

Awareness on Sex Education among Elementary and Junior High School Teachers and Future Challenges

Yumiko Takemata, Rumiko Kimura*, Akiko Tsuda*

Abstract

As young people initiate sexual activity at lower ages, which increased the number of cases of STDs and abortions among teenagers, sexual health problems are getting more serious in Japan. Therefore it is a task of utmost urgency in schools to strengthen and promote sex education.

In order to discuss future improvements in advancing sex education by clarifying the current provision of sex education in schools and awareness of teachers, a questionnaire survey was conducted for elementary and junior high school teachers in 'A' city, with regard to their understanding and awareness of children's sexual activity. 242 completed copies from elementary school and 83 copies from junior high school teachers were obtained.

The study found that more than half of the schools in both elementary and junior high schools offered 'development of male and female consciousness' and 'childbirth'. Significantly larger percentage of teachers of junior high schools compared to those of elementary schools were offering classes on following topics: 'dealing with sex-related information', 'male-female relationship', 'sexual intercourse', 'STDs', and 'contraception and abortion'.

Higher percentage of teachers with personal experience of being asked for advice regarding sex-related matters by children were offering classes regarding sex-related matters than teachers without such experience and a significant percentage difference between them was found in six topics and five topics in elementary schools and junior high schools, respectively.

As for the teachers' recognition regarding children's sexual activities, the rates were significantly higher for all items in junior high school teachers than those of elementary school teachers. However, less than half of the responding teachers reported that they had recognized children's sexual experience, use of online dating sites, and involvement in sexual assault, and percentages of teachers who were asked for advice regarding sex-related matters were 15.4% and 24.4% in elementary schools and junior high schools, respectively. As for the reasons for the slow advancement of sex education, elementary school teachers often cited 'insufficient educational system' and 'not knowing the right teaching methods', while junior high school teachers often cited more personal reasons such as 'low awareness of teachers' and 'personal resistance'.

To proceed sex education in accordance with current status of children it is indicated that important that elementary school teachers should think sexual activity of children as a familiar issue while junior high school teachers should become more closely aware of current issues in children's sexual activity.

Key Words

Sex Education, Elementary school, Junior high school, Teachers

Introduction

Increasing numbers of young people in Japan have sex younger and more frequently in recent years^{1,2)},

with growing concerns over increasing numbers of cases of sexually transmitted disease (STDs), unwanted pregnancy and abortion among teens and adults in their

Doctoral course, Division of Health Sciences, Kanazawa University Graduate School of Medical Science
Kanazawa City Moroe-mache Elementary School

* Faculty of Health Science, Institute of Medical Pharmaceutical and Health Sciences, Kanazawa University

early 20s³⁾. It has been reported that the average age of initiation of sex among the pregnant teens was 15 years old; 80% of them had multiple partners⁴⁾; 47.8% of the pregnant teens are junior or senior high school students⁵⁾ and 82% of pregnant teens did not use contraceptives⁶⁾. A case study on abortion has shown unwanted pregnancy and abortion due to unprotected sex among junior high school and high school students as well as young people without work⁴⁾. Lack of awareness and knowledge of protective sex and contraception will lead to more unwanted pregnancies and increased rates of STDs.

A study reported that the main source of information regarding sex among adolescent children of junior high and high schools was from class at school taught by teachers and school nurses as well as magazines and peers⁷⁾. In a survey of 5th and 6th graders of elementary schools conducted by the author in 2008⁸⁾, several children answered that they gained information regarding sex from class at school while most of the teachers thought children were getting information from peers, books and magazines, showing a gap of perception between them. Since the amount and quality of knowledge about sex gained at puberty, at the ages of increasing curiosity about sex, affect significantly on sexual awareness and behavior afterwards⁹⁾, a systematic sex education from elementary school age is urgently needed.

Canada, Australia and some EU member countries positions sex education as a required subject in their educational process. As a result, it is reported that most children in these countries developed correct knowledge on reproduction including contraception and abortion and the rate of teen pregnancy reduced¹⁰⁻¹⁴⁾.

Meanwhile in Japan, sex education is treated, not as a unit subject, but a part of general educational activities¹⁵⁾, depending solely on 'Guideline on Sex Education' distributed by the local board of education, and so on, as teacher's support material. The 'Guideline on Sex Education' has been published by prefectural governments since the 1950s. The Ministry of Education published 'Approach and Provision of Sex Education' in 1999 that led to publication of a revised 'Guideline on Sex Education' in 17 prefectural board of education in the 2000s¹⁶⁾.

However since 2002, the so-called 'sex education bashing' attitude, accusing excessive sex education in schools of creating the present situation where many schools move away from sex education¹⁷⁾. At present sex

education in schools is 'investigated' and 'instructed' by local board of education, and so on¹⁸⁾, preventing teachers' own initiatives. In such an atmosphere, there are very few studies of the actual contents of sex education in schools conducted by teachers, nor how teachers are aware of children's sexual activities. One of them is Watarai's survey¹⁹⁾, which asked if teachers of elementary and junior high schools had conducted sex education at their schools in the last 3 years.

Therefore, this study aimed to examine the actual contents of sex education provided in schools, teachers' recognition on children's sexual behaviors and teachers' thinking on sex education, as well as to identify issues surrounding the present sex education, aiming to improve the current situation.

Method

1. Participants

The subjects of the study are elementary and junior high school teachers in 'A' city. It has a higher proportion of 20s and 30s population than the national average and slightly lower rate of abortion per 1,000 females compared to the national average of 7.9 as of 2010.

There are 59 elementary and 24 junior high schools in the 'A' city with 1,451 and 777 teachers respectively.

The survey was requested of the attendees at a working group session included in a voluntary teachers training conference in 'A' city in August 2010. The working group is not directly associated with sex education. The purpose of the study was explained to the teachers attended the working group and appropriate numbers of survey request forms, copies of the questionnaire and a returning envelopes for their respective schools were distributed. The numbers distributed were 624 copies in 29 elementary (43.0%) and 407 copies in 15 junior high schools (52.4%). A participant was to complete the questionnaire and post it individually to the lab. Submitting the responses of the survey was considered to be consent to participation in the survey.

2. Study design

This is a fact-finding survey based on quantitative research design.

3. Investigation method

The question items relating to 'provision and content of sex education' and 'teachers' recognition on children's sexual activities, perpetrator and victim of sexual assault',

were created based on National Survey of Youth Sexual Behaviors²⁰⁾ and Survey Report on Sexual Awareness and Behaviors in Elementary, Junior High and High Schools in Tokyo²⁾. The original self-completion questionnaire about 'vision for sex education' created by the researchers was conducted using the surveys run by Suzuki et al.²¹⁾ and Kusanagi et al.⁹⁾.

1) Characteristics of participants

To identify the characteristics of the participants, type of school where he/she works, type of work, class in charge, teacher's age, years of employment and sex were asked.

2) Provision and content of sex education

Survey items, of 'development of male and female consciousness', 'male-female relationship', 'dealing with sex-related information', 'perpetrator and victim of sexual assault', 'STDs', 'pregnancy' and 'childbirth' were set referring the Guideline on Sex Education in order to gather information necessary for contemporary children regarding 'sexual intercourse' and 'contraception and abortion'. The provision of these topics was asked about in a question as to whether the teacher dealt with the topic (s) in a class. 'Development of male and female bodies', 'development of secondary sexual characteristics' and 'functions of menstruation and ejaculation' were not included in the survey items, since they were stipulated to be taught in physical education class in elementary school and health and physical education class in junior high school by curriculum guidelines. As for the use of 'Guideline on Sex Education' distributed by the local board of education, questions were asked whether 'they have read it'. The questionnaire also asked whether they had any experience of being asked for advice from children regarding sex-related matters.

3) Teachers' recognition on children's sexual activities, perpetrator and victim of sexual assault

The teachers were asked to choose one from three choices, 'Yes', 'No' or 'Cannot decide', whether they think there are children in their school who 'have used online dating sites', 'have had a girlfriend/boyfriend', 'have experienced sexual intercourse', 'have engaged in abusive sexual behavior such as touching anyone else's body in an inappropriate way' and 'have become victims of sexual assault such as being touched by anyone else'.

4) Reasons for lack of progress in sex education

The teachers were asked to write freely about their

thinking on reasons preventing the advancement of sex education.

4. Investigation period

The investigation was conducted during August and September 2010.

5. Analytical method

Analyses were made for each type of schools; elementary schools and junior high schools.

Comparison of ratios were made and the χ^2 test was carried out for "Provision and contents of sex education in school", "Experience of having read the Guideline on Sex Education", "Teachers' recognition on children's sexual activities" and "Experience of being asked for advice from children regarding sex-related matters".

When values of each item had been lower than expected frequency, Fisher's exact test or Residual analysis were conducted. As for age and years of experience, t-test or Bonferroni one-way ANOVA were conducted. The significance level was set as less than or equal to 5% for all test.

As for the free description on why sex education does not progress, categorization was carried out by sorting and abstracting the data, based on similarities. Supervisions were provided by relevant researchers throughout the study period.

SPSS for Windows Ver. 12.0 was used for statistical processing.

Ethical considerations

Oral and written explanation regarding the aim of the study was given to the teachers attending the training workshop. The questionnaire was then distributed by the teachers who agreed to participate in the survey, to their colleagues in the schools.

The participating teacher was asked to send the completed questionnaire directly to the lab.

The cover letter stated that: answering the questions was voluntary, with no disadvantage for refusing to answer, the questionnaire was anonymous and answers would only be statistically processed so that no individual or school would be identified, the data will be secured at the author's research lab and destroyed after completion of the study. Submitting the response was regarded as participation consent to the study.

The study was approved by the Medical Ethics Committee of Kanazawa University (reg.no. 273) .

Table1. Characteristics of the participants

	Total n=325	Elementary school n=242	Junior high school n=83	P-value
Sex ^a	325	242	83	
Male	111 (34.3)	68 (28.1)	43 (51.8)	<.001***
Female	213 (69.1)	174 (71.9)	40 (48.2)	
Age (year) ^b	321	238	83	
	41.8 ± 10.8	41.3 ± 11.1	43.2 ± 10.0	.174
Generation ^c	321	238	83	
20-29	67 (20.9)	55 (23.1)	12 (14.5)	.159
30-39	62 (19.3)	47 (19.7)	15 (18.1)	
40-49	89 (27.7)	59 (24.8)	30 (36.1)	
50-	103 (32.1)	77 (32.4)	26 (31.3)	
Years of experience ^d	319	238	81	
	17.9 ± 11.8	17.8 ± 12.2	18.3 ± 10.7	.748

Note. a.c: Value were Number (%). b.d: Value were Mean ± S.D.
P-Values : a and c examined by χ^2 -test. b and d examined by t-test. *** p < .001

Results

1. Characteristics of the participants (Table 1)

The recovery rate was 36.6% (377 copies), among which 45.4% (283 copies) was from the elementary schools and 23.1% (94 copies) was from the junior high schools.

Regarding the type of work among the participants, 325 (86.2%) were teachers and 48 (12.7%) were school nurses and there was no difference of the ratio between the elementary and junior high schools. Four respondents with missing entry of teaching qualification and school nurses whose duties exclude teaching were eliminated and responses from 325 participants (86.2%) were analyzed. Due to the small number sample, those with minor

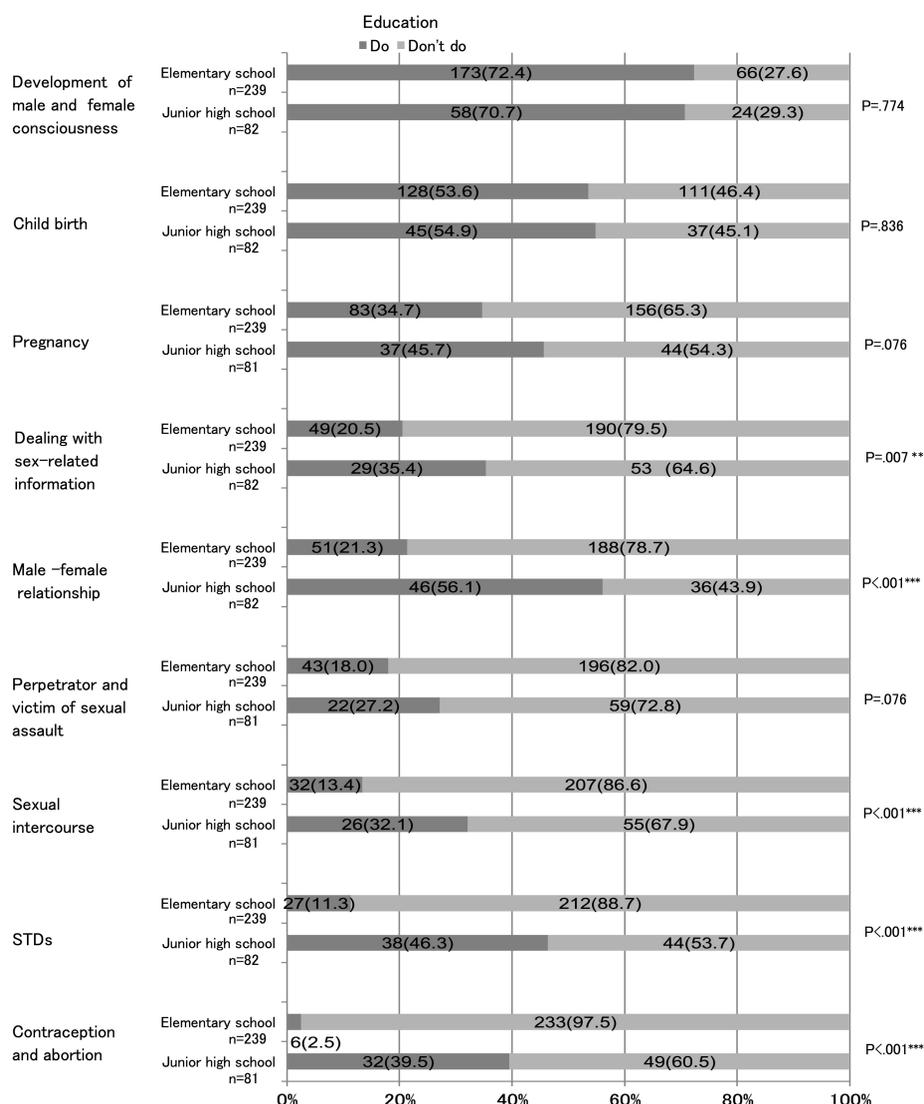


Figure 1. Comparison Elementary school teachers and Junior high school teachers about Contents of sex education provided
Notes. Value were Number (%). P-Values denote the overall significance of differences between Elementary school and Junior high school by χ^2 -test. ** P<.01 *** P<.001

deficiency in response were included in the analyses.

The sex of the participants: 68 (28.1%) males and 174 (71.9%) females in Knowledge of secondary school pupils regarding sexual health education. elementary schools and 43 (51.8%) males and 40 (48.2%) females in junior high schools, showing a significantly higher proportion of female teachers in elementary schools ($p<.001$). For both elementary and junior high schools, the participants' male/female sex ratio was almost the same as the ratio of all the teachers in 'A' city. There was no difference in the distribution of ages among the participants both in the elementary and junior high schools.

2. Provision of sex education in school and use of 'Guideline on Sex Education'

1) Contents of sex education provided (Fig 1, Table 2 and 3)

The most provided content in classroom setting, in both the elementary and junior high schools, was 'development of male and female consciousness', taught by 70 percent of participating schools. The second most provided content was 'childbirth', taught in more than half of the participating elementary and junior high schools. Compared to the elementary schools, significantly higher rates of provision of 'dealing with sex-related information' ($p<.01$), 'male-female relationship' ($p<.001$), 'sexual intercourse' ($p<.001$), 'STDs' ($p<.001$) and 'contraception

Table 2. Relation between Existence of Sex education and Sex

	Elementary school				Junior high school			
	n	Do	Don't do	P-value	n	Do	Don't do	P-value
Contents of sex education provided								
Development of male and female consciousness								
Male	68	51 (75.0)	17 (25.0)	P=.569	41	28 (68.3)	13 (31.7)	P=.678
Female	171	122 (71.3)	49 (28.7)		40	29 (72.5)	11 (27.5)	
Child birth								
Male	68	33 (48.5)	35 (51.5)	P=.326	41	21 (51.2)	20 (48.8)	P=.427
Female	171	95 (55.6)	76 (44.4)		40	24 (60.0)	16 (40.0)	
Pregnancy								
Male	68	25 (36.8)	43 (63.2)	P=.677	40	18 (45.0)	22 (55.0)	P=1.000
Female	171	58 (33.9)	113 (66.1)		40	18 (45.0)	22 (55.0)	
Dealing with sex-related information								
Male	68	23 (33.8)	45 (66.2)	P=.001**	41	14 (34.1)	27 (65.9)	P=.936
Female	171	26 (15.2)	145 (84.8)		40	14 (35.0)	26 (65.0)	
Male -female relationship								
Male	68	17 (25.0)	51 (75.0)	P=.384	41	22 (53.7)	19 (46.3)	P=.728
Female	171	34 (19.9)	137 (80.1)		40	23 (57.5)	17 (42.5)	
Perpetrator and victim of sexual assault								
Male	68	13 (19.1)	55 (80.9)	P=.775	40	10 (25.0)	30 (75.0)	P=.799
Female	171	30 (17.5)	141 (82.5)		40	11 (27.5)	29 (72.5)	
Sexual intercourse								
Male	68	8 (11.8)	60 (88.2)	P=.642	40	11 (27.5)	29 (72.5)	P=.469
Female	171	24 (14.0)	147 (86.0)		40	14 (35.0)	26 (65.0)	
STDs								
Male	68	7 (10.3)	61 (89.7)	P=.757	41	19 (46.3)	22 (53.7)	P=.904
Female	171	20 (11.7)	151 (88.3)		40	18 (45.0)	22 (55.0)	
Contraception and abortion								
Male	68	0 (0.0)	68 (100.0)	P=.187 †	40	13 (32.5)	27 (67.5)	P=.251
Female	171	6 (3.5)	165 (96.5)		40	18 (45.0)	22 (55.0)	
Read Guideline								
Male	68	19 (27.9)	49 (72.1)	P=.357	42	7 (16.7)	35 (83.3)	P=.656
Female	173	59 (34.1)	114 (65.9)		39	8 (20.5)	31 (79.5)	

Notes. Value were Number (%). P-Values denote the overall significance of differences between male and female by χ^2 test. † : Fisher's exact -test ** P<.01

Table 3. Relation between Existance of Sex education and Age

		Elementary school			Junior high school		
		n (%)	Mean ± S.D	P-value	n (%)	Mean ± S.D	P-value
Contents of sex education provided							
Development of male and female consciousness	Do	171 (72.8)	42.5 ± 10.5	P=.002**	58 (70.7)	43.2 ± 10.1	P=.921
	Don't do	64 (27.2)	37.5 ± 11.9		24 (29.3)	42.9 ± 9.8	
Child birth	Do	127 (40.0)	42.7 ± 10.8	P=.024*	45 (54.9)	42.3 ± 10.1	P=.454
	Don't do	108 (54.0)	39.4 ± 11.2		37 (45.1)	44.0 ± 9.8	
Pregnancy	Do	82 (34.9)	40.7 ± 11.1	P=.677	37 (45.7)	42.7 ± 10.7	P=.879
	Don't do	153 (65.1)	41.4 ± 11.1		44 (54.3)	43.1 ± 9.3	
Dealing with sex-related information	Do	49 (20.9)	38.5 ± 11.2	P=.062	29 (35.4)	43.3 ± 10.8	P=.868
	Don't do	186 (79.1)	41.9 ± 11.0		53 (64.6)	42.9 ± 9.6	
Male -female relationship	Do	51 (21.6)	43.1 ± 11.0	P=.164	46 (56.1)	43.5 ± 10.1	P=.705
	Don't do	185 (78.4)	40.6 ± 11.1		36 (43.9)	42.6 ± 9.9	
Perpetrator and victim of sexual assault	Do	43 (18.3)	44.4 ± 10.1	P=.025*	22 (27.2)	43.1 ± 11.8	P=.891
	Don't do	192 (81.7)	40.4 ± 11.2		59 (72.8)	42.8 ± 9.2	
Sexual intercourse	Do	32 (86.4)	45.8 ± 10.5	P=.010**	26 (32.1)	42.1 ± 11.1	P=.686
	Don't do	203 (13.6)	40.4 ± 11.0		55 (67.9)	43.1 ± 9.3	
STDs	Do	26 (11.1)	43.4 ± 10.8	P=.264	38 (46.3)	43.9 ± 10.7	P=.488
	Don't do	209 (88.9)	40.9 ± 11.1		44 (53.7)	42.4 ± 9.4	
Contraception and abortion	Do	6 (2.6)	40.2 ± 8.4	P=.786	32 (39.5)	42.4 ± 11.2	P=.725
	Don't do	229 (97.4)	41.2 ± 11.2		49 (60.5)	43.2 ± 9.0	
Read Guideline	Do	78 (32.9)	44.0 ± 10.2	P=.008**	15 (18.3)	46.3 ± 5.6	P=.173
	Don't do	159 (67.1)	39.9 ± 11.3		67 (81.7)	42.4 ± 10.6	

Notes. Value were Number (%). P-Values denote the overall significance of differences between education do and don't do by t-test. * P<.05 ** P<.01

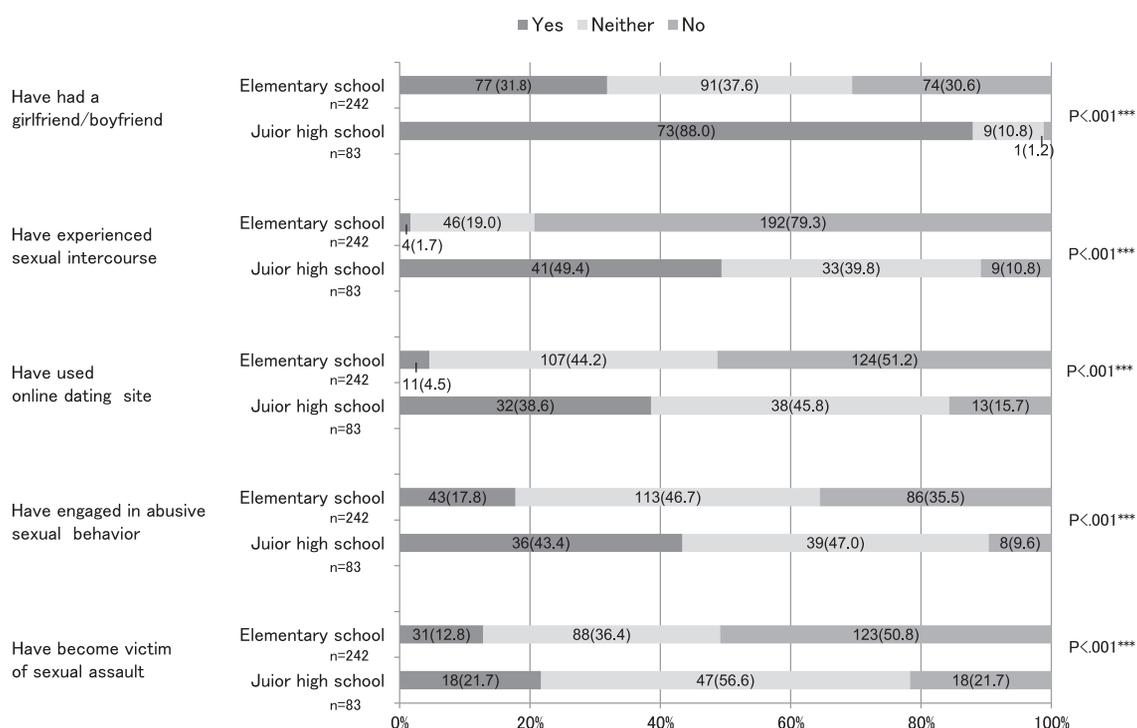


Figure2. Comparison Elementary school and Junior high school about Teachers' recognition on children's sexual activities. Notes. Value were Number (%). P-Values denote the overall significance of differences between Elementary school and Junior high school by χ^2 test. *** P < .001

and abortion' ($p<001$) were found in junior high schools.

In elementary schools, a significantly large number of male teachers provide classes on 'dealing with sex-related information' ($p<0.01$). Average age of teachers who provide classes was significantly higher than those not providing classes about 'development of male and female consciousness' ($p<0.01$), 'childbirth' ($p<0.05$), 'perpetrator and victim of sexual assault' ($p<0.05$), and 'sexual intercourse' ($p<0.01$). In Junior high schools there were no significant differences between ages and sexes among each type of schools.

2) Use of 'Guideline on Sex Education' in class

A significant difference ($p<0.05$) between the elementary and the junior high schools was shown in the number of teachers who have read 'Guideline on Sex Education', with 78 (32.4%) of the elementary and 15 (18.3%) of the junior high school teachers. Average age of children who had read the Guideline was significantly higher in elementary schools than those who had never read it ($p<0.01$), while no significant difference was observed in junior high schools. There were no significant differences between sexes among each type of schools.

3. Teachers' recognition on children's sexual activities

(Fig 2, Table 4 and 5)

The numbers of teachers who thought that there are children who are in the following situation: 'having a girlfriend/boyfriend': 77 (31.8%) in the elementary and 73 (88.0%) in the junior high schools. 'Have experienced

sexual intercourse': 4 (1.7%) in the elementary and 41 (49.4%) in the junior high schools. 'Using online dating sites': 11 (4.5%) in the elementary and 32 (38.6%) in the junior high schools. 'Victim of sexual assault': 43 (17.8%) in the elementary and 36 (43.4%) in the junior high schools. 'Perpetrator of sexual assault': 31 (12.8%) in the elementary schools and 18 (21.7%) in the junior high schools. The ratios were significantly higher among the junior high school teachers in each item, however, less than half of the responding teachers reported that they had recognition of children's sexual experience, use of online dating sites, perpetrator and victim of sexual assault.

The rate of male teachers who think there is at least one child in school who is a victim or perpetrator of sexual assault was higher than female teachers in elementary school, but the rates were low at less than 30% ($p<0.01$). Average age of teachers who thought there are children in their school who have boyfriend or girlfriend was lower than that of teachers who chosen 'No' or 'Cannot decide' ($p<0.001$). On the other hand, average age of teachers who thought there is at least one child in their school who is a victim of sexual assault was higher than that of teachers who chosen 'No' or 'Cannot decide' ($p<0.01$).

In junior high schools, a larger number of male teachers than female counterparts thought there were children in their school who had experience of sexual intercourse ($p<0.05$).

Table 4. Defference in recognition on children's sexual activities and Relation with Sex

	Elementary school					Junior high school				
	n	Yes	Neither	No	P-value	n	Yes	Neither	No	P-value
Teachers' awareness on children's sexual activities										
Have had a girlfriend/boyfriend										
Male	68	26 (38.2)	22 (32.4)	20 (29.4)	P=.375	42	36 (85.7)	6 (14.3)	0 (0.0)	n.s †
Female	174	51 (29.3)	69 (39.7)	54 (31.0)		40	36 (90.0)	3 (7.5)	1 (2.5)	
Have experienced sexual intercourse										
Male	68	4 (5.9)	9 (13.2)	55 (80.9)	P<.05* †	42	25 (59.5)	15 (35.7)	2 (4.8)	P<.05* †
Female	174	0 (0.0)	37 (21.3)	137 (78.7)		40	15 (37.5)	18 (45.0)	7 (17.5)	
Have used online dating site										
Male	68	2 (2.9)	26 (38.2)	40 (58.8)	n.s †	42	20 (47.6)	14 (33.3)	8 (19.0)	P=.053
Female	174	9 (5.2)	81 (46.6)	84 (48.3)		40	11 (27.5)	24 (60.0)	5 (12.5)	
Have engaged in abusive sexual behavior										
Male	68	19 (27.9)	22 (32.4)	27 (39.7)	P=.006**	42	21 (50.0)	19 (45.2)	2 (4.8)	n.s †
Female	174	24 (13.8)	91 (52.3)	59 (33.9)		40	14 (35.0)	20 (50.0)	6 (15.0)	
Have become victim of sexual assault										
Male	68	15 (22.1)	16 (23.5)	37 (54.4)	P=.004**	42	11 (26.2)	25 (59.5)	6 (14.3)	P=.164
Female	174	16 (9.2)	72 (41.4)	86 (49.6)		40	6 (15.0)	22 (55.0)	12 (30.0)	

Notes. Value were Number (%). P-Values denote the overall significance of differences between male and female by χ^2 test. † : Residual analysis * P<.05 ** P<.01

4. Teachers' experience of being asked for advice from children regarding sex-related matters and correlation between teachers' personal involvement and provision and contents of sex education (Table 6, Figs 3 and 4)

The ratios of teachers who have experience of being asked for advice from children regarding sex-related matters were higher in the junior high schools at 20 (24.4%) compared with 37 (15.4%) in the elementary schools. There were no significant differences between ages and sexes among the elementary school. In junior high schools, the rate of 40's teachers were significantly higher compared with other generation.

Among the elementary school teachers, a significantly large number of those with experience of being asked for advice included 'development of male and female consciousness'

($p < .001$), 'childbirth' ($p < .001$), 'pregnancy' ($p < .001$), 'dealing with sex-related information' ($p < .001$) 'male-female relationship' ($p < .01$) and 'sexual intercourse' ($p < .05$) in their classes, compared to those who had no such experience. Especially, 'development of male and female consciousness', 'childbirth' and 'pregnancy' were included in class by more than 70% of the teachers who had experience of being asked for advice.

In the junior high schools, 'development of male and female consciousness' was addressed by many teachers regardless of their experience of being asked for advice. However a significantly large number of teachers with such experience included 5 items of 'childbirth' ($p < .01$), 'STDs' ($p < .01$), 'pregnancy' ($p < .01$), 'sexual intercourse' ($p < .001$) and 'dealing with sex-related information' ($p < .05$) in their classes, compared to the teachers who had no

Table 5. Defference in recognition on children's sexual activities and relation with Age

			Elementary school			Junior high school		
			n (%)	Mean ± S.D	P-value	n (%)	Mean ± S.D	P-value
Teachers' recognition on children's sexual activities								
Have had a girlfriend/boyfriend	Yes		76 (31.9)	37.3 ± 10.5	P<.001***	73 (88.0)	42.5 ± 10.1	P=.191
	Neither		90 (37.8)	42.5 ± 11.1		9 (10.8)	48.9 ± 7.5	
	No		72 (30.3)	44.1 ± 10.7		1 (1.2)	44.0	
Have experienced sexual intercourse	Yes		4 (1.7)	33.3 ± 13.3	P=.178	41 (49.4)	42.5 ± 10.6	P=.061
	Neither		46 (19.3)	43.3 ± 10.7		33 (39.8)	45.7 ± 8.2	
	No		188 (79.0)	41.0 ± 11.1		9 (10.8)	37.2 ± 10.8	
Have used online dating site	Yes		11 (4.6)	41.2 ± 9.4	P=.162	32 (38.5)	43.4 ± 10.2	P=.267
	Neither		104 (43.7)	42.9 ± 10.9		38 (45.8)	44.2 ± 9.0	
	No		123 (51.7)	40.0 ± 11.4		13 (15.7)	39.1 ± 11.8	
Have engaged in abusive sexual behavior	Yes		42 (17.6)	45.2 ± 11.1	P=.004**	36 (43.4)	44.1 ± 9.0	P=.617
	Neither		113 (47.5)	41.9 ± 10.6		39 (47.0)	43.0 ± 10.7	
	No		83 (34.9)	38.5 ± 11.2		8 (9.6)	40.2 ± 10.9	
Have become victim of sexual assault	Yes		30 (12.6)	43.3 ± 11.6	P=.118	18 (21.7)	44.5 ± 10.4	P=.489
	Neither		88 (37.0)	42.6 ± 10.5		47 (56.6)	43.6 ± 9.6	
	No		120 (50.4)	39.9 ± 11.3		18 (21.7)	40.8 ± 10.6	

Notes. Value were Number(%). P-Values denote the overall significance of differences between teachers' recognition by Bonferroni one-way ANOVA. ** P<.01 *** P<.001

Table6. Teachers' experience of being asked for advice from children regarding sex-related matter and correlation between Sex, Generation

		Elementary school			Junior high school				
		n	Yes	No	P-value	n	Yes	No	P-value
Sex									
Male		67	7 (10.4)	60 (89.6)	P=.183	41	9 (22.0)	32 (78.0)	P=.746
Female		173	30 (17.3)	143 (82.7)		40	10 (25.0)	30 (75.0)	
Generation									
20-29		55	7 (12.7)	48 (87.3)	P=.831	12	2 (16.7)	10 (83.3)	P<.05* †
30-39		47	8 (17.0)	39 (83.0)		15	2 (13.3)	13 (86.7)	
40-49		59	11 (18.6)	48 (81.4)		30	12 (40.0)	18 (60.0)	
50-		75	11 (14.7)	64 (85.3)		25	4 (16.0)	21 (84.0)	

Notes. Value were Number (%) . P-Values denote the overall significance of differences between Sex ,Generation by χ^2 test. † : Residual analysis *p<.05

such experience.

The ratio of teachers who responded that they had read 'Guideline on Sex Education' was significantly higher ($p < .001$) among those who had experience of being asked for advice, than those without such experience in the elementary schools. No difference was found among the junior high school teachers.

5. Lack of progress in sex education (Table 7)

The analysis of free descriptions by the teachers with regard to their thinking as to why sex education was not progressing was extracted into the following categories: 'insufficient educational system', 'not knowing the right teaching methods', 'teachers' low awareness', 'cultural

background regarding sex', 'teachers' embarrassment', 'unique nature of sex education', 'sex education bashing' and 'insufficient collaboration between families and local community'.

Many elementary school teachers cited 'insufficient educational system', with descriptions such as "no time for sex education due to emphasis on academic achievement" and "no clear positioning in the curriculum". 'Not knowing the right teaching methods' was also cited, with the descriptions such as "don't know what kind of content to offer in what kind of framework" and "don't have expertise". Some teachers stated 'teachers' low awareness' and 'cultural background regarding sex' as the reasons as

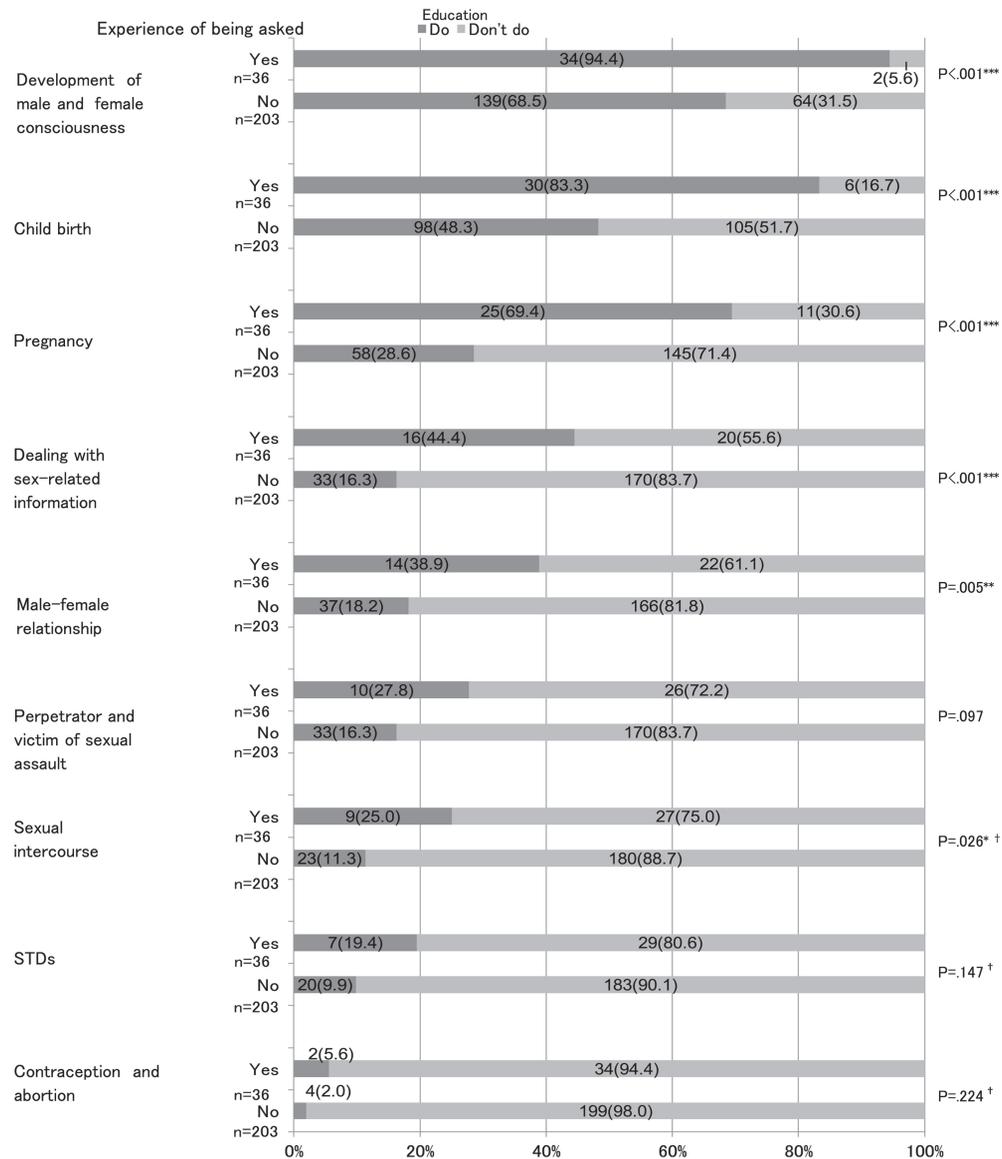


Figure 3. Teachers' experience of being asked for advice from children regarding sex-related matters and correlation between teachers' personal involvement and provision sex education in elementary school
 Notes. Value were Number (%). P-Values denote the overall significance of differences between experience of being asked by χ^2 test. † : Fisher's exact -test * $p < .05$ ** $P < .01$ *** $P < .001$

to why sex education is not progressing.

Among the junior high school teachers, 'teachers' low awareness' was the top reason with statements such as "encourages sexual activities", "don't feel the necessity", "no understanding of the reality of the children" and "low awareness of teachers". That is followed by 'teachers' embarrassment' with statements such as "prefer to avoid", "teachers' embarrassment and shyness" and 'cultural background regarding sex' with statements such as "closed-mindedness of Japanese mentality towards sex", "taboo subject" and "prejudice". Some cited 'not knowing the right teaching methods' and 'unique nature of sex

education' as the reason for no progress.

Discussion

With the background of almost non-existence of previous surveys targeting teachers specifically on the topic of sex education, this study identified 'development of male and female consciousness', 'childbirth' and 'pregnancy' in the elementary schools and 'development of male and female consciousness', 'childbirth' and 'male-female relationship' in the junior high schools were the most taught contents. It can be said that these contents are relatively easy to address as part of sex education.

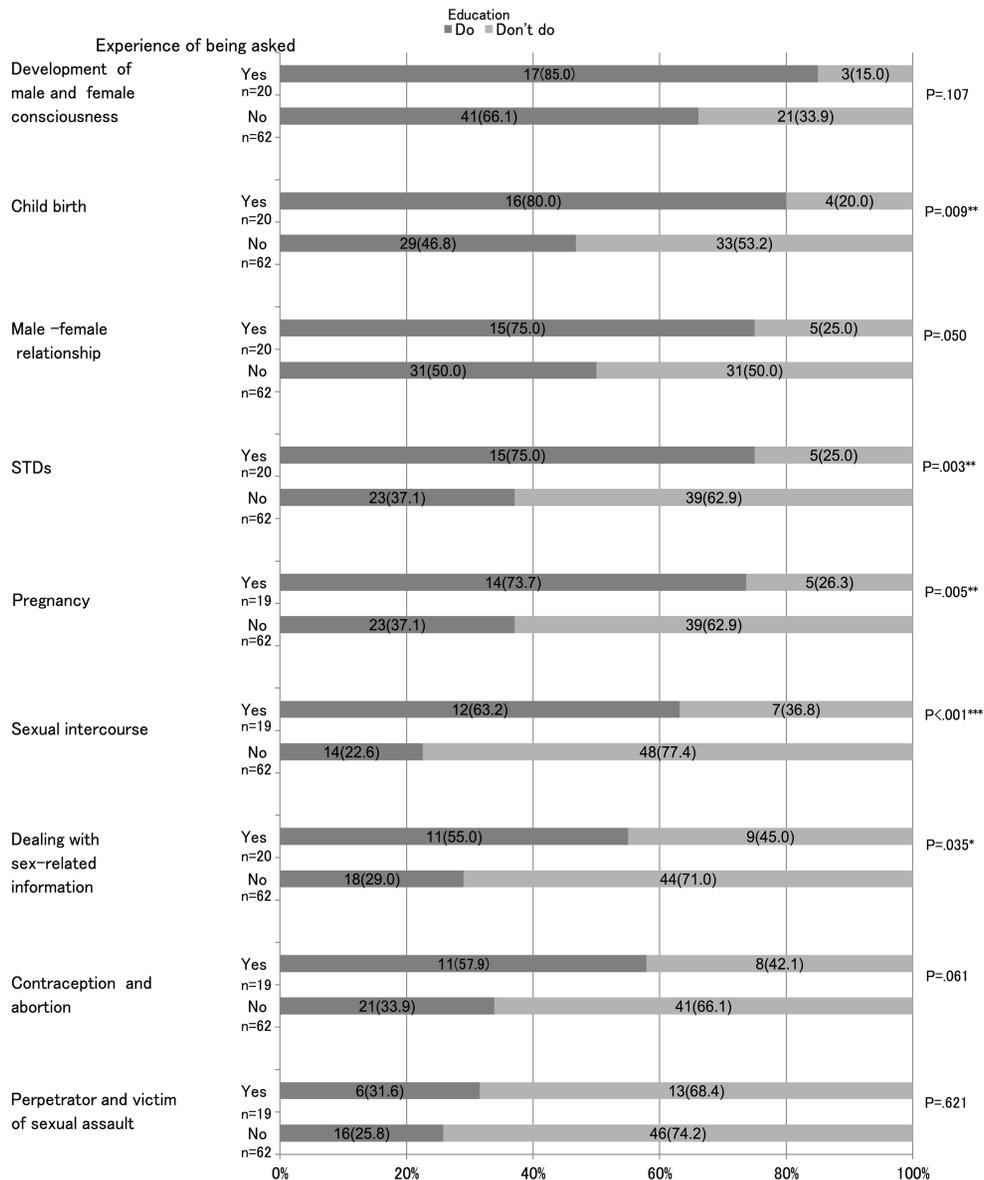


Figure 4. Teachers' experience of being asked for advice from children regarding sex-related matters and correlation between teachers' personal involvement and provision sex education in Junior high school

Notes. Value were Number (%) . P-Values denote the overall significance of differences between experience of being asked by χ^2 test. * P < .05 ** P < .01 *** P < .001

'Sexual intercourse' is rarely touched both in elementary and junior high schools. While in elementary schools, 'pregnancy' and 'childbirth' are taught without 'sexual intercourse', the situation is similar in junior high schools, where 'pregnancy', 'childbirth', 'STDs' and 'contraception and abortion' are taught without 'sexual intercourse'. As a result, it is possible that the message of 'pregnancy, childbirth, abortion and STDs are all the associated risks of sexual intercourse' is not sufficiently conveyed. Kazumi²²⁾ stated that sex education must nurture knowledge and skill to protect oneself from risks, as well as relationships in which one can communicate with the partner in equal terms. However, in reality, children are not prepared at all.

The results of this study suggest that there are tendencies that many schools and local administrations focus on 'Learning about Life' and 'Learning about Babies' and hesitate to include contraception education that is

essential to prevent abortions and STDs, in order to avoid 'sex education bashing'.

'Insufficient educational system' and 'not knowing the right teaching methods' were the most cited reasons among the elementary school teachers surveyed when asked about the lack of progress in sex education.

The survey conducted by Kitamura in 1991²³⁾ identified 'exact contents and delivering method unclear', 'no opportunity to carry out' and 'not having confidence' as the factors slowing the advancement, the finding is similar to this study. That means after 20 years, the issues surrounding sex education in school have not been solved.

In the 4th Special Committee session of the Central Education Council²⁴⁾ in 2008, opinions such as 'teachers must give the educational message of absolutely 'no' to any sexual conduct for junior high and high school children' and 'need suppressive abstinence approach

Table 7 Lack of progress in sex education

	Elementary school n = 157	Juioir high school n = 55
Insufficient educational system No time for sex education due to emphasis on academic achievement No clear positioning in the curriculum Gap between flooding sexual information and studing in school.	37 (23.7)	8 (14.5)
Not know the right teaching methodsl Don't know what kind of content to offer in what kind of framework Don't have expertise	37 (23.7)	7 (12.7)
Teachers' low awareness Encourages sexual activities. Don't feel the necessity No understanding of the reality of the children Low awareness of teachers	38 (24.2)	18 (32.7)
Cultural backgrand regarding sex Closed-mindedness of Japanese mentality toward sex Taboo subject Prejudice	37 (23.7)	12 (21.8)
Teachers' embarrassment Prefer to avoid Teachers' embarrassment and shyness	27 (17.2)	12 (21.8)
Unique nature of sex education Difficulty in leading for group with difference among individuals Difficulty in leading for don't mere informaiton Defference in sence of value, awareness and thinking	29 (18.5)	3 (5.5)
Sex education bashing Bashing to sexual education Influence for parents's thinking	6 (3.8)	4 (7.3)
Insufficient collaboration between families and local community It should be taught by parents Lack of cooperation between parents, region and school	12 (7.6)	2 (3.6)

Plural answer. Value were Number (%)

toward sexual behaviors and impulses¹ were presented. The government's curriculum guideline is written based on these opinions and it suggests that this attitude also suppresses the present advancement of sex education.

Sex education in the US has been proceeded mainly under two types of policies, abstinence education and comprehensive sexuality education. The former assumes teens should postpone sexual intercourse before they are married, while the latter regards the sex education as a tool to generally provide such as lifelong sexual information and human relation. From 1998, the US government started to provide a subsidy to the abstinence education which had been widely undertaken in most schools.

In the US, however, maintains a relatively higher level of birth and abortion of 15-19 year old women than other developed countries and, therefore, it is hard to say this abstinence education was effective for sexual health of the youth¹³. In 2010, the Obama administration changes the proportion of subsidy, providing one third of subsidy to the comprehensive sexuality education^{25,26}.

In addition, children's awareness and attitudes towards sex are rapidly changing. It is reported that 30.8% of male and 36.3% of female junior high school students as well as 57.8% of male and 51.6% of female high school students think 'it's ok to have sex with whomever he/she is if there is a mutual consent'²⁷. This demonstrates a shift of moral baseline of young people from 'love' to 'consensus of both parties'²⁷ as well as lowering of age of sexual activity initiation and changes of children's awareness and attitude toward sex²⁸. Children the basic image of sex-related matters during elementary school ages. If elementary school teachers have low recognition of children's sexual activity, they cannot offer reasonable classes or response to deal with a circumstance described above.

As children get older, they are bound to obtain information relating to sex from magazines and other media⁸, and grow up without forming a correct awareness towards sex that may lead to unwanted pregnancy and STDs.

Meanwhile, the ratios of teachers with experience of being asked for advice from children regarding sex-related matters was 15.4% in the elementary schools and 24.4% in the junior high schools in this study. A higher ratio of the teachers with the experience carried out classes dealing with 'pregnancy', 'STDs' and 'contraception and abortion',

showing closer involvement in children's sex activities was the motivation in carrying out sex education in classes.

It has been reported² that approximately 5% of boys and 10% of girls in the 3rd grade of junior high school and approximately 20% of boys and 45% of girls in the 3rd grade of high school have experience of sexual intercourse. Though not many junior high school students would come to ask for an advice from their own initiative, if the teacher has this kind of information, he/she would see sexual issues surrounding children not as problems happening somewhere else, and would be able to provide gradual guidance appropriate for the age of the children on necessary actions to protect themselves.

This study identified that there still are teachers who think 'let sleeping dogs lie', as well as teachers' strong sense of embarrassment still prevailing in school when it comes to sex education. This clearly shows that teachers are avoiding involvement in issues relating to sex, or seeing the reality surrounding the children. This kind of attitude of teachers prevents opportunities for much needed sex education. Now is the time for teachers to consider what to do, focussing on the children's reality.

Though this survey was carried outside the reach of the education authority, the recovery rate was low with 45.4% in elementary school and 23.1% in junior high school. The lower take-up rate of the 'Guideline on Sex Education' was also found among the junior high school teachers. This implies low level of awareness of the teachers regarding sex education as well as their honest feeling of wanting to avoid involvement.

All public run schools have a full-time school nurse stationed in a school as a health education specialist and it is not hard to assume that she would be consulted by children regarding sex related matters, probably quite often. But are the school nurses communicating with teachers about sexual reality children are facing? It should be a requirement that school nurses take active roles in raising the awareness of teachers, positioning sex education in the curriculum as an important part of health education and ensuring the planned curriculum to be carried out properly.

Limitation of this study

Survey by random sampling was not feasible due to the critical social attitude toward sex education, thus all request for participation in the study was given at

a teachers' training workshop, hoping to generate as many responses as possible. Since the sample number is small and geographically limited to one place, and the respondents' schools cannot be individually identified, there is a possibility that a difference between each school as to whether it is an elementary or junior high might have affect the outcome. Thus the outcomes of the study cannot be regarded as a general trend among teachers. To investigate further geographical expansion of survey location is needed.

Conclusions

This study identified issues surrounding sex education by surveying the awareness and attitudes of teachers in order to suggest improvement. The participants were 325 elementary and junior high school teachers in 'A' city. The following findings were made:

1. 'Development of male and female consciousness' and 'childbirth' were most taught sex education contents in both elementary and junior high schools.

2. Junior high schools offered wider contents of in-class sex education.

3. Teachers with personal experience of being asked for advice regarding sex-related matter provided wider contents on sex education compared to those who had no such experience.

4. Regarding the recognition on children's sexual behavior, differences were found between sexes and ages of the teachers in Elementary school.

5. Regarding the lack of progress in sex education, 'insufficient educational system' and 'not knowing the right teaching methods' in elementary schools and 'teachers' low awareness' and 'teachers' embarrassment' in junior high schools were most frequently cited.

Acknowledgement

I would like to express my sincere gratitude to those who spared their busy time to participate in this study and those who kindly distributed the questionnaire.

References

- 1) The Japanese Association for Sex Education: White paper on 'Sex and Youth', The 6th National :Survey of Youth Sexual Behavior, Shogakukan, pp 26-35, 2007 (in Japanese)
- 2) Tokyo Education Study Group for Children: Survey Report on Sexual Awareness and Behaviors in Elementary, Junior High and High Schools in Tokyo, Gakko Tosho Co., Ltd., pp 55-88, 2005 (in Japanese)
- 3) Mother and Child Health Section, Equal Opportunity, Children, Families and Mothers Health Bureau, The Ministry of Health, Labour and Welfare (eds.) , Key Statistics of Mother and Child Health, 2002 (in Japanese)
- 4) Morimatsu Y, Watanabe T, Kuwata T, et al: The State of Teenage Pregnancy in Tochigi Prefecture, *Adolescentology* 22: 475-480, 2004 (in Japanese)
- 5) Mochizuki Y, Watanabe H, Oishi A, et al: A Clinical Study of Teenage Pregnancy *Adolescentology* 22: 404-409, 2004 (in Japanese)
- 6) Toda T, Kono Y, Hira S: A Clinical Study of Teenage Pregnancy- From a Viewpoint of Reproductive Health/Rights, *Adolescentology* 22: 392-387, 2004 (in Japanese)
- 7) Kihara M: The study of The Knowledges, Sexual behavior, attitude for sex in relation to HIV/STD for youth, The epidemiology report of HIVs on the public measures in 1999, 584-593, 2002 (in Japanese)
- 8) Takemata Y, Kimura R: The investigation into sexual problem for children in adolescence (Part1) – conversation about sex between parents and children, and the way to get the information about sex-, *Journal of the Tsuruma Health Science society Kanazawa university* 34: 79-90, 2010 (in Japanese)
- 9) Kusanagi H, Kato H, Suzuki M, et al: A Examination into Sex Education in Elementary Schools - Focusing on Awareness of Teachers and Children -, *Hoken-no-kagaku*, 40: 985-990, 1998 (in Japanese)
- 10) Alexander McKay : Trends in teen pregnancy in Canada with comparison to U.S.A and England/Wales. *The Canadian Journal of Human Sexuality* 17 : 157-161, 2006
- 11) Bourke A, Boduszek D, Kelleher C, et al: Sex education, first sex and sexual health outcomes in adulthood: findings from a nationally representative sexual health survey. *Sex Education* 14 (3) : 299-309, 2014
- 12) Rebecca M F, Ine V, Trudie K: A matter of fact and more: an exploratory analysis of the content of sexuality education in The Netherlands. *Sex Education* 8 (1) : 93-106, 2008
- 13) Heather W, Gary S, Susan K: School-based sex education policies and indicators of sexual health among young people: a comparison of the Netherlands, France, Australia and the United States. *Sex Education* 5 (2) : 171-188, 2005
- 14) Hashimoto N, Shinohara H, Tashiro M, et al: Reality and Challenges of Sex Education in Japanese Junior High Schools, *Kagawa Education Institute of Nutrition Education Studies Bulletin, 'Education and Gender' Studies* 9: 3-20, 2011 (in Japanese)
- 15) The Ministry of Education and Science: Approach,

- Provision and Administration of Sex Education, pp 1, 1999 (in Japanese)
- 16) Motegi T: Changes of the 'Guideline on Sex Education' and Provision Planning in the Post-war Japan - A Study of Sex Education Curriculum Draft Guidelines Database -, Kagawa Education Institute of Nutrition Education Studies Bulletin, 'Education and Gender' Studies 7: 47-56, 2007
 - 17) Sikama K: The pendulum theory of the sex education in our country-Mainly since World War II it-, *Adolescentology* 26 (3) : 350-359, 2008 (in Japanese)
 - 18) Asai H: Development of Children's Sexual Identity (Introduction) - Challenging the issues surrounding sex education, Chapter 10 -, Jugatu-sha, pp 110-112, 2005 (in Japanese)
 - 19) Watarai M: The actual situation of sex for elementary and middle school students and the present state of sexuality education for teaching staff, *Japan Journal of Sexology* 21: 39-45, 2003 (in Japanese)
 - 20) The Japanese Association for Sex Education: White paper on 'Sex and Youth', The 6th National Survey of Youth Sexual Behavior, Shogakukan, pp 177-191, 2007 (in Japanese)
 - 21) Suzuki Y, Sasaki K, Katayama R, et al: Basic investigation toward adolescent health activity- The opinion poll of junior high school student, guardians, and teachers-, *Japanese Journal of Maternal Health* 45: 512-517, 2005 (in Japanese)
 - 22) Kazumi T: Reality of teen's sex life and building capability of dealing with sex related issues, Kamogawa. Co., Ltd., pp 131-139, 2010 (in Japanese)
 - 23) Kitamura N: Teacher's sexual awareness and problem of practice of sex education, *Adolescentology* 11: 185-191, 1993 (in Japanese)
 - 24) The 4th Special Committee session of the Central Education Council: http://www.mext.go.jp/b_menu/shingi/chukyo/chukyo3/022/siryu/05071302/000.htm (2014. 5 refer) (in Japanese)
 - 25) Jeffres VI W, Dodge B, Bandiera F C, et al: Beyond abstinence-only: Relationship between abstinence education and comprehensive topic instruction. *Sex Education* 10 (2) : 171-185, 2010
 - 26) SIECUS: A portrait of Sexuality Education Abstinence-Only-Until-Marriage Program in the States An Overview Fiscal Year 2010 Edition, <http://www.siecus.org/index.cfm?fuseaction=page.viewPage&pageID=1339&nodeID=1> (2014. 5 refer)
 - 27) Yajima M: From in love by mutual consent- on a change of sexual consciousness of teenager, *Trends the sciences* 9: pp 26-29, 2001 (in Japanese)
 - 28) Sakaguchi A, Sakaguchi T: Education for human sexuality- Education for sex, life, love- (2) , *Journal of Kawamura Gakuen Woman's University* 17: 111-123, 2006 (in Japanese)

小中学校教師の性教育に対する認識と今後の課題

竹俣由美子, 木村留美子*, 津田 朗子*

要 旨

わが国においては、若者の性行動の早期活発化が進み、それに伴い性感染症や10代の人工妊娠中絶などが増加し、性に関する健康問題が深刻化している。したがって、学校現場における性教育の充実・推進は急務の課題である。

そこで、本研究は、学校で実施されている性教育の状況と教師の認識の現状を明らかにし、性教育を推進するためには何が課題かを検討する為に、A市の小中学校教員を対象に、子どもの性行動に対する理解や性教育の実施内容、性教育に対する思いを調査し、小学校242名、中学校83名から回答を得た。

その結果、小中学校共に「男女の心の変化」「出産」に対する教育を実践している割合が半数を超えていた。「性情報への対応」「男女交際」「性交」「性感染症」「避妊や中絶」の項目は中学校教師の方が小学校教師よりも指導していた者の割合が有意に多かった。また、子どもから「性に関する相談を受けた経験」がある教師はそうでない教師よりも、指導を行っている割合が多く、小学校では6項目で、中学校では5項目で有意差がみられた。

子どもの性行動については、すべての項目で小学校よりも中学校の教師の方が認識している者の割合が多かった。しかし、性交、出会い系サイトへのアクセス、性被害や性加害を経験したことのある子どもが学校にいると答えた教師は半数にも満たず、子どもから、性の相談を受けた割合は、小学校で15.4%、中学校で24.4%と少なかった。性教育が進まない理由については、小学校教師は「教育体制の不備」「指導方法がわからない」を挙げ、中学校教師は「教師の意識が低い」「教師自身の抵抗感」といった教師自身の問題を挙げていた。

子どもの実態に即した性教育を進めるには、小学校教師は、子どもの性行動を身近なこととして捉える必要があり、中学校教師は、子どもの性の今日的課題に目をそらすことなく向き合う必要があることが示唆された。