Awareness and Behavior on the Contraception of Youth

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Abstract

Objective:

The purpose of the study was to disclose the awareness and behavior about the contraception of youth and to clarify the contemporary issues of the sexual education in Japan. **Design:**

Study design was a surveillance study using a questionnaire.

Materials and Methods:

The surveillance study was performed using self-description to anonymous questionnaires by subjects composed of 150 male and 730 female college students in western Japan. Informed consent was obtained from the subjects immediately before taking the questionnaires.

These participants were asked about their knowledge and execution of the contraception, as well as selection criteria of contraceptive methods. They were further asked about their evaluation to the sexual education which they had in their school days, worries about contraception and the attitude toward the partner.

Results were analyzed by the chi-squared test for statistical significance.

Results:

- 1. The main contraceptive method of youth was a condom, being male-dominated as in the past.
- 2. As for the selection criteria for the contraceptive method, both men and women gave priority to technical easiness, convenience and economy rather than effectiveness.
- 3. The execution rate of the contraception was low in both men and women, especially being lower in the latter (p<0.01).
- 4. When young women who have experience of intercourse could not obtain partners' cooperation for contraception, they were apt to leave the decision of the contraception to their male partners (p<0.01).
- 5. The biggest worry about contraception was the certainty of contraception in both men and women.

6. Many men and women preferred to get contraceptive education started at junior high school.

Conclusion:

- 1. The results clarified the necessity of improvement and enforcement of the sexual education for youth which helps them to have correct awareness about contraception and to execute reliable contraceptive behavior.
- 2. The necessity to establish and develop the personal consulting system for reproductive health of each youth was also elucidated.

Key words: contraception, awareness, behavior, sexual education, youth

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I. INTRODUCTION

Recently, the sexual behavior of the adolescents are becoming a serious social problem in Japan, which are manifested by the lowering age of the first sexual intercourse, the high abortion rate and the increased morbidity of sexually transmitted diseases (STD) among them ^{1.2}. Both the abortion and STD are deleterious to psychophysical health of youth, especially to women who bear the next generation. Therefore, the sexual education including the contraception is required for the adolescents.

There is a fact that the contraception in Japan has been dependent on mainly condom³⁾. In 1999, the low-dose pill, copper-added intrauterine device (IUD) and female condom have become legally available, and women's options for the contraception have increased in Japan. However, even after the accreditation of these devices, there was no improvement in the number of artificial abortion of adolescents¹⁾. Here, we conducted the study about awareness and behavior of the contraception of young men and women in order to disclose the contemporary issues of sexual education.

II. OBJECTIVE

The purpose of the study was to extract the new issues of reproductive health guidance for Japanese youth by investigating their awareness and behavior about contraception.

III. MATERIALS AND METHODS

The research was conducted as the surveillance study using anonymous questionnaires by subject's self-description. The survey covered students below the third grade who majored in science, social science or cultural science. In total of 1,223 college students, male (n=197) and female (n=1,026), in western Japan participated in the study as the subjects. The documented informed consents for the purpose and methods including strict data management of the study were obtained from all participants. The research was performed from June 2001 to July 2002 in their campuses using placement method of half a day.

The participants were asked about the knowledge, execution rate, troubles and selection criteria for conducting the contraception. They were also asked about the evaluation to the sexual education of school and the attitude toward their partners $^{4.7)}$.

The recovery rates of the questionnaires from men and women were 78.2% and 76.1%, respectively, and the response rates were 76.1% (n=150, average age of 21.4) and 71.2 % (n=730, average age of 19.2), respectively.

The answers were analyzed according to the sex. The answers were also analyzed with and without the experience of the sexual intercourse.

Results were analyzed by the chi-squared test for the statistical significant differences.

IV. RESULTS

One hundred and nineteen men (79.3%) and 358 women (49.0%) of the subjects had experience of the sexual intercourse, and they were designated as "Group A" and "Gr oup B" respectively hereafter. Thirty one men (20.7%) and 372 women (51.0%) did not have experience of sexual intercourse and they were designated as "Group a" and "Group b", respectively hereafter (Fig 1).

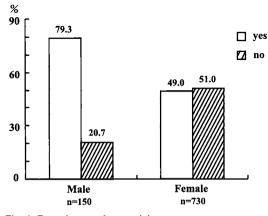


Fig. 1 Experience of sexual intercourse

 The knowledge and the experience of each contraceptive method (multiple answers)

On both men (Group A) and women (Group B), the knowledge and the experience of each contraceptive method were as follows. Condom was by far the most known by both men and women. The pills, Ogino method and vaginal douche were more known among men than women, though these contraceptives were for women.

Male condom was the most used contraception both by young men and women, and the other contraceptive methods were used infrequently (Table 1).

Table	1	Knowledge and experience
		of contraceptive methods

	know by	name	how to	use		
	м٠	F	м・	F	М	F
condom	99.3	99.7	92.6	93.3	94.1	90.8
BBT	51.3	77.9	28.6	54.5	6.7	7.3
female condom	56.0	70.1	28.6	30.2	5.8	0.8
pessary	42.0	53.6	16.0	17.9	0.8	0.0
pills	86.6	50.6	50.6	31.0	5.0	1.7
film	20.0	37.2	8.6	14.5	0.8	1.1
tablet/jellies	35.3	29.9	10.6	8.4	0.8	0.6
Ogino method	37.3	29.3	20.6	17.0	5.8	3.9
coitus interruptus	66.6	26.0	58.0	16.8	38.9	7.8
vaginal douche	25.3	20.7	12.6	7.3	3.3	0.6
IUD	12.6	14.2	4.0	5.9	0.0	0.3
emergency pills	8.0	9.5	4.0	3.6	0.8	0.3

Male: Group A n= 119, Female: Group B n=358. multiple answers

(2) Selection criteria for the contraceptive methods (multiple answers)

Selection criteria of the contraceptive methods of both men (Group A) and women

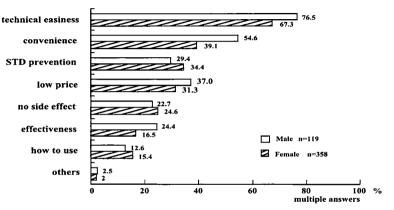


Fig. 2 Selection criteria of contraceptive method

(Group B) were as follows. On both men and women, the technical easiness (76.5% and 67.3%) was the largest number of answer, and was followed by the convenience (54.6% and 39.1%, respectively). The answers on the effectiveness of the contraception were 24.4% of men and 16.5% of women (Fig 2). (3) Execution rate of the contraception

The subjects who always execute contraception were 52.9% and 36.9% for men (Group A) and women (Group B), respectively. The subjects who did not always execute contraception were 47.1% in men (Group A) and 63.1% in women (Group B) (Fig 3). As for the execution rate of contraception, there was statistical significance between men and women (p<0.01).

The reasons for avoiding contraception in men (Group A) were the troublesome (22.7%), the loss of sexual pleasure (19.3%), and so on (multiple answers, Fig 4). The reasons why women in Group A did not practice contraception were "no special reason (29.6%)", "being troublesome (18.4%)" and "uncooperative partner (10.9%)", and so on (multiple answers, Fig 4).

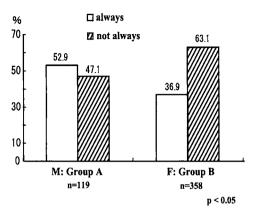


Fig. 3 Execution rate of contraception

(4) The attitude toward partner

About 90% of the male subjects, i.e., groups B and b, answered that they considered contraception positively, and 85% answered that they accepted to female partner's request of contraception.

In female subjects, not only Group B but also Group b was asked about the responses to uncooperative partner to contraception. The results except for no-answers were as follows. The 31.6% of Group B and 66.4% of Group b answered that they refused the coitus from the beginning. The subjects who discontinued the coitus were 29.3% and 22.8% of Groups B and b, respectively. The 34.9% of Group B and 10.3% of Group b answered to commit the decision of the contraception to the male partners. The statistically significant difference existed between the results of groups B and b (p<0.01) (Fig 5).

Table 2 Information sources of the contract

	Male n=150	Female n=730
school education	62.0	73.6
friends	62.0	38.9
parents	5.3	5.2
brothers/sisters	2.7	2.9
television	37.3	27.1
magazines	56.7	40.0
others	9.3	2.5
	multiple answers	(%)

(5) Information source about the contraception (multiple answers)

Information source about the contraception of the entire male subjects were the school education (62.0%), friends (62.0%), magazine (56.7%), and so on (Table 2). Information source about the contraception

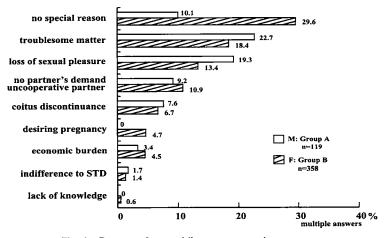
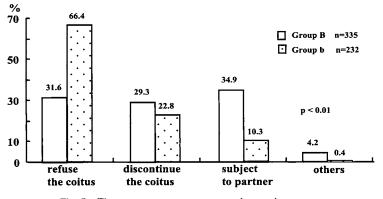


Fig. 4 Reasons for avoiding contraception





of all the female subjects were the school education (73.6%), magazine (40.0%), friends (38.9%), and so on (Table 2).

(6) Evaluation of the sexual education at school

Seventy-five point three percent of the male participants and 91.4% of the female ones answered that they learned the education for human sexuality at school. In both men (Group A) and women (Group B) the most frequent answer on evaluation for the school education was that it was rather beneficial (44.0% and 58.2%, respectively). Then the next answer was as

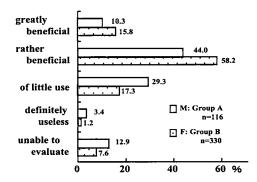


Fig. 6 Evaluation of the sexual education in school

follows, of little use (29.3% and 17.3%, respectively), and greatly beneficial (10.3% and 15.8%, respectively)(Fig 6).

Fifty-nine point three percent of the en-

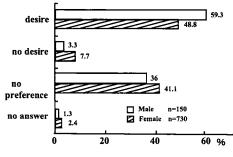


Fig. 7 Desire for the contraceptive education at school

tire male subjects and 48.8% of the entire female ones answered that they wanted to have sexual education including contraception at school (Fig 7). Many subjects in both men and women preferred the junior high school as the initiation time of the contraceptive education, by 55.7% and 60.9 %, respectively. The answers of men and women were followed by the elementary school (29.2% vs. 24.1%), and the senior high school (11.3% vs. 13.8%) (Table 3).

Table 3 Desire for the start of contraception education

	Male	Female
	n=106	n=427
college	0.0	0.9
senior high school	11.3	13.8
junior high school	55.7	60.9
elementary school	29.2	24.1
kindergarten	3.8	0.2
		(

(7) Worries about the contraception (freelydescribed multiple answers)

Worries about contraception of subjects who have experience of sexual intercourse were as follows. Both men (Group A) and women (Group B) most worried about the effectiveness of the contraception (95.5% and 63.7%, respectively). As for their partner, women worried about the male partners' noncooperation (9.3%), and men worried about female partners' negativity on contraception (27.3%) (Table 4).

V. DISCUSSION

The actual condition of the young men and women on the contraception was disclosed from the findings of questionnaires, and was discussed by highlighting their reproductive health promotion.

The experience rates of the sexual intercourse of the men and women were about 80% and 50%, respectively. Men's data of our study was higher than that (62.5%) reported by The Japanese Association for Sex Education in 2001. Women's data of our study was very close to that (50.3%) reported by the same association ⁴⁾. However, our men's and women's data were much higher than those reported by Ochiai ⁵⁾ in 1997 (51% for men and 39% for women). These results suggest the current trend of lowering age of the first sexual experience.

Fifty-three percent of men and 37% of women answered that they always carried out the contraception. These execution rates were evidently lower than those reported by the Japanese Association for Sex Education in 2001⁴⁾; 66.0% in male students and 65.9% in female students.

Both on men and women the condom was used most, and the coitus interruptus followed. It was noteworthy that these top two methods were male-dominated. As contrast with these results, usage rates of the BBT, the Ogino method, the pill, the female condom and the IUD, all which were dominated

	M: Group A n=44	F: Group B n=215
effectiveness	95.5	63.7
economic burden	38.6	20.9
no suitable method	6.8	18.6
poor knowledge	15.9	15.8
partner's noncooperation	27.3	9.3
difficult to use	9.1	7.4
no adviser	9.1	7.4
side effects	13.6	5.6
others	20.5	2.3
,	multip	le answers (%)

Table 4 Worries about the contraception

by females were extremely low. The execution rates of the each contraceptive method in this study were similar to those reported by the public opinion survey of Japan in 2000^{3} . In the other developed countries the pill is mainly used under the female leadership⁸⁻¹⁰. In Japan the contraception is maledominated by using mainly the condom, and such condition is evidently different from that of developed countries where it is female-dominated by using the pills. Thus, our survey has reconfirmed the current status of the contraception of youth in Japan.

The selection criteria for the contraceptive methods in both men and women were mainly based on the technical easiness, convenience and affordable price, but not the effectiveness of contraception. These results were reflected in the other answers in which the condom and the coitus interruptus were listed at the top two among the contraceptive methods. The condom and the coitus interruptus, indeed, are technically easy to use, but it is well known that both result in failure of the contraception at a high possibility ^{6.10}.

The ideal contraceptive method would be as

follows; certainty of effectiveness, women's leadership, retaining sexual pleasure, minimal side effect, no adverse effect on the coming pregnancy and appropriate $prices^{7}$. Thus, the results displayed the alarming situation in which the young men and women give priority of the selection of the contraceptive method to the technical easiness rather than the certainty of the effect.

As the reasons of avoiding contraception both men and women listed two answers at the top i.e. there was no special reason and they feel troublesome. These results seem to imply that they might not take the contraception seriously. The human sexual intercourse has, indeed, the significance of reproduction, but it also gives feeling of pleasure and promotes intimacy with the partner. As such, the answers that they do not prefer the loss of sexual pleasure and the interruption of coitus should not be neglected. It is, therefore, important that up- to-date education of the contraception acceptable to adolescents is necessary to avoid the unintended pregnancy ¹²⁾.

The attitude to the contraception also ap-

peared on the relationship with their partner. Most male subjects answered that they accept their female partner's request about contraception. On the other hands, 10.9% of the women in Group B answered that they were unable to practice the contraception properly because of the uncooperative male partner. When the women with sexual experiences could not obtain partner's cooperation, they tended to leave the contraception to partner's feeling, accordingly the contraception became uncertain. The execution rate of contraception was low in both men and women, and it was especially lower in women (53% vs 37%, p < 0.01). These circumstances indicated the lack of subjective attitudes toward the contraception of youth, and it was especially weak in women. Thus, it was suggested that the weakness of the autonomy in the contraception of a woman lies behind the fact that a male plays a dominant role in the contraception in our country.

The main source of information about the contraception was the school education on both men and women (62.0% and 73.6%, respectively). A 59.3% of all the male subjects and 48.8% of all the female ones desired the contraceptive education in school. Fifty-four percent of male Group A and 74% of female Group B answered that sexual education in school was useful. Ministry of Education, Culture, Sports, Science and Technology introduced the sexual education into the formal subject of school since 1992 in Japan. It was suggested by the study that the sexual education at school has contributed to improve the awareness and the behavior of the contraception of Japanese youth.

Nowadays the contraceptive education is

conducted at the senior high school, and many male and female in the study preferred to also have it in the junior high school (55.7% and 60.9%, respectively). From these findings it is suggested that the contraceptive education should be conducted at the lower grades of the school responding to the lowering of the age of the first sexual intercourse. This consideration is consistent with WHO report in which the sexual education was most effective if it was given before adolescents became sexually active 13) and the education in schools has significantly improved the levels of contraceptive use among teens¹⁴⁾. Use of contraception among adolescents, particularly those unmarried, is significantly different from that among older couples, and is specially influenced by educational factors ¹⁴⁾. The correct knowledge and the detailed methods of the contraception should be given to them through education, which might help them establish their subjective attitude to the contraception¹⁵⁾.

The most worry about contraception was the assured effectiveness of the contraception in both male Group A and female Group B. Surprisingly enough, this result was completely inconsistent with the other answers; i.e. low executing rate of the contraception, facile selection of the method, ambiguous reasons for avoiding the contraception, and the most popular use of the condom which often results in failure of the contraception. Other worries also described by them were inadequate knowledge of how to get and use the devices and inability to find the most suitable methods to them. Furthermore, lack of the cooperation from the partner and absence of advisor about the contraception were

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mentioned as their problems, too.

These results illustrated the following figures of the youth in Japan. Namely, even though they have less suitable method and less partner's cooperation, they subject themselves into unprotected intercourse running the risk of unwanted pregnancy. These aspects indicated the weak awareness and unstable behavior of contraception of Japanese youth. Their subjective attitude to the contraception was less established and their awareness for the health was also insufficient.

However, these results, at the same time, would surely be interpreted as the reflection of the desire of the youth to improve the knowledge, behavior and the attitude towards the contraception. The results suggested the need of basic sexual education including contraception, and the need of consulting system which gives individuallytargeted advice to youth.

Contraceptive education never promotes the sexual intercourse of unmarried young men and women. As for sexual behavior of adolescents, it may be ideal advice to wait sexual intercourse until marriage. Some researcher reported that approximately 30 percent of adolescents believed premarital sex was wrong ¹⁶⁾. However, it was unraveled in the study that nearly half of female college students before marriage did experience the sexual intercourse. Therefore, the contraception education is surely needed for premarital adolescents to avoid unintended pregnancies. It is important that the education programs should be based on the concept of Reproductive Health/Rights in which both sexes are esteemed by each other.

In the study a part of the awareness and the behavior on contraception of Japanese youth was elucidated even though the size of the subjects was relatively small. Further increase in the number of subjects would raise the precision of the analysis.

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