

Substance Use and Sexual Behaviors of Adolescents in Multicultural Families in Korea

Subin Park✉

Department of Psychiatry, Seoul National Hospital, Seoul, Republic of Korea

Objective To investigate the substance use and sexual behavior of adolescents in multicultural families compared with adolescents in Korean families in South Korea.

Methods Data from the 2013 Korean Youth Risk Behavior Web-Based Survey collected from 66,591 adolescents aged 12–18 years (mean age 14.89 ± 1.76 years) were analyzed. We classified the adolescents into four groups: those whose father and mother were born in South Korea, those whose father was born in South Korea but whose mother was not, those whose mother was born in South Korea but whose father was not, and those whose father and mother were not born in South Korea. Experiences with alcohol, cigarette, and drug use and sexual relations were investigated.

Results Compared with adolescents whose fathers and mothers were born in Korea, adolescents whose fathers were born in Korea but whose mothers were not were less likely to use alcohol and cigarettes. Adolescents whose mothers were born in Korea but whose fathers were not and adolescents whose fathers and mothers were both born outside Korea were more likely to use cigarettes and drugs and to have sexual relations.

Conclusion These results indicate that adolescents whose fathers were not born in Korea and whose fathers and mothers were both born outside Korea are at greater risk for cigarette and drug use and risky sexual behaviors. For these high risk groups, health education should include dependency prevention program, safety issue, and health screening as well as programs aimed at preventing substance use and sexual activity.

Psychiatry Investig 2015;12(4):466-473

Key Words Multicultural families, Substance use, Internet use, KYRBS, Adolescents.

INTRODUCTION

Since the mid-1990s, Korea has become a multicultural and multi-ethnic society with a marriage-based influx of immigrant women and an influx of foreign workers.¹ There is a considerable difference between families with foreign mothers and families with foreign fathers in South Korea: The majority of male immigrants came to Korea to find job opportunities, while the majority of immigrant women came to Korea to marry Korean men.^{2,3} According to the Ministry of Justice of the Republic of Korea, in 2007, the number of marriage-based immigrants was 93,786 (82,828 foreign wives

and 10,958 foreign husbands); by 2013, this number had increased to 150,865 (128,826 foreign wives and 22,039 foreign husbands).⁴

The foremost problem for multicultural families in South Korea is related to their children. In 2013, the number of children in multicultural families was estimated at 190,000, and the number of adolescents aged 13–18 years old in multicultural families was estimated at 20,027.¹ According to the Ministry of Education, Science, and Technology,⁵ 1 in 10 children in multicultural families in rural areas leaves primary school, and even children who attend school show low academic achievement. In addition, there is evidence that children in multicultural families are frequently bullied, easily become involved in school violence and exhibit aggressive behavior.^{3,6,7} During adolescence, relational problems with parents and peers, academic failure, and various form of social maladjustment manifest as delinquent behaviors, such taking drugs, using alcohol and cigarette, and engaging in early sexual relations.⁸⁻¹⁰ Therefore, adolescents in multicultural families are assumed to be at risk for substance use and

Received: November 28, 2014 **Revised:** February 18, 2015

Accepted: February 25, 2015 **Available online:** September 30, 2015

✉ **Correspondence:** Subin Park, MD, PhD

Department of Psychiatry, Seoul National Hospital, 398 Neungdong-ro, Gwangjin-gu, Seoul 04933, Republic of Korea

Tel: +82-2-2204-0295, **Fax:** +82-2-2204-0280, **E-mail:** subin-21@hanmail.net

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sexual behavior.

Adolescence is an important developmental stage during which many lifestyle habits form, such as those involving alcohol and cigarette use and sexual behavior. Many adolescents start smoking, drinking, and engaging in sexual behaviors at a young age out of curiosity and a spirit of adventure. Although not all adolescents develop addictions, teenage alcohol, cigarette, and drug use is the most important predictor of adolescent delinquency, severe substance problems and criminal behavior in young adulthood.¹¹⁻¹³ Considering the rapid increase in the adolescent population among multicultural families and the hardships that these social minorities face,¹ it is important to understand the health risk behaviors (such as substance use and sexual activity) of adolescents from multicultural families in South Korea.

Although a variety of studies have examined adolescent health behaviors in South Korea,¹⁴⁻¹⁶ few have focused on adolescents from multicultural families in this country. Recently, Lee et al.¹⁷ investigated health-related behaviors, including drinking, smoking, drugs, and sexual intercourse, among adolescents from multicultural families in South Korea. This study had such limitations as the lack of a comparison group (e.g., adolescents from Korean families) and the failure to divide the multicultural families into subtypes (e.g., families with foreign fathers, families with foreign mothers, and families in which both parents are foreign).

Therefore, this study investigated the substance use (alcohol, cigarettes, and drugs) and sexual behaviors of adolescents in multicultural families compared with adolescents in Korean families in South Korea. Specifically, the adolescents were classified into four groups according to whether their father or mother was born in South Korea and examined whether there were significant differences in substance use and sexual behaviors among the groups.

METHODS

Subjects

Data from the 2013 Korean Youth Risk Behavior Web-Based Survey (KYRBS) were used. The KYRBS is a government-approved statistical survey that has been performed annually by the Korea Centers for Disease Control and Prevention since 2005 to monitor health-related risk behaviors among Korean adolescents. The 2013 KYRBS was conducted from June 1, 2013 to July 18, 2013 using a stratified multistage cluster sampling design to obtain a nationally representative sample of middle- and high-school students. The students voluntarily completed the anonymous, self-administered web-based survey during a regular class period. Written informed consent was not obtained from the participants be-

cause the KYRBS did not collect any personal information, such as the students' names, schools, telephone numbers, home addresses, or social security numbers. A total of 72,435 students from 400 middle schools and 400 high schools (36,655 boys and 35,780 girls, mean age 14.90 ± 1.76 years) participated in the survey. Additional details about the sampling methodology and survey procedure are available elsewhere.¹⁸ This study was reviewed and approved by the institutional review board of Seoul National University Hospital.

Multicultural families were assessed using two questions: "Was your father born in South Korea?" and "Was your mother born in South Korea?" The adolescents were classified into four groups: those whose father and mother were born in South Korea (reference group), those whose father was born in South Korea but whose mother was not, those whose mother was born in South Korea but whose father was not, and those whose father and mother were not born in South Korea. For adolescents whose fathers or mothers were not born in South Korea, the parents' birthplace was asked. Foreign birthplaces were classified as China (ethnic Koreans), China (Han and other ethnicities), North Korea, Japan, other Asian countries (e.g., Vietnam, the Philippines, Taiwan, Mongolia, Thailand, Cambodia), and non-Asian countries (e.g., Uzbekistan, Russia, the United States, Canada). In the case of absent fathers or mothers, no further questions about the absent parent was asked, including questions about his or her birthplace. Therefore, among the 72,435 students, 66,951 participants with both parents (33,777 boys and 33,174 girls, mean age 14.89 ± 1.76 years) were included in the analysis.

Measurements

Sociodemographic variables included sex, age, place of residence (name of city), perceived family economic status, and parents' level of education. Places of residence were classified as rural area, small city, and large city.

Lifetime alcohol use was assessed with the following question: "Have you ever use alcohol?" Current drinking was assessed with the following question: "In the last month, have you used alcohol?" Problematic alcohol use was assessed with the CRAFET, a 6-item instrument that is used to screen for alcohol use in the adolescent population. It consists of the following yes-no questions: 1) Have you ever ridden in a Car driven by someone (including yourself) who had been using alcohol? 2) Do you ever use alcohol to Relax, feel better about yourself, or fit in? 3) Do you ever use alcohol while you are by yourself or Alone? 4) Do you ever Forget things you did while using alcohol? 5) Do your family or friends ever tell you that you should cut down on your drinking? and 6) Have you ever gotten into Trouble while you were using alcohol? Two or more positive responses indicate the po-

Table 1. Socio-demographic characteristics of adolescents according to parents' birthplaces

	Korean- parents family (N=66217)		Foreign- mother family (N=580)		Foreign- father family (N=60)		Foreign- parents family (N=94)		Foreign-mother family vs. Korean-parents family		Foreign-father family vs. Korean-parents family		Foreign-parents family vs. Korean-parents family	
	%		%		%		%		OR (95% CI)	p-value	OR (95% CI)	p-value	OR (95% CI)	p-value
Age (years), mean (SD)	14.89 (1.76)	14.28 (1.62)	14.86 (1.73)	14.86 (1.73)	16.00 (1.68)	0.61 (0.41-0.80)*	<0.001†	0.03 (-0.59-0.65)*	>0.990†	-1.11 (-1.67 to -0.55)*	<0.001†			
Sex, female	49.5	50.2	51.7	47.9	47.9	1.03 (0.87-1.21)	0.763	1.09 (0.66-1.81)	0.743	0.94 (0.62-1.40)	0.746			
Area of residence														
Rural	11.6	31.4	10.0	8.5	8.5	4.64 (3.73-5.75)	<0.001	0.74 (0.31-1.76)	0.490	0.95 (0.44-2.06)	0.898			
Small city	42.9	42.1	36.7	56.4	56.4	1.68 (1.38-2.06)	<0.001	0.73 (0.42-1.26)	0.257	1.71 (1.10-2.64)	0.016			
Large city	45.5	26.6	53.3	35.1	35.1	Ref	Ref	Ref	Ref	Ref	Ref			
Paternal education														
Middle school education or lower	4.3	4.4	6.0	23.3	23.3	17.18 (13.03-22.65)	<0.001	1.17 (0.36-3.82)	0.793	8.20 (4.19-16.05)	<0.001			
High school education	40.7	52.4	28.0	40.0	40.0	3.48 (2.72-4.44)	<0.001	0.58 (0.31-1.07)	0.082	1.48 (0.83-2.64)	0.186			
College degree or higher	55.1	20.4	66.0	36.7	36.7	Ref	Ref	Ref	Ref	Ref	Ref			
Maternal education														
Middle school education or lower	4.2	12.5	13.5	25.7	25.7	3.05 (2.23-4.16)	<0.001	2.77 (1.20-6.36)	0.017	8.00 (4.34-14.77)	<0.001			
High school education	51.2	43.8	34.6	40.0	40.0	0.87 (0.71-1.07)	0.192	0.58 (0.32-1.06)	0.075	1.02 (0.59-1.76)	0.952			
College degree or higher	44.6	43.8	51.9	34.3	34.3	Ref	Ref	Ref	Ref	Ref	Ref			
Not live with father	9.0	8.3	40.0	36.2	36.2	0.88 (0.66-1.19)	0.401	6.51 (3.88-10.91)	<0.001	5.53 (3.63-8.43)	<0.001			
Not live with mother	4.7	7.2	3.3	22.3	22.3	1.57 (1.14-2.15)	0.005	0.69 (0.17-2.84)	0.611	5.78 (3.56-9.41)	<0.001			
Socio-economic status														
Low	3.7	6.2	11.7	27.7	27.7	2.87 (1.72-4.78)	<0.001	3.48 (1.02-11.91)	0.047	2.72 (1.50-4.93)	0.001			
Low-middle	15.1	26.7	20.0	13.8	13.8	3.05 (2.00-4.66)	<0.001	1.48 (0.48-4.58)	0.501	0.34 (0.17-0.68)	0.003			
Middle	48.4	48.8	40.0	28.7	28.7	1.73 (1.15-2.61)	0.009	0.92 (0.32-2.65)	0.874	0.22 (0.12-0.39)	<0.001			
High-middle	25.4	14.0	21.7	9.6	9.6	0.94 (0.60-1.48)	0.798	0.95 (0.31-2.91)	0.922	0.14 (0.06-0.31)	<0.001			
High	7.4	4.3	6.7	20.2	20.2	Ref	Ref	Ref	Ref	Ref	Ref			

*mean difference (95% CI), †results of analysis of variance (ANOVA). OR: odds ratio, CI: confidence interval

tential for a significant alcohol problem.

Lifetime smoking was assessed with the following question: "Have you ever smoked even a puff of a cigarette, cigar, or pipe?" Current smoking was assessed with the following question: "In the last month, have you smoked a cigarette, cigar, or pipe?"

Lifetime drug use was assessed with the following question: "Have you ever used drugs that are often used nonmedically (e.g., inhalants, glue, stimulants, cannabids, amphetamine, marijuana, codeine, neuroleptics)?" Current drug use was assessed with the question "In the last month, have you used drugs that are often used nonmedically?"

Sexual activity was assessed with the following questions: "Have you ever experienced sexual relations with a partner of the opposite sex?" and "Have you ever experienced sexual relations with a same-sex partner?" Participants who responded positively to either question were considered sexually active.

Statistical analysis

Logistic regression tests were performed to compare the sociodemographic factors among the groups. Odds ratios (ORs) and 95% confidence intervals (CIs) were calculated using the parents' birthplace as the main outcome variable and each sociodemographic factor as the principal predictor. Three sets of dichotomized outcomes were defined: those whose father was born in South Korea but whose mother was not vs. those whose father and mother were born in South Korea; those whose mother was born in South Korea but whose father was not vs. those whose father and mother were born in South Korea; and those whose father and mother were not born in South Korea vs. those whose father and mother were born in South Korea.

To elucidate the association between the adolescents' substance use and sexual behaviors and their parents' birthplace, logistic regression tests were performed using the lifetime and current use of alcohol, tobacco, and drugs and sexual activity as the main outcome variables and the parents' birth-

place as the principal predictor after controlling for gender, age, area of residence, parents' educational level, parental co-residence, and socioeconomic status. Three sets of principal predictors were used: those whose father was born in South Korea but not mother vs. those whose father and mother were born in South Korea, those whose mother was born in South Korea but not father vs. those whose father and mother were born in South Korea, and those whose father and mother were not born in South Korea vs. those whose father and mother were born in South Korea.

SPSS (version 21.0; SPSS, Inc., Chicago, IL, USA) was used to perform all statistical analyses, and a p-value less than 0.05 was considered significant.

RESULTS

Of 66,951 respondents, 580 were students whose father was born in South Korea but whose mother was not, 60 had a mother who was born in South Korea and a father who was not, 94 had two parents who were not born in South Korea, and the remaining 66,217 had a father and mother who were born in South Korea.

Table 1 presents the sociodemographic characteristics by group. Compared with the participants whose father and mother were born in South Korea, the participants whose fathers were born in South Korea but whose mothers were not were more likely to live in a rural area or small city than in a large city, and to have a lower socioeconomic status; and their parents were more likely to be less-educated. The participants whose mothers were born in South Korea but whose fathers were not were more likely to have a lower socioeconomic status and their mothers were more likely to be less-educated. Compared with the participants whose fathers and mothers were both born in South Korea, the participants whose fathers and mothers were not born in South Korea were more likely to live in a small city than in a large city, to have less-educated parents, and to have a lower socioeconomic status.

Table 2. Birthplaces of parents in multicultural families

	Foreign-mother family (N=580)	Foreign-father family (N=60)	Foreign-parents family (N=94)	
	Mother's birthplace	Father's birthplace	Mother's birthplace	Father's birthplace
China (ethnic Koreans)	30.2	5.0	16.0	16.0
China (Han and other ethnicities)	11.9	11.7	4.3	5.3
Japan	32.9	30.0	2.1	3.2
North Korea	0.9	5.0	40.4	41.5
Other Asian countries	21.2	11.7	18.1	16.0
Non-Asian countries	2.9	36.7	19.1	18.1

Table 3. Adolescents' substance use and sexual relations according to their parents' birthplaces

	Korean- parents family (N=66217)		Foreign- mother family (N=580)		Foreign- father family (N=60)		Foreign- parents family (N=94)		Foreign-mother family vs. Korean-parents family		Foreign-father family vs. Korean-parents family		Foreign-parents family vs. Korean-parents family	
	%		%		%		%		AOR (95% CI)	p-value	AOR (95% CI)	p-value	AOR (95% CI)	p-value
Lifetime alcohol use	43.2	32.4	43.4	56.4	0.60 (0.48-0.76)	<0.001	1.11 (0.60-2.08)	0.734	1.13 (0.60-2.14)	0.700				
Current alcohol use	15.9	11.4	26.7	35.1	0.70 (0.51-0.97)	0.032	1.72 (0.82-3.59)	0.151	1.44 (0.74-2.78)	0.284				
Problematic alcohol use	6.4	3.4	16.7	24.5	0.51 (0.29-0.89)	0.019	2.17 (0.82-5.71)	0.118	1.67 (0.77-3.63)	0.198				
Lifetime smoking	20.6	16.2	26.7	47.9	0.68 (0.50-0.91)	0.010	1.42 (0.69-2.91)	0.344	2.37 (1.26-4.46)	0.008				
Current smoking	9.2	6.7	21.7	27.7	0.83 (0.56-1.24)	0.358	2.71 (1.20-6.11)	0.016	1.58 (0.74-3.38)	0.237				
Lifetime drug use	0.8	1.4	10.0	16.0	1.34 (0.49-3.67)	0.563	5.87 (1.40-24.60)	0.016	18.08 (8.00-40.84)	<0.001				
Current drug use	0.1	0.2	6.7	9.6	-	-	30.51 (3.83-242.72)	0.001	64.12 (19.77-207.92)	<0.001				
Sexual activity	4.8	4.5	20.0	44.7	1.00 (0.61-1.65)	0.990	4.05 (1.77-9.31)	0.001	8.41 (4.43-15.98)	<0.001				

AOR: odd ratios adjusted for gender, age, area of residence, parents' educational level, parent coresidence, and socioeconomic status

Table 2 shows the birthplaces of the fathers and mothers of adolescents in multicultural families. Among the adolescents whose fathers were born in South Korea but whose mothers were not, most of the mothers came from Asian countries, including 42.1% from China and 32.9% from Japan. Among the adolescents whose mothers were born in South Korea but whose fathers were not, 30.0% of the fathers came from Japan, 16.7% came from China, and 36.7% came from non-Asian countries. Among the adolescents whose father and mother were both foreign-born, approximately 40% of the parents came from North Korea; China, other Asian countries, and non-Asian countries accounted for approximately 20% of the foreign-born parents each.

Table 3 shows the results of logistic regression models that used lifetime or current alcohol, tobacco, and illegal substance use and lifetime sexual activity as the main outcome variables and parents' birthplace as the principal predictor. Compared with adolescents whose fathers and mothers were born in South Korea, adolescents whose fathers were born in South Korea but whose mothers were not were less likely to use alcohol and cigarettes. Adolescents whose mothers were born in South Korea but whose fathers were not and those whose parents were both foreign-born were more likely to use tobacco and drugs and to be sexually active.

DISCUSSION

This is the first study to demonstrate differences in substance use and sexual behaviors among adolescents groups from multicultural families according to whether one or neither of their parents was born in South Korea. The main findings of this study were that compared with adolescents whose fathers and mothers were born in South Korea, adolescents whose fathers were born in South Korea but whose mothers were not were less likely to use alcohol and cigarettes, but adolescents whose mothers were born in South Korea but whose fathers were not and adolescents whose parents were both foreign born were more likely to use cigarettes and drugs and to be sexually active.

It should be noted that the adolescents in multicultural families were classified according to their parents' birthplaces (i.e., whether they were born in South Korea) because this study did not gather information about the parents' ethnicity or nationality. Accordingly, the group of adolescents whose parents were both foreign-born might have included some Korean parents who were born in foreign countries. However, from this point forward, I will refer to adolescents whose fathers were born in South Korea but whose mothers were not as "adolescents in a foreign-mother family", adolescents whose mothers were born in South Korea but whose fathers

were not as “adolescents in a foreign-father family”, and adolescents whose parents were both born outside South Korea as “adolescents in a foreign-parents family” for ease of discussion.

The sociodemographic characteristics of multicultural families reflect that adolescents in multicultural families are in a disadvantageous position compared with adolescents in Korean families. For example, the adolescents in multicultural families, particularly those in foreign-parents families, were more likely to have less-educated parents and a lower socioeconomic status and were less likely to live with both parents compared with adolescents in Korean families. These disadvantageous factors may be associated with the higher prevalence of substance use and sexual activity in adolescents in multicultural families compared with adolescents in Korean families. The older age of the adolescents in the foreign-parents families may also partially explain the higher prevalence of cigarette and drug use and sexual activity in this population. Low socioeconomic status, divorce, poor intrafamilial linkages, and older age all contribute to the risk of adolescent delinquency, including smoking, drug use, and sexual activity.^{9,14,19} In contrast, the younger age and more rural residence of the adolescents in the foreign-mother families partially explains the lower prevalence of alcohol and cigarette use in this population.¹⁶

However, even after controlling for these socio-demographic factors, a lower prevalence of alcohol and cigarette use among adolescents in foreign-mother families and a higher prevalence of cigarette and drug use and sexual activity in adolescents in foreign-father and foreign-parents families remained. Different language use and appearance, social prejudices, and a relatively lower socioeconomic status is related to social difficulties and maladjusted behaviors among children in multicultural families in South Korea.^{1,6,7} Therefore, differences in the degree of social difficulties according to the subtype of multicultural families may provide some explanations for the different prevalence of substance use and sexual activity among the subgroups of multicultural families. Previous studies of multicultural families in South Korea showed that adolescents in foreign-parents families were more likely to experience difficulties in school and to be involved in school violence or be bullied compared with Korean adolescents,^{20,21} but the adolescent children of women who immigrated to marry Korean men were not.^{21,22}

Many of adolescents in foreign-mother families could be the children of marriage-migrant women. Compared with adolescents in foreign-parents families, the adolescent children of marriage-migrant women are in a more advantageous position because of the way that they learn Korean language within the family. Despite possible difficulty with Korean lan-

guage acquisition in early childhood because of their mother's different language use, these children might fully overcome language difficulties before they reach adolescence. The children of marriage-migrant mothers are also in an advantageous position compared with the adolescents in foreign-father families because their mothers were mostly Asians, meaning that their physical appearance likely did not differ greatly from that of Koreans. Consistent with the study finding of less delinquency among adolescents in foreign-mother families, previous studies revealed that the school adjustment, peer relationships, and self-satisfaction of the children of marriage-migrant women were similar to or even better than those of Korean children and adolescents.²¹⁻²³ It is generally considered that immigrants, including the marriage-migrant women, may experience greater stress owing to low socioeconomic status and/or adapting to a new culture. This social stress hypothesis of immigration, which predicts greater risk of maladjusted behaviors among the foreign-born, cannot explain our results. However, these results are consistent with the “frustrated status” hypothesis.^{24,25} This model posits that the foreign-born may be less distressed because of a lower set of expectations about what constitutes success in Korea. Indigenous Koreans, having higher expectations for status attainment, may be more distressed and experience a greater sense of deprivation and greater risk of substance use problem, than individuals born in developing countries.

Adolescents in foreign-father families are less likely to have language difficulty because they can learn Korean from their mothers, but they are more likely to have difficulties related to differences in their appearance. In this study, only 2.9% of the mothers in the foreign-mother families came from non-Asian countries, but 36.7% of the fathers in the foreign-father families came from non-Asian countries. Previous studies showed that children with Caucasian or African ethnicity experienced greater difficulty with peer relationships compared with children with Asian ethnicity.^{20,26}

Finally, adolescents in foreign-parent families might include the children of foreign workers, children in blended families whose foreign father or mother married a Korean step-parent, and the children of North Korean refugees. Although this study did not gather information about the adolescents' birthplaces, many of the adolescents in foreign-parents families could have been immigrants who had been born in foreign countries. These immigrant adolescents might suffer from difficulties with acculturation, the process of adapting to a new host culture, and from difficulties related to language and appearance difficulties.^{27,28} Previous studies showed that acculturation is predictive of alcohol use,²⁷ cigarette smoking,³⁰ sexual behavior and risk-taking³¹ among Hispanic adolescents. In the case of adolescents from North

Korea, predominantly constituting foreign-parents family, heterogeneity coming from different cultures, the experience of various sufferings after defection, and acculturation-related stress could be a significant problem despite similarities with Korean adolescents in language and appearance.³² In addition, compared with adolescents who were born and raised in South Korea, where the sales of cigarettes to underage youth and the drug use of all citizens are legally controlled,^{15,33} immigrants adolescents who came from countries where substances are less strictly regulated might have had more opportunities to access these substances.

This study had several limitations. First, the prevalence of substance use and sexual activity might be underestimated because this survey was conducted in school and did not include adolescents who were not attending school, a high-risk group for delinquent behavior. Although the survey was anonymous, substance use may have been underreported because of concern with disclosing illegal drug use, especially in adolescents whose parents were born in Korea where drug use is legally controlled. If this hypothesis is correct, group differences between adolescents in Korean families and adolescents in multicultural families can be somewhat exaggerated. On the other hand, because the middle- and high-school enrollment rates for adolescent children in multicultural families (i.e., 92.3% and 85.1%) are lower than those for Korean families (i.e., 96.1% and 92.6%),¹ group differences between adolescents in Korean families and adolescents in multicultural families would have been even more pronounced if this survey had included adolescents who did not attend school along with those who attended school. Second, this study did not gather information about the ethnicity or nationality of the parents or about the birthplace of the adolescents. Therefore, many of interpretations are speculative. For example, it was supposed that many of the adolescents whose fathers and mothers were not born in South Korea might have been immigrants, but the data of this study do not allow us to draw definite conclusions about the adolescents' immigration status. Third, there is a possibility that adolescents in foreign parents family might have difficulties in reading and understanding Korean language, which may affect the reliability of responses in the survey. Finally, the frequency and risk level of substance use and sexual activity were not assessed in this study.

The results of the present study indicate that adolescents in foreign-father and foreign-parents families need greater awareness of cigarette and drug use and risky sexual behaviors. Currently, the major foci of health education at school are the prevention of sexual activity and smoking. However, considering the high prevalence of problematic alcohol use, smoking, and sexual activity (20% to 48% among adolescents

in foreign-father and foreign-parents families), health education should also include dependency prevention programs, safety issues, and health screening. In addition, in contrast with the very low prevalence of drug use among Koreans,³¹ more than 10% of the adolescents in foreign-father and foreign-parents families reported experience with drugs, suggesting a need for a specific preventive strategy for this population. In addition to a universal risky health behavior prevention program, individualized programs are needed to enhance social adjustment in the areas that trouble adolescents in multicultural families (e.g., language difficulty, bullying, acculturation stress).

Acknowledgments

This work was supported by the National Research Foundation of Korea (NRF) Grant funded by the Korean Government (MSIP) (NRF-2014R1A1A3049818).

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