, there are those parents who try to unconditionally believe their children because it is easy. Doing so, parent-child arguments are avoided, and they can always be their child's "best friends" or "good mother/father". The other type is the controlling parents. Some mothers check drawers, letters, and everything else that is suspicious. Parents these days do not have the confidence to observe and take action when it is really necessary.

Schools have changed as well

—Finally, what are the schools for adolescents ? And what are the problems with sexual health education at school ?

Schools, too, are changing, not only adolescents and parents. In the past, teachers were seriously engaged with their students. They would have long conversations; the teacher lending a persistent ear and giving advice until late even to the point student would get fed up with it. Graduates who are now young adults sometimes visit me and tell me how it "brings back so many old and good memories" to visit their old school. This shows how intimately students and teachers were once connected.

Now, it is increasingly difficult for teachers to maintain relationships, even among each other. Many of them are only peddling expertise and consider that as their job. Students face countless problems; no matter how many we dig up, there will always be more. Some teachers maintain, "getting involved with those types of things would prevent me from doing my job". Others think, "Getting involved with how students manage their lives is their families' duty. Sexual health education is something that should be done at home, not at school".

Sexual health education, however, cannot be done only at home. A school with children of the same age group is an effective setting for conveying and discussing correct information. School is also an effective setting for students to mutually balance each another's opinions and behavior. I think it is a problem that schools are not aware of their effectiveness.

The school at which this nurse worked is by no means an exception. Not only a few schools encountered similar experiences. This school nurse confirmed that adolescents have changed significantly in front of her eyes. Parent-child relationship has changed, schools have changed and less and less people really care for adolescents anymore. Live human friendships have also faded among adolescents due to mobile phones and other changes in lifestyle.

The nurse also told me with a loving expression, of moments when students tried to nestle in her lap even though they were too big or when they tried to beg off some lunch from her. I, too, marveled at how some students let down their guard after a group interview and came up to me. Although they had only met me for the first time, they leaned on my shoulder, touched my earlobes, and did not want to go home because they wanted to keep talking. This shows how little live human relationships contemporary adolescents experience.

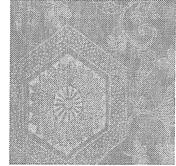
Similar to the obstetrician-gynecologist above, this school nurse emphasized that the adolescents getting into troubles were not exceptional in their character, but that many adolescents were simply indeed not aware that they might get pregnant. Adolescents who in a seemingly unconcerned way described that they had had an abortion were really hurting inside. They needed someone who really cared for them. She believes that more adults are ought to listen and care.

This teacher herself is planning to open up her home to adolescents after reaching retirement, so that adolescents could come and talk to her.

Part 4

What to do ?

Part 4



What to do?

Up to this chapter, we have extensively analyzed current adolescent sexuality and its social background. However, with a wave of Asian HIV epidemic coming close at hand, we cannot sit back and just take a critical stance. We have to look for a way that leads out of the current situation and take action.

Through our surveys and experiences we understood the current sexual health issues as symptoms of a society growing out of control. If this is indeed the case, we can hardly expect to solve these problems with only a "symptomatic treatment" or technical approach that just teaches adolescents how to use condoms and the contraceptive pill, or how to technically communicate with the partner.

Based on the findings presented in Part 2 (Figure 30), we must strive to:

(1) maintain social limits for sexual information;
(2) intensify the efforts of media, health administrators, and schools to provide appropriate and accurate information and services; and
(3) restore human connectedness to improve social ecology.

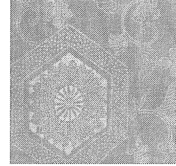
The first point is of social means, necessitating reinforced efforts on the part of the Parent-Teachers' Association (PTA) and politicians. Regarding the second aim, we need to break away from ineffective education or communications, sort out the confusion, and install a more effective and sustainable program. With respect to human connectedness, we cannot anticipate spontaneous recovery. We have to undertake more conscious efforts to restore it, employing all possible

means we can conceive.

In Part 4, we would like to develop aims (2) and (3) and give an overview on a prevention project (the WYSH Project) for adolescents which we have developed and which has begun to propagate throughout the country.

Chapter 9

Adolescents' needs and current sexual health education



"Tell me what to look out for"

First, we would like to take a look at what the needs of the adolescents themselves are in sexual health education. The followings are the top five requests adolescents made as revealed by a survey conducted in 2003, in which approximately 5,000 second-year high school students in local prefectures participated.

- I want to be told what to look out for. (Males: 94%; Females: 93%)
- I want to be taught in an open and confident manner. (Males: 81%; Females: 81%)
- I don't want to hear jokes, because it is inappropriate in this context. (Males: 80%; Females: 79%)
- I want to be given specific contact information for the case I get into trouble. (Males: 71%; Females: 69%)
- I want to hear personal accounts. (Males: 67%; Females: 63%)

The reader may notice that the majority of students are hoping to be told what to look out for and that they are at a loss without somewhere to turn for advice. Despite the excessive exposure to sexual information through mass media even from early childhood, teenagers are irritated that they are all the same unable to obtain the information they actually need.

Current sexual health education

What has sexual health education including HIV prevention education at schools consisted in up to now ? The easiest way to find out is to look at how much and what adolescents are informed on.

As mentioned in Part 1, high school and middle school students are well aware that HIV cannot be transmitted through baths, toilets, eating utensils, or handshakes. On the other hand, information relevant to HIV testing and STDs has not been conveyed. This shows that sexual health education in schools has been biased, failing to provide information essential for sexual health protection.

One of my experiences illustrates well how little people are aware of the true situation. In 2003, I was invited to give a lecture at the closing meeting of the "Specially Designated Prefecture for the Promotion of AIDS Education", a program instituted by the Ministry of Education, Culture, Sports, Science and Technology, which was in its third (and final) year. I took this occasion to speak about the current situation of HIV, STDs, and elective abortions and included information pertinent to the prefecture the meeting took place in. Surprisingly all of the audience showed expressions of amazement and reacted equally "We had no idea about this situation in our prefecture !".

I myself was surprised at their reaction, wondering if this was indeed a specifically designated prefecture for AIDS education. Although people were enthusiastically involved in making red ribbons and memorial quilts and giving basic human rights education, they were actually not dealing with the issues regarding the prevalence of HIV, STDs, elective abortions or prevention. Even though the incidence of elective abortions and STDs had been on the rise in their prefecture, the people that were supposed to know about it did not.

I heard similar stories also in other regions. The importance of human rights aspects of HIV/AIDS goes without saying, but teaching these alone is insufficient. They need to be accompanied by programs that make young people understand that everybody is at risk. If we fail to do this, adolescents will keep facing a troubled future. Although the situation is considerably more urgent than before, there is still a lot of resistance to sexual health education.

A reason that is often mentioned in this aspect is that "parents are

against it". However, in a survey we conducted in 2001 in two local prefectures on teachers in charge of sexual health education at elementary and middle schools (approximately half of the schools in these prefectures participated in the survey), we found that most often fellow teachers were reported as the resisting factor. So, the source of the problem seems to also reside in the schools.

As for parents, only recently have their attitudes begun to change. A vast number of PTA meetings now deal with sexual issues of adolescents and often I am invited to give talks. Finally, in 2004, in collaboration with us, the Federation of All-Japan Senior High School Parent-Teachers' Associations decided to launch a national survey on 10,000 high school students, the first survey of its kind since its foundation I would like to pay my sincere respect for this bold decision of the Association to push through this survey. The results and the fact that parent organizations finally stood up to support sexual health education now find strong resonance in society.

Sexual health education without scientific evidence

A number of different attempts have previously been made in providing sexual health education. While I believe these efforts are of value, their weakness lay in the fact that they were introduced and practiced without scientific evaluation.

All sorts of "made in the West" implements have been imported into Japan, including peer education (Note: This refers to a type of education through friends and peers who supposedly share similar language and values.), self-determination, role play, life skills, and so forth. These are understandable enough as experiments, but we need to take differing socio-cultural backgrounds between the individualism praising West and more community-orientated Japan into account. As behavior is a socio-cultural phenomenon, whether an imported concept works in Japan or not must be verified within its socio-cultural context. Unfortunately, there is no evidence in Japan of such verification. As a consequence, implements with uncertain effectiveness are merely repeated without end.

Sometimes, education indifferent to evidence yields unanticipated results. Once, when I was asked to give a talk in an outlying prefecture designated for the promotion of AIDS education, a high school

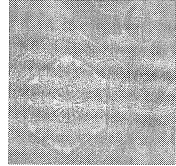
nurse showed me data and asked why I thought the number of students who accepted high school students to have sex increased after prevention classes. As it happened, that day, classes were open to the public, so I sat in one of them. It was a peer education class and a group of upper grade students were enthusiastically giving a lecture to their lower grade fellows. The essence of what they were teaching was generally "what AIDS is" and "use condoms for protection". Strangely they were using Tokyo dialect, presumably having been taught so by urban "experts". During the lecture, many students were leaning on their desks and looking around the room self-consciously, but near the end when one of the peer educators pulled out a condom from his back pocket and demonstrated how to put it on, everyone sat up straight and paid attention.

A behavioral theory, the "Precaution Adoption Process Model", posits that a caution message is only accepted when risk to oneself is acknowledged. The students in the class were unable to perceive HIV infection as an immediate personal problem. Thus, they were likely unable to recognize the condom as the prevention message, but instead took it as a message that sex at their age was normal.

If the education curriculum is not based on evidence it can lead to such unintended results.

Chapter 10

Towards preventive measures based on scientific evidence



The WYSH Project

Based on the accumulated data from our surveys on sexual behavior, we started a prevention project in 2003 supported by a grant from the Ministry of Health, Labour and Welfare. It is now entering its fifth year (as of 2006). Named the WYSH Project (pronounced "wish", short for Well-Being of Youth in Social Happiness), this project is currently designed for middle and high school students and was developed using a methodological approach we refer to as *socio-epidemiology*. It integrates epidemiology, qualitative methods, social marketing, behavioral science, and more.

The WYSH Project is based on in-depth studies of adolescents (the first audience) and concentrates not only on the adolescents themselves but also on the people around them (the second audience) as a target group. Going beyond the perspective of mere knowledge or technical education, the project distinguishes itself by attempting to place sexual health education within a framework of fundamental values that encompass dreams and aspirations. The SH—the social happiness—of the WYSH Project refers to just these dreams and aspirations, and we refer to the type of education in the WYSH Project as "hope education" and "life education".

Another important feature of this project is its focus on cooperation between related parties with clearly defined roles; or, in other words, the pursuit to implement "social divisions of labor". Looking

at previously installed sexual health education, we see many instances of so-called "role sharing" or "cooperation" in which education is in fact entirely left to external professionals such as local public health nurses or midwives, who once a year visit schools to give lectures to students. In these approaches educators are unfamiliar with the school specific problems of the students, so that the content and even the message itself may be inappropriate and inconsistent depending on the educator. In addition, there is no guarantee that such activities are sustainable.

In contrast to this, we would like to promote the idea of local medical professionals, school teachers and parents working closely together to assume the most suitable and unique role for each party. Establishing a division of labor will enable us to provide adolescents with a comprehensive and sustainable system of prevention support.

Tailored prevention support

Our project is divided into four distinct phases: diagnosis (survey), planning, intervention, and evaluation. Most important is, to become familiar with the target, the adolescents, in as much detail as possible. This is done in the initial diagnosis (survey) phase and holds the key to the success of the project. Similar to a medical exam, only an accurate diagnosis allows for proper treatment. Physicians who offer or administer treatment without diagnosis are by no means trustworthy.

In order to construct the most appropriate curriculum for sexual health education, we strive to understand the mindset (knowledge, attitudes, behavioral stages) of students at each school by conducting questionnaire surveys and group interviews. As I explained earlier, although questionnaires can usually give us an idea of the prevalence of certain knowledge, attitudes and behaviors, it is fairly difficult to obtain explanatory information as to *why* the participants feel that way and *why* they act the way they do. Moreover, questionnaire surveys cannot easily be conducted multiple times. Interviews thus fill the gaps where questionnaires fall short, allowing us to discern more deeply the truth behind the lives of students through their own accounts.

We then carefully design classes to accommodate knowledge

level, attitudes, values, and behavioral stages of the students at each school; in other words, rather than providing ready-made clothes imported from abroad, we try to provide the students at each school and even in each class with best fitting tailored clothes.

Implementing education without knowing the intricacies of the people equals prescribing treatment without diagnosis, which is potentially ineffective and can even be harmful (wake a sleeping lion).

Allowing for behavioral stages

As mentioned earlier, there are a surprising number of misconceptions among adolescents: male high school students who think that laxatives work as contraceptives; female high school students who believe that they will not become pregnant if the chemistry with the sexual partner is bad; and so on. The misconceptions are often well beyond the imagination of adults.

These misconceptions are often spread by word of mouth, so that we cannot leave them without remedy. Hence, we approach planning classes by first omitting what students already know, instead working to dispel the misconceptions uncovered in formative surveys or interviews. Doing so enables us to use class time more effectively.

It is also important to take the behavioral stages of the target adolescents into account (Figure 31). Neglecting them can turn appropriate measures awry or even lead to adverse consequences.

According to the Transtheoretical Model, behavioral stages can be largely classified into precontemplation, contemplation, action, and maintenance stages. (Note: In the original model, two further stages are defined, a preparation stage and a terminal stage.) Precontemplation is the stage in which one has yet to realize the risk to oneself. Contemplation stage is when the risk to oneself is realized but no preventive action is taken yet. The action stage refers to the stage when preventive action is initiated. Once this action is maintained this stage is called maintenance stage.

As an example, pamphlets for distribution to adolescents should provide different information content depending on their behavioral stage. Adolescents in the precontemplation stage are not aware that they are at risk, so they will find big, bulky pamphlets with a lot of

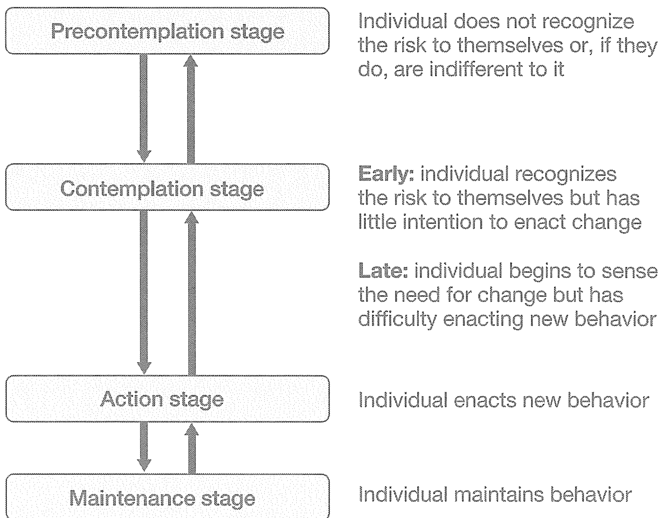


Fig.31 **Stages of Change Model**

Source: Prochaska and DiClemente model, modified by Andreasen, 1995

information annoying and throw them away. The taxpayer money is wasted to produce litter. Pamphlets distributed to adolescents in the precontemplation stage must therefore be limited to only essential information, substantiated by survey results and information that concerns their immediate environment. It should also be designed to fit the taste of adolescents, taking their preference in terms of color and format into consideration.

We emphasize again, that the most important point for adolescents in the precontemplation stage is to thoroughly convey that they, too, are at risk. In contrast, adolescents in the contemplation stage are already aware that they are at risk and should therefore be provided more detailed information.

Allowing for stages of development

As stages of development vary between middle and high school students as well as between grades, we must be careful not to push too much, especially in lower grade classes. Stages of development also

vary considerably between male and female students. It seems that gender difference has particularly increased in the last several years. In addition, even same grade classes at the same schools can be quite different in their developmental stage, depending on the year in which students have entered school. Schoolteachers probably have often experienced this fact.

We need to ensure prevention classes take such developmental stages into consideration. Social norms, too, can be surprisingly different depending on the region, which in turn leads to considerable differences in attitudes among adolescents of different areas. Hence, we need to give due consideration to these differences as well.

Each time, a class has been implemented, the WYSH Project conducts a survey several months later. This procedure equals evaluation of treatment effects with diagnosis and tests. The surveys thereby determine if the education has been effective in changing and improving knowledge, attitudes and behaviors. The project uses positive results to devise even better classes and uses the absence of positive results to improve the program.

The WYSH message (1)—"Everyone is at risk"

The WYSH Project tries to convey two basic messages. The first message is that "Anyone who is sexually active (and anyone who will be in the future) is at risk for contracting STDs and HIV, and for experiencing an unplanned pregnancy". This message is referred to as "risk personalization".

If we cannot convey this point, adolescents will not become aware of the necessity to protect themselves. This awareness is not raised by supplying information from other countries around the globe. No matter how much we provide them with such kind of information, they will still believe that they themselves are unconcerned. To become alert, they need to receive personalized information.

Figure 32 is a part of a survey on high school students conducted by the Federation of All-Japan Senior High School Parent Teachers' Associations in 2004. It shows that even though approximately 80% of the students know that the number of teenage abortions is increasing throughout Japan, only around 20% are aware that it is increasing in their own area. Under such circumstances, realization for the ne-

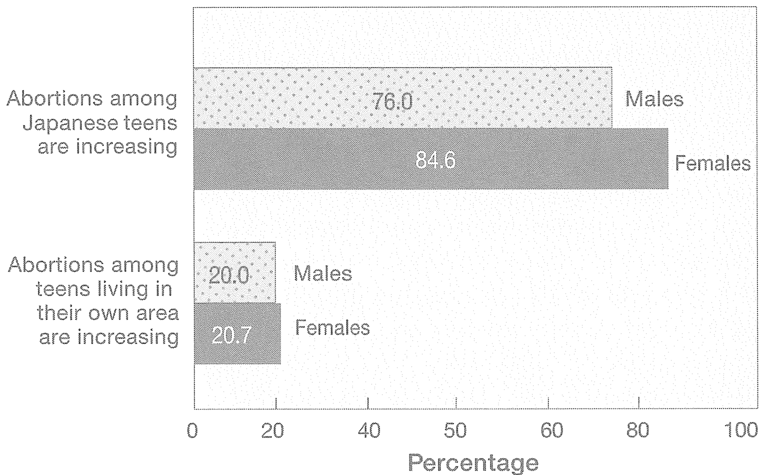


Fig.32 Perception of elective abortions among high school students
Source:2004 National Survey by the Federation of All-Japan Senior High School Parent-Teachers' Associations

cessity of a prevention program is prohibited.

We therefore first collect and provide data on the areas in which the target adolescents live; in other words, we inform them on teenage abortions and STDs in their own region. If in an area HIV infection is prevalent, we also provide local information on HIV/AIDS. We then explain the concept of sexual networks in an easily understandable way. We make sure adolescents understand that depending on the sexual behavior of their partner they risk being integrated into a sexual network without knowing. In this way, we also dismantle the misbelieve that "a steady partner is safe".

The WYSH message (2) —"Conscientious relationships"

"Take the time to build conscientious relationships". This is the main message we want to convey in our projects.

Intense peer pressure spurs adolescents towards sexual activity. In interviews, adolescents who were not sexually active referred to their inexperience with embarrassment. They are in a hurry without reason.

We try to communicate our second message with videos that display photos expressing the beauty of human connectedness over soft but solemn music. In these days where everything and everyone is pressed for time, we would like to convey the importance of pure joy that is born through building conscientious relationships, instead of carnal pleasure. In this way, we hope to encourage adolescents by natural means to reflect before their first sexual encounter and by doing so reduce the number of people they have sex with. We put particular emphasis on this message in situations where sexually active individuals are actually small in proportion, such as at middle schools and lower grades of high school. We are also careful about the language we choose in such cases, so that students do not unduly get stimulated.

We deliver the same message—"Take the time to build conscientious relationships"—at exceptionally sexually active schools as well, but strongly emphasizing the risk of infection and pregnancy and also provide information on protection and testing. Here again, we design classes specifically tailored to these schools based on the results of formative research by questionnaires and interviews.

To avoid misunderstanding, I remark that we are not trying to communicate a negative message about sex. To forbid sex appeals to the idea that "prohibited behavior = deviant behavior", which ultimately leads to abandoning those who cannot conform.

The message we are sending out is a positive message, regardless of sexual activity. The aim is to place sex within the context of enriching relationships rather than shallow ones. It is a message of encouragement for young people who care about others, but do not want get sexually involved, as well as for sexually active adolescents fighting with their feelings.

After attending our classes, many students wrote about their impressions: "I'm happy to see that my decision to wait was in no way a lagging behind or uncool". "I realized that the reason, the guy I was together with didn't ask to have sex with me, was not because I am unattractive as a woman but because he valued our relationship". Sexually active adolescents also shared their thoughts. "I thought that having sex was a routine thing to do, but I decided to take a break from it until graduating from high school". "I think from now on I'm only going to meet with people I genuinely care about".

The WYSH Project does not demonstrate how to use a condom using real condoms and dildos. It rather concentrates on enhancing the risk perception of the students, mentioning the condom only to point out its effectiveness for protection. This thought is based on the findings of the following study.

We conducted a large-scale study in 2003 to compare the effect of education on condom use between schools, which received risk personalization education including condom demonstration and those which received risk personalization education only. The study showed that both increased the HIV/STD-related knowledge, changed attitude towards adolescent sex and increased condom use to almost exactly the same extent. Since then, we were able to confirm this fact repeatedly, showing that the education that thoroughly emphasizes risk personalization can significantly improve knowledge, attitude, and behavior without condom demonstrations.

This finding is important as it spares younger adolescents who balk at vivid terminology. Considering that risk personalization education with condom demonstration has the same effectiveness as education without, it is reasonable to conduct classes that can be received by a broader audience, in this way, offering support to even more adolescents. Consequently, this approach has the considerable merit to allow more schools to implement WYSH education and promote its widespread dissemination.

Social divisions of labor (1)—The role of schools

As already explained earlier, the WYSH Project is designed to conduct prevention education through social divisions of labor. Here, I would like to elaborate this idea a little more (Figure 33).

Let us first look at the role of schools. Every school has sexually active, high-risk adolescents with rich sexual experience, but they are in fact small in proportion. Although about 30-40% of the students have sexual experience by their third year of high school, the majority is still inactive.

However, the nature of schools is oriented towards mass education, where all students are educated under the same umbrella. Besides, it would be impossible to segregate sexually active and inactive students into separate classes. Hence, it is necessary to provide

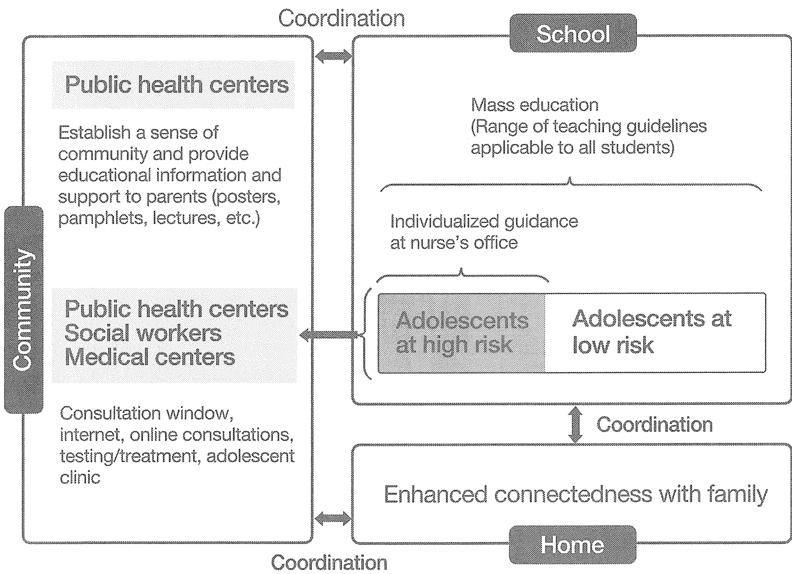


Fig.33 **Social divisions of labor model in the WYSH Project**

information that commonly applies to all students.

If classes are designed to target only sexually active students, as is frequently the case, sexually inactive students are likely to stop paying attention, thus being robbed of an opportunity to gain information crucial for their future. Moreover, as in the peer education example we gave earlier, there is a chance that adolescents may mistake the prevention message as an all right sign for sexual activity.

Yet, merely providing information commonly applicable to all students is insufficient, too. Students at higher risk than others are in need of more detailed preventive information and support and should not be left aside.

It is here, we see the importance of the school nurse's office. Past studies showed that many high-risk students visit the nurse's office. It could therefore be used to great advantage, as a place to provide information and individualized guidance.

Since the school nurses are already too busy to fulfill this role alone, a two-person system may be needed to accommodate such individualized guidance and to create an appropriate environment.

Social divisions of labor (2) —The role of public health centers

The school nurse's office is not easily accessible for all high-risk students. This leaves us with the aspects of adolescents' health that cannot be covered by the school nurse. We believe, that this is the point where public health centers have to take over.

More specifically, this involves creating an environment comfortable for adolescents by enhancing consultation and testing services, including online consultation services, already available at public health centers. Informing students of these services at school will give them the possibility to turn to them when they are in need. Public health centers will also be able to provide support for adolescents who do not attend school any more.

Public health centers in one district participated in the WYSH Project and distributed business card-sized cards to adolescents with information on consultation and testing. As a result of these efforts, the number of consultations in public health centers in that district increased, as did the number of adolescents who came for HIV tests.

In our model, the role of public health centers is also to organize educational activities within their area using posters and pamphlets as well as to hold lectures and provide class assistance for schools in the area.

The WYSH Project created posters using information and dialects specific to the region and incorporated characters popular with high school students for the district mentioned above. A group of public health practitioners had the idea to increase exposure by producing small A3 sized posters, rather than the conventional sized ones, so that they could be put up in more places for a longer period of time. Indeed, as a result, a substantially greater number of posters were accepted for display in their area. Together with the WYSH pamphlets that will be discussed in the next chapter (Chapter 11), the group put up posters in many places, including convenience stores, *karaoke* establishments, and waiting rooms of public transportation facilities.

We want to point out, that these posters were not mailed, but distributed by the public health practitioners involved in the WYSH Project. They walked from door to door, explaining the significance of

the project and asking for permission to put up posters. They reported that this approach woke genuine interest of local residents in the project and helped them expand understanding and cooperation for their activities. This means that public health centers will be met with favorable response from local residents once they get involved more publicly rather than only in their offices.

Posters and pamphlets were produced using the same designs, in order to evoke the messages in the pamphlets when coming across the posters (in marketing this is referred to as a "prompting effect").

With respect to schools, assistance of public health centers should be supportive rather than active. In other words, the role of public health centers in classes should be limited to providing the latest epidemiological and medical information as well as information on the situation in the particular area. Even if school visits are scheduled, they should be limited to advising classes rather than leading them. The same applies to medical professionals, since they too, are unfamiliar with the circumstances of the particular school. Moreover, sustainability of such visits from external institutions is questionable. The schools themselves have to solve their own affairs, rather than to depend on outsiders.

Local medical centers can also provide important assistance. Adolescent clinics that make it easy for adolescents to receive consultation or examination can serve as effective reception point for children who have nowhere to turn to. In one city, an obstetrician-gynecologist set up a network of adolescent clinics. In other places, social workers help provide counseling services.

Part of our biggest prospects for prevention lies in building local networks to support adolescents and to reestablish part of the once lost human connectedness within communities.

Social divisions of labor (3)—The role of parents

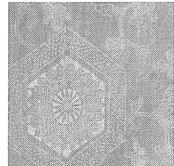
Although we are just in the process of developing methods for enhancing the role of parents, some public health centers have already been working since 2004 with us on improving lecture-based activities for parents. As a tool for providing information during these activities, public health centers use recently developed pamphlets oriented towards parents.

These pamphlets are designed exactly like the ones for adolescents described later on, but they are larger in size, printed in a larger font, and more substantive in terms of information. By distributing "parents pamphlets" together with pamphlets for adolescents, we aim to create exchange opportunities between parents and children and to give parents who have not received sexual health education the confidence to relate to their children.

Encouraging is, that in 2004, the Federation of All-Japan Senior High School Parent-Teachers' Associations, for the first time, conducted a national sex behavior survey. This showed that parents had developed advanced awareness of sexual issues. We can thus anticipate further progress with regard to prevention.

Chapter 11

WYSH Project classes



Class organization

Prevention classes are part of the WYSH Project. The amount of time, schools usually can allocate for such additional education is at most one or two class units (50 or 100 minutes) per year. This requires careful planning, in order to achieve high efficiency in a short time.

When planning each class, we spend several months pondering over the results of formative studies. Most classes are conducted as follows:

1. Introductory quiz game in which groups compete (true or false or multiple-choice).
2. PowerPoint and video-assisted lecture (aims to raise awareness of abortion risk and chlamydia and to dispel common misconceptions on prevention)
3. Group work: discussion and presentation of a particular topic
4. Video on the importance of human connectedness
5. Students write about their impressions of the class
6. Dance performance to a popular song on the irreplaceable value of oneself (optional)
7. Message from the teacher (conveys his or her thoughts in a serious manner)
8. Distribution of WYSH pamphlets

The game in the beginning is used to create a comfortable atmosphere. Failure to do so at this point makes it difficult to communicate during the rest of the class. For the game to be appropriate for the particular audience, its contents are always adapted.

After the game, the teacher gives a lecture using PowerPoint-based teaching material, which informs students that the incidence of STDs and abortions is increasing in their area, that STDs can lead to serious health issues, and that sexual networks potentially and unknowingly expose them to the risk of infection.

In the course of the lecture, the teacher uses two different videos to explain the reality and significance of abortions and the consequences STDs may have on health. (Note: For middle school students, the video on abortions is excluded.)

We use computer graphics to develop these videos, trying to make them easy to understand while still leaving impact. The videos restrict the scope of STDs to chlamydia. HIV is mentioned only with respect to its prevalence and the fact that any STD infection enhances the susceptibility to HIV infection. According to the Consumer Information Process Model, the most efficient strategy is to give a clear message by avoiding giving too much information at once. Students can find additional information on a mobile phone homepage set up by the WYSH Project.

Students have usually become aware of their own risk by the end of the videos, so we then move on to a PowerPoint-based lecture on prevention. Focusing mainly on dispelling misconceptions revealed in previous surveys (e.g. that the contraceptive pill can be used to prevent HIV and STDs), we acquaint students with the concept of sexual networks and outline the need for condom use. As mentioned above, we do not show actual condoms or demonstrate how to use them during the lecture.

The first slides of the PowerPoint presentation include pictures of the school. This gives the message a personal note so that the presentation is received with concentration.

After the lecture, the students are engaged in group work, in which a particular topic (e.g. prevention methods, ideal love, personal aspirations; topics change depending on the target) is discussed and presented. The aim of this exercise is not, to urge the students to arrive at given conclusions but to provide a setting, in which they can

contemplate on the topic of prevention, explain their views, and affirm and balance their thoughts through interaction with other students. The crucial point is to appeal to the adolescents' capacity for self-discovery.

After the group work we watch a video together, which intends to convey the importance of human connectedness. We then ask students to write about their impressions on the class and afterwards invite them to dance to a popular song, which emphasizes that every individual person is wonderful. We believe that self-esteem is the basis for human connectedness. The class ends with a teacher expressing his or her view on the importance of "taking time to build conscientious relationships". According to the students' essays and evaluations of the project, most of the students were sensitive enough to feel our message and make reasonable decisions about their personal life.

After class, we distribute business card-sized pamphlets (WYSH pamphlets), which incorporate the content of the PowerPoint lecture so that students can later review the material. The pamphlets consist in approximately a dozen pages and use concise terminology using dialects in part and are of colorful design. The design, based on the results of focus group interviews, incorporates sightseeing spots or products famous in each area to enhance the locality or cute animals popular with adolescents (Figure 34).

The adolescents accept these pamphlets very well. Rather than throwing the pamphlet away, many adolescents keep it, read it at least once, and often show it to friends and parents. These trends can particularly be seen with female students (Figure 35).

Effectiveness of the WYSH Project —The lion continues to sleep

Schools, which had offered WYSH prevention classes, experienced remarkable positive effects. Evaluation studies show that 3 months after the class, the knowledge of the students on prevention had risen to a surprisingly high level, their attitudinal acceptance of having sex had declined, and the number of students using protection (condoms) had increased by 10% to 20% (Figure 36).

Our project did not lead to the "waking a sleeping lion" phenome-

Fig.34 **Examples of WYSH pamphlets**

non, which educators and parents had been concerned about the most (Figure 36). This confirms that a prevention curriculum grounded on sufficient preparatory research does not stimulate sexual behavior. We believe that sexual health education currently conducted throughout Japan needs to be based on such investigations of the current socio-cultural circumstances of the adolescents and evidence of their effectiveness.

In schools at which WYSH classes had been conducted for two continuous years (concerning approximately 4,000 students in total), the behavior of second-year high school students showed notable changes. Even though the rate of sexual activity of female students has slightly increased, it has not among male students. The number of both male and female students who accept having sex at the high school level has decreased slightly. The percentage of female students who have only one sexual partner has increased by 5%. The

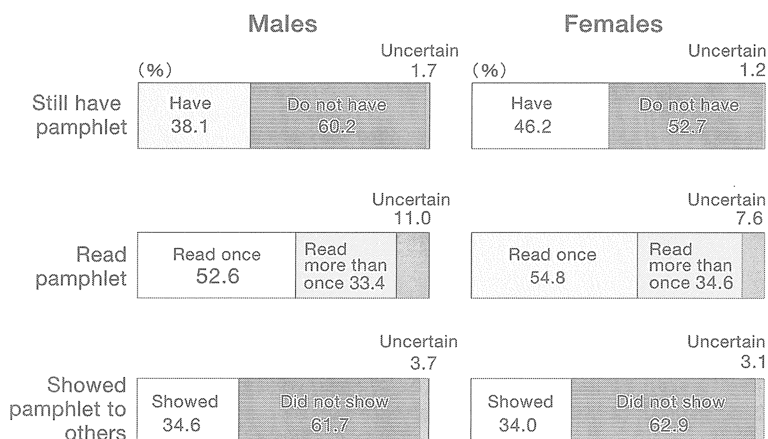


Fig.35 Evaluation of WYSH pamphlets (3 months after)

Source:2002 WYSH Project for High School Students in Outlying Prefectures, Ministry of Health and Welfare Study Group on HIV Socio-epidemiology

Subjects / Evaluation items	High school students 2002 (n=7,935) 2003 (n=5,629) 2004 (n=6,422)	Middle school students 2003 (n=7,089) 2004 (n=12,615)
Knowledge of STDs, HIV, and abortions within the own area	↑ ↑ (+approx.20%)	↑ ↑ ↑ (+approx.30%)
Awareness that they can be infected by an STD	↑ (+approx. 10%)	↑ ↑ (+approx.20%)
Attitudes accepting high school students having sex	↘ (-approx.5%)	↘ (-approx.5%)
Condom use among sexually active individuals	↑ (+approx.10%)	↑ ↑ (+approx.20%)
Proportion of students who have sexual experience	→ (did not accelerate)	→ (did not accelerate)

Fig.36 Effectiveness of the WYSH Project (3 months after, as compared to the group that did not take WYSH classes)

Source:2002, 2003, and 2004 WYSH Project for Middle and High School Students in Outlying Prefectures, Ministry of Health, Labour and Welfare Study Group on HIV Socio-epidemiology

percentage of people who responded that they used condoms every time has increased by over 20%, climbing from 18% in the first year and to 39% percent in the second year of the project.

Presumably revealing the combined effect of the posters, pamphlets and the classes, the data convinces us that sexual health education can promote prevention very effectively when thoroughly organized.

We also observed that regional activities organized by public health centers have led to an increase of awareness among high school students, proportionally to the number of posters and pamphlets distributed per 10,000 of population. This shows that activism on the part of public health centers can make a substantial difference (Figure 37). In addition, despite unavailable testing opportunities in the evenings or rapid testing, some public health centers reported that the number of visitors asking for HIV testing and consultation had increased significantly, especially among young women.

The WYSH Project thus demonstrates its effectiveness through these positive results. Nevertheless, since the project is still young, it has yet to show whether it can delay adolescents' first sexual experience; one of the project's ultimate goals. However for that, it is essential to initiate the transformation of regional and social environments, as well as the establishment of new social norms since intense sexual stimulation from society and peer pressure are still unchanged. Continued social cooperation and an ongoing commitment to walk a long road will be necessary before we will see the results our project ultimately aims to achieve.

Increasing support for the WYSH Project

Possible options for intensifying prevention supports for adolescents include expanding training projects for school teachers, increasing the number of nurses at school, and enhancing public health centers activities to provide HIV/STD testing and consultation services. The most important thing, however, is the coordination between the governmental institutions responsible for adolescent's health and education, respectively. Achieving this coordination on a central and local level holds the key to future prevention.

Although the WYSH Project has started just as a small scale

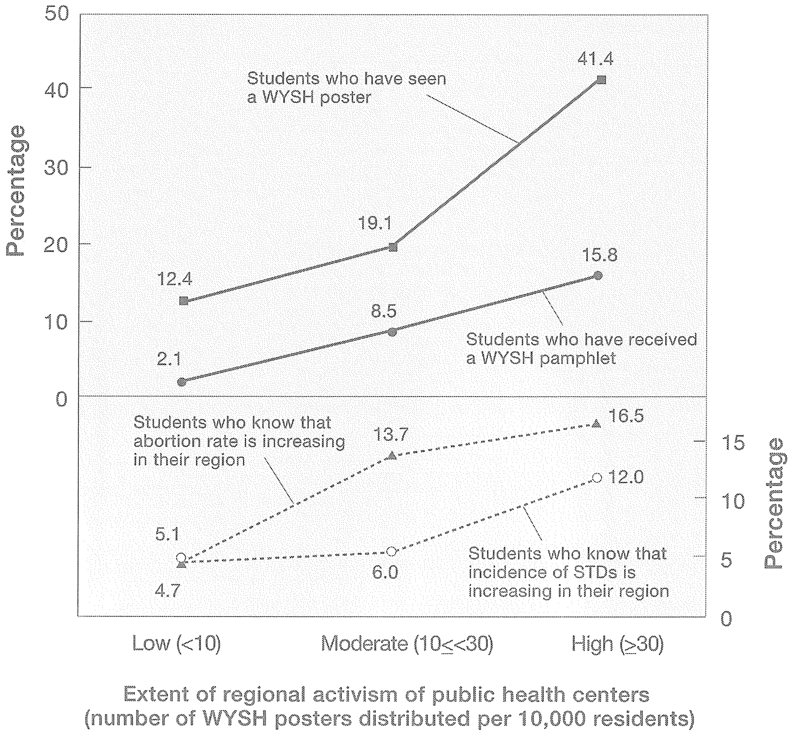


Fig.37 Extent of regional activism of public health centers and its impact on high school students

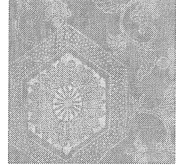
Source:2002 WYSH Project for High School Students in Outlying Prefecture A, Ministry of Health, Labour and Welfare Study Group on HIV Socio-epidemiology

training project for school teachers in 2003, it soon won official support by the Ministry of Health, Labour and Welfare, the Ministry of Education, Culture, Sports, Science and Technology and numerous local education boards and public health centers. This is the first sexual health education project in Japan that has gained support from governmental agencies of both health and education and on both central and local levels. Along with such progress in governmental support, the number of schools participating in the central training course increased. While teachers from 45 middle schools and 29 high schools representing 17 prefectures participated in the fiscal year 2004, in the fiscal 2006, we counted 88 middle schools and 52 high

schools representing 26 prefectures. Schools that participated in the training and conducted classes using material from the WYSH Project achieved positive results, demonstrating that the class methodology we designed is suitable for passing on through training.

Chapter 12

Hopes for prevention



Adult commitment is the key

While it is of course important to continue engaging adolescents directly in the prevention programs, it is no less essential to expand understanding among the people who surround adolescents and encourage them to take part in prevention support through the "social divisions of labor". In the very early stages of the project we, too, concentrated our efforts directly on engaging adolescents through sexual health education classes but we soon noticed that considerable misapprehension and misperception prevailed among the members of the local education boards, administrators of middle and high schools, as well as among schoolteachers and parents.

This apprehension and misperception created a "wall" that kept us from continuing our work. We needed to pass this "wall" in order to reach those we wanted to convey our message to, but no matter how much scientific data we accumulated, we were told that the data was biased and that the students were not serious when answering the questionnaires and interviews. When we pointed out the necessity of surveys, we were often turned down with words such as "We don't need them here" and "It will stir up the students".

Although these circumstances continue to exist even now, it seems as if recently the tide is turning little by little. The nationwide survey of more than 10,000 high school students conducted by the Federation of All-Japan Senior High School Parent-Teachers' Asso-

ciations is symbolic here. The understanding for the WYSH Project among teachers has grown, the boards of education have grown, and some prefectures have begun to adopt the WYSH model as a model for prevention education. While busily conducting surveys, developing speeches, prevention and training courses, the door had already started to inch open.

There are countless schoolteachers, and members of local education boards and the PTA who are really fond of adolescents and enthusiastic to provide prevention support. These people are the key to propelling the momentum and achieving greater understanding and cooperation.

From our experience thus far, the behavior and awareness of adolescents can be changed in areas where adults are really committed.

The radiant faces of the adolescents

I would like to close this final chapter by sharing the experiences in model classes conducted at middle school C in Chiba Prefecture and middle school K in Hiroshima Prefecture. Over the last three years, middle school C has served as a model school for the WYSH Project, while middle school K has joined the project just recently. We had the opportunity to conduct WYSH education classes at these schools thanks to the strong support and cooperation on the part of their school principals, vice-principals, and teachers.

With regard to these experiences, I am most inclined to think of our suggestions as the "seed" and these schools as the "soil". There is a strong sense of human connectedness between teachers and students at these schools. I feel that it was due to this "soil", that our project was so well received and we were able to deliver our messages in the best possible way. At both schools unforgettable incidents occurred, in which the WYSH Project led students, who were on the verge to truancy, to come back to school.

Personally, I am fond of holding classes. Whether carried out over one or two class periods, we have designed the classes trying to take full advantage of the class time set aside by schools. In middle school C and K mentioned above, we first swept the rooms, decorated the desks with flowers and white tablecloths, and then laid out tiny stuffed animals. A special message deserves a special setting.

Principal Yuji Imada of middle school K even decorated each table with tablecloths he had made himself.

At the beginning of the class, students entered the room and took their seats with looks of embarrassment at the somewhat different atmosphere of their classroom. Students I had interviewed previously smiled and showed the peace sign with their fingers, while others, who met me middle-aged woman and the other staff members for the first time sat and flashed stiff glances at the recording camera and microphone as if to say "What exactly is going on here ?". It was now time to play the ball. I then introduced myself, followed by the rest of the staff.

First, groups of students competed in a quiz game. The quiz consisted in true or false questions, for which the students used cards with T (for true) or F (for false) to answer, or in multiple-choice questions, to which the correct answer was given by cards with the number of the chosen option. The students enjoyed the game and the classroom filled with a relaxed atmosphere.

Subsequently, we informed on STDs using a PowerPoint presentation and a video. Although confronted with a wave of serious material, the students concentrated intently. They listened wholeheartedly and with astonished expressions to the explanation of sexual networks. The students seemed to perceive it as a personal issue.

We then moved on to group work. The individual groups discussed and presented a given topic. At middle school T, the boys were asked to consider methods of prevention (Figure 38), while the girls were asked to create a love story. Here, each group was asked to think of scenarios, which describe the type of person they wished to date in specific situations we presented to them. At middle school K, mixed groups of boys and girls were given the topic of "my dreams". We asked the students to depict their future visions of love, work, and home. At this point, everybody started to smile. The students were excited and the group work progresses seemingly very entertaining. Then, when the time for the presentations came, we were surprised to see everybody raise their hand to present first. All of the students look genuinely thrilled to present. Some students poured their souls into comical performance of their created story, while another group only agreed on their roles and gave an impromptu performance. The student who played the part of the female lover in this

Fig.38 A scene from class

group delivered her lines with a bashful blush. Waves of laughter swept through the entire classroom. In "my dreams", one fun and lively presentation followed the other, showing the students' visions of love, future careers as farmers and beauticians, dreams of families big enough to form a baseball team or having a posh house (Figure 39).

After the presentations we spent a few minutes passing around outtakes and photos from "*Sekachu*" (Crying Out Love In the Center of the World; also known as Socrates in Love), which we found to be popular among adolescents in prior interviews. I was touched to see the kids looking at images of the happy-looking couple with sparkling and teary eyes.

We later asked them to write down their impressions and dance to a video which my younger sister (Ryoko Ono, director of Studio NOW) choreographed to SMAP's "*Sekai ni hitotsu dake no hana*" (A Flower Unlike Any Other in the World). We believe that everybody has something wonderful. As the Japanese poet Misuzu Kaneko once

Fig.39 A scene from class

said, "We're all different and all wonderful".

Everybody glowed with radiant smiles. I well up with sincere delight whenever I get the chance to see such bright smiles. I wish that even though we only had one class together, that they will remember it for the rest of their lives ... Seeing the kids' faces, I know I will never stop giving these classes. At the very end, I gave them my own message encouraging them to live each day conscientiously and dignified.

The students at middle school K expressed their thanks with applause at the end of class.

I will never forget the striking words of Vice-Principal Yukio Tsukamoto from middle school C when he saw the recorded video of the class for the first time.

"Kids are beautiful, aren't they."

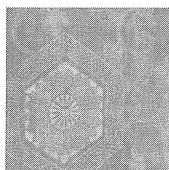
The smile of the girl that appears on this page is one of the smiles

Fig.40 A smile from the children I love

I appreciate so much (Figure 40). At the end of my lectures, I always make sure that everybody sees one of these much-loved smiles because it is these smiles that give us hope for the future of Japan.

I recently received a call from Principal Imada of middle school K. He told me that the students who had taken our WYSH class had given a performance at a school festival using my message as their topic ("live with dignity"). Meanwhile, letters from some girls at that same middle school have arrived. Along with some questions they wanted to ask, they were letters of gratefulness. Another treasure for my heart.

Afterword for the Japanese edition



Already five years have passed since we decided to write this book. At that time, our surveys of sexual behavior were eliciting enormous public response, so I naturally thought it necessary to write a book about our findings and I have cherished that idea ever since. No matter how much time passed, however, the prospect of completing the manuscript never really materialized. This was partly due to my indolence and awkwardness as a writer but also due to continuous substantial changes in our work.

When we planned the book, our surveys of sexual behavior consisted in collected data on not more than approximately 15,000 people, but now data on not fewer than 150,000 people, mainly high school students is available. We were uncertain about the right time of publication out of concern that the new data, which continued to pile up, would make the book seem out of date when it would just have been completed.

Moreover, our understanding of the phenomenon of sexual behavior changed over the years. In the beginning, we could only be surprised about the facts that emerged from the surveys we conducted. Then, simultaneously to the surveys, we started prevention work, but only several years later did we start to suspect that it must be social factors that underlie the current situation of the youth. I could not bring myself to write while my own thoughts had yet to settle. I also wanted to avoid taking a critical approach without offering a possible solution.

Nevertheless, at some point, I could no longer postpone the matter. More and more people called for publication. As our work became more widely known to the public through lectures and press coverage, the demand for a comprehensive, written work increased.

Luckily, our work had just reached a tentative stage (halfway up the mountain) and publication seemed feasible.

For one thing, the huge amount of data obtained from the questionnaire surveys and the many accounts from adolescents we had gathered in interviews, gave us the feeling that we had captured the situation of adolescent sexual behavior. We found a remarkable degree of similarity in adolescent sexual behavior across the entire spectrum of surveys.

Second, we had arrived at a reasonable understanding of the social factors behind this sexual behavior. At first, the impact of pornographic information attracted our attention the most, but while accumulating surveys, interviews, and experience, we realized that the decline of human connectedness in society (family, community, school, and friends) was a significant factor, too.

Third, we started to see hope for prevention as we scientifically evaluated the effectiveness of the prevention model (WYSH model) we were developing. We were also able to verify repeatedly its preventive effects, even without condom demonstrations. It did not wake a sleeping lion. Rather than leaving prevention education to someone else, teachers from many schools can now implement it themselves.

In order to address preventive measures, we developed the idea of "social divisions of labor". Its intention is to build a safety net of support for adolescents by clearly defining the roles of people at schools, public health centers, medical facilities, as well as the role of families. The aim is to restore human connectedness, while at the same time sorting out the confusion in the roles or responsibilities in sexual health education at schools.

We decided to proceed with publication for the above reasons. However, I cannot say that I am satisfied with my abilities as an author and whether I have addressed the issues adequately. In addition, the data will continue to change every year. The national survey of 10,000 high school students, which we conducted in 2004 in collaboration with the Federation of All-Japan Senior High School Parent-Teachers' Associations, drew enormous public attention. The data

of this survey support the results of the surveys we present in this book to such an extent that we actually considered using it in place of our previous data, but this would have meant rewriting large portions of the text and delaying the date of publication. As a result, we decided to save this for another opportunity and present part of it in this book.

Considering the present circumstances of adolescent sexual behavior and the Asian HIV epidemic looming before our very own door, it is time to stop writing and use the accumulated data and our ideas to appeal to the public. Nothing could make me happier than for this book to make a difference to contemporary Japan and to contribute even a single drop to the debate and actions necessary in order to resolve the issues.

I would like to mention, that although I gave priority to understandability and simple representation of the data, it is entirely corroborated by statistical analysis.

Finally, I would like to express my gratefulness for all the encouragement I received from Dr. Susan Kippax, whom I respect most as a scholar and as a woman. Dr. Kippax is the Director of the Australian National Centre in HIV Social Research and a sociologist famous worldwide and is renowned for her important role in successful HIV prevention in Australia. I once spent a month studying at her institute. I remember her saying then that "Prevention takes up a lot of energy". As I had just become involved in prevention research at that time, I honestly did not understand the meaning behind those words. However, having carried the torch of prevention activism for five years now, I have learned in painful detail what her words were all about.

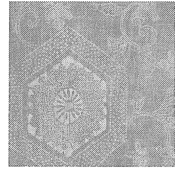
Society must change to make adolescents change, and this requires a vast supply of energy. One needs energy to overcome the whole range of misunderstandings and prejudices one faces with prevention. Additionally, being a woman asks a great amount of extra energy in this male-dominant society.

Nevertheless, it is also true that I have gained a lot of supporters over the years. With a timely "You can do it", Dr. Kippax always encourages me when I feel myself wearing thin. Little by little, we have also gained heartfelt support from teachers who participated in the WYSH Project and the members of local education boards and

parents who had a chance to know about our project. Simply thinking of the faces of all the kids and all those who supported me encourages me to continue working hard in the future.

In a final note, I would like to thank Professor Masahiro Kihara, who is both my family and mentor. I have conducted all of my work guided by his research strategies that seem to see ten years into the future. He urged me to write this book, continued to encourage me when I was on the verge of giving up, and constantly gave me important advice on the key points of the book. I have no doubt that without such support this book would simply not exist.

January 14 (birthday), 2006
Masako Ono-Kihara



Appendix

List of questionnaire surveys conducted by the author

1. National Survey on Sexual Behavior

"National Survey of HIV/STD-Related Knowledge, Sexual Attitudes and Sexual Behavior of Japanese" as the official name, this study was conducted by a research group (Study Group on HIV/AIDS Epidemiology) supported by a FY1999 research grant of the Ministry of Health. This is the first scientific study on sexual behavior in Japan conducted on a national scale. We conducted this survey over a one-month period from June to July 1999. Objective was to investigate the Japanese society's predominant sexual behavior and perception towards the low-dose contraceptive pill. The survey targeted a sample of 5,000 people between 18 and 59 years of age, who were selected from the resident register or the list of registered voters. We collected data from 3,562 participants, amounting to a response rate of 71%. This equals the response rates of national sexual behavior surveys conducted in Europe and the United States around 1990. Over 200 canvassers, who were trained in workshops, went from door to door asking residents to fill out self-administered questionnaires.

2. Nationwide Survey of National University Students

"Study on HIV/STD-Related Knowledge, Sexual Attitudes and Sexual Behavior of University Students" as the official name, this study

was conducted by a research group (Study Group on HIV/AIDS Epidemiology) supported with a FY 1999 research grant of the Ministry of Health. We conducted this survey from April to June 1999 with the purpose of studying university students' sexual behavior and their perceptions towards the low-dose contraceptive pill. This is the first survey of its kind in Japan among university students on a national scale. In cooperation with the National Association of Health Centers of National Universities, we invited the health centers of all 96 national universities throughout the country to join the survey, achieving participation of 26 universities (27%). We only focused on national universities since there is no national association of health centers of private universities. The number of participants was 13,645, representing 58% of all students from all participating universities. Participating universities were dispersed throughout 21 prefectures (44.7% of all prefectures) and ranged from Hokkaido in the north to Kagoshima in the south.

3. Survey of Couples in the Tokyo Metropolitan Area

"Survey of Lifestyles, HIV/STD-Related Knowledge and Behavior of Teenage Couples in the Tokyo Metropolitan Area" as the official name, this study was conducted by a research group (Study Group on HIV/AIDS Epidemiology) supported by a FY 2000 research grant of the Ministry of Health. We conducted this survey during a one-week period from January to February 2001 in the streets of Ikebukuro and Shibuya in downtown Tokyo, with the objective of investigating the state of sexual networks among adolescents. We approached couples walking in the streets, targeting couples with teenage females. 301 couples of the 569 couples who met the selection criteria and whom we addressed, participated. The couples were given self-administered questionnaires and were asked to fill them out, each of them individually.

4. 2001 Survey of High School Students in Outlying Prefectures

"Survey of Sexual Attitudes and Sexual Behavior of High School Students in Outlying Prefectures" as the official name, this study was conducted by a research group (Socio-epidemiological Study Group on Monitoring and Prevention of HIV/AIDS) supported by a FY2001 research grant of the Ministry of Health, Labour and Welfare. This

was the first large-scale survey of sexual behavior among high school students in outlying prefectures in Japan. A complete census of all schools in Prefectures A and B which wanted to participate was conducted. In Prefecture A, we conducted the survey from February to March 2001, eliciting the participation of 4,942 male and female second-year high school students from 31 full-time public, municipal, and national high schools (36% response rate). In Prefecture B, we conducted the survey from October to December 2001, eliciting the participation of 6,193 male and female second year high school students from 38 out of 124 schools (31% response rate).

5. Survey of Attitudes among Parents, Adolescents and Teachers
"Survey of the Differences in Knowledge and Attitudes Among Parents, Adolescents and Teachers" as the official name, this study was conducted by a research group (Socio-epidemiological Study Group on Monitoring and Prevention of HIV/AIDS) supported by a FY2001 research grant of the Ministry of Health, Labour and Welfare. The objective of this study was to examine attitude differences between parents, teachers, and adolescents. We conducted this survey in Prefecture B from October to December 2001, concurrently with the 2001 Survey of High School Students in Outlying Prefectures, targeting parents and teachers partly from the same high schools. We asked students to take questionnaires home to their parents and then return them to us. We obtained responses from 656 parents (19%) and 738 teachers (56%).

6. Surveys on the State of Sexual Health Education
This study was conducted by a research group (Socio-epidemiological Study Group on Monitoring and Prevention of HIV/AIDS) supported by a FY2001 research grant of the Ministry of Health, Labour and Welfare. We conducted this survey in Prefecture A from January to May 2002 and in Prefecture B in November 2001 with the objective of examining the content and timing of sexual health education and HIV/AIDS education. We mailed questionnaires to the school nurses of all elementary, middle, and high schools in each prefecture, asking them to consult with other teachers and respond in a representative way. 322 schools (44%) in Prefecture A and 657 schools (63%) in Prefecture B participated.

7. 2002 Survey of Sexual Behavior among High School Students in Outlying Prefectures

This study was conducted by a research group (Socio-epidemiological Study Group on Monitoring and Prevention of HIV/AIDS) supported by a FY2002 research grant of the Ministry of Health, Labour and Welfare. We conducted this survey in October 2002 as a pretest for the evaluation of effectiveness of prevention education provided by the WYSH Project. It targeted all second-year high school students in Prefecture A that wished to participate in the project. 6,708 male and female second-year high school students from 44 out of 91 (48%) schools in the prefecture participated.

8. 2003 Survey of Sexual Behavior among High School Students in Outlying Prefectures

This study was conducted by a research group (Socio-epidemiological Study Group on Monitoring HIV/AIDS and the Development and Propagation of Prevention Models) supported by a FY2003 research grant of the Ministry of Health, Labour and Welfare. We conducted this survey in September 2003 as a pretest for the evaluation of effectiveness of prevention education provided by the WYSH Project, targeting all second-year high school students in Prefecture A that wished to participate in the project. 5,075 male and female second-year high school students from 33 out of 91 (36%) schools in the prefecture participated.

9. Survey of Sexual Behavior among Middle School Students in One City of an Outlying Prefecture

This study was conducted by a research group (Socio-epidemiological Study Group on Monitoring HIV/AIDS and the Development and Propagation of Prevention Models) supported by a FY2003 research grant of the Ministry of Health, Labour and Welfare. We conducted this survey in September 2003 as a pretest for the evaluation of effectiveness of prevention education of the WYSH Project, targeting all students in City C, Prefecture A that wished to participate in the project. 7,089 male and female middle school students from all 22 schools in the city participated.

10. 2004 Survey of Sexual Behavior among Middle and High School Students in Outlying Prefectures

This study was conducted by a research group (Socio-epidemiological Study Group on Monitoring HIV/AIDS and the Development and Propagation of Prevention Models) supported by a FY2004 research grant of the Ministry of Health, Labour and Welfare. We conducted this survey as pretest for the evaluation of effectiveness of prevention education provided the WYSH Project. 19,037 male and female students (12,615 middle school students and 6,422 high school students) from 74 schools (45 middle schools and 29 high schools) in 17 prefectures participated in the project.

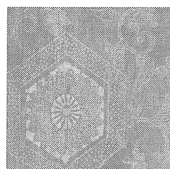
11. National Survey of Sexual Behavior among High School Students

"National Survey of the Lives and Attitudes of High School Students" as the official name, this is the study jointly conducted by a research group (Socio-epidemiological Study Group on Monitoring HIV/AIDS and the Development and Propagation of Prevention Models) supported by a FY2004 research grant of the Ministry of Health, Labour and Welfare and the Federation of All-Japan Senior High School Parent-Teachers' Associations. This was the first survey on sexual behavior of high school students conducted in Japan on a national level. 5 schools from each of Japan's 9 regional blocks participated, totaling 45 schools. We selected 2 average classes from each grade level at each school. We selected schools with proportional emphasis on rural/urban districts or vocational ordinary schools. 9,587 male and female students participated (99.6% response rate).

12. 2004 Survey of Sexual Behavior among High School Students in an Outlying Prefecture

This is a study jointly conducted by a research group (Socio-Epidemiological Study Group on Monitoring HIV/AIDS and the Development and Propagation of Prevention Models) supported by a FY2004 research grant of the Ministry of Health, Labour and Welfare and the High School Student Guidance Council of the Prefecture G. This survey was conducted in order to establish the base of evidence for future prevention education at high schools in that prefecture. We

used the same questionnaire as in the National Survey of Sexual Behavior Among High School Students conducted by the Federation of All-Japan Senior High School Parent-Teachers' Associations (PTA). 22,805 males and females at all grade levels from 57 out of 75 public high schools (76%), 3 out of 12 part-time high schools (25%), and 2 out of 16 private high schools (13%) in Prefecture G participated. Interestingly, we obtained results that were almost identical to that of the PTA survey listed under 11.



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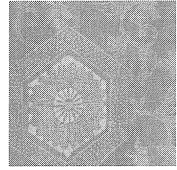

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