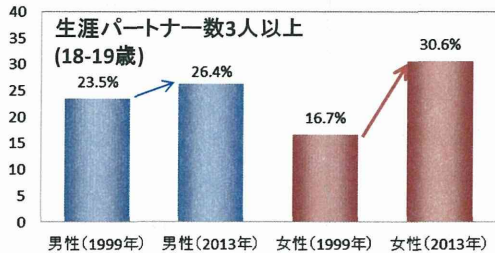
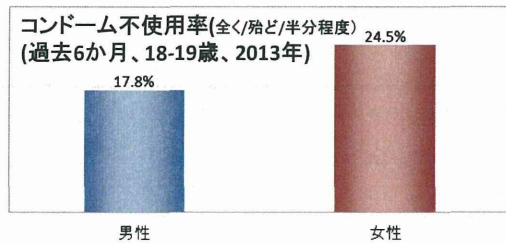
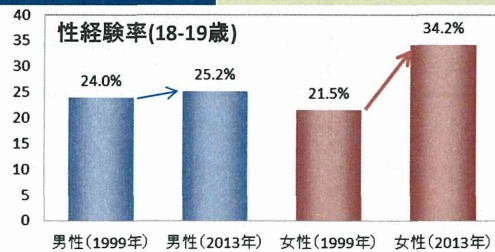


2-1. 若者の性に関する知識・意識・行動についての研究(ネット調査)まとめ

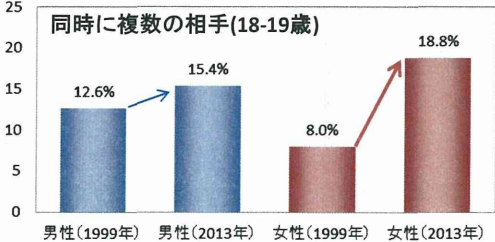
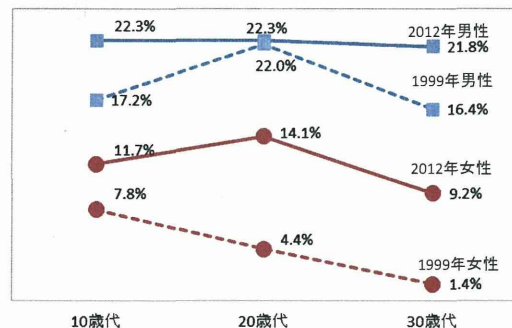
【若者(18歳・19歳男女)の性行動・性意識結果の主要知見の概要】

研究結果概要

性行動調査の結果(15年前調査との比較)



金銭を介するセックスの容認度



1999年全国大学生調査(1年生n=9474, 木原雅子)
 1999年全国国民性行動調査(18-59歳, n=3562, 木原雅子)
 2012年全国ネット調査(18-59歳、某社パネル、n=2060, 木原雅子)
 2013年全国ネット調査(18-19歳、某社パネル、n=1030, 木原雅子)

- ① 性経験率：男性はほとんど変化なし(24%→25%)、女性では大幅増(22%→34%)
- ② 生涯パートナー数3人以上：男性はほとんど変化なし(24%→26%)、女性では激増(17%→31%)
- ③ 同時に複数の相手：男性はほとんど変化なし(13%→15%)、女性では大幅増(8%→19%)
- ④ コンドーム不使用率の男女比較：男性 19%、女性 25%
- ⑤ 金銭授受を介したセックスの容認：男性はほとんど変化なし、女性は全年代層で容認度の大幅増

★この15年間に若年女性の性行動が活発化し、しかも無防備化していることが示された。

★性感染症の罹患経験と関連のある因子

- ①生涯パートナー数が多いこと
- ②同時に複数の相手がいること
- ③セックスの頻度が高いこと
- ④コンドームを使わないこと
- ⑤金銭の授受を介したセックスの経験があること

Outline of the state of risky sexual behaviors in selected developed countries.

Patou Masika Musumari, MD, PhD

Kyoto University School of Public Health

Department of Global Health and Socio-epidemiology

Section 1: Introduction

Section 2: Risky sexual behaviors in specific population groups

- **Adolescent and youth**

Section 3: Interventions to improve sexual health

- **Adolescent and youth**
- **Men who have Sex with Men**

Section 1: Introduction

Risky sexual behavior is commonly referred to as behavior that increase one's risk of contracting sexually transmitted infections and experiencing unintended pregnancies. Sexual risk behavior include having sex at an early age, having multiple sexual partners, concurrent sexual partners, having sex while under the influence of alcohol or drugs, and unprotected sexual behaviors [1].

Sexual behavior is a largely private activity, subject to varying degrees of social, cultural, religious, moral and legal norms and constraints. Though research on sexual behavior dates back to the 18th century, drastic increase in research on risky sexual behavior was noted after the advent of HIV/AIDS epidemic [2]. In Europe, as in North America, gay communities were the first to be affected and engage in the fight against AIDS. Thus, in the early stage of the HIV/AIDS epidemic, most research of sexual risk behaviors in developed countries were directed towards men who have sex with men, and later, injecting drug users [3]. However, little endeavors were felt in terms of understanding risky sexual behaviors, as well as their drivers, in the general population. It is only after 1985, that most of European countries felt the need for general population campaigns to address sexual risk behaviors on the premise that everyone should be concern about HIV/AIDS prevention if were to avoid the spread of the disease to the general population and also to avoid the stigmatization resulting from the focus on the same risk.

In this context, most developed countries initiated large-scale population-based sexual risk survey to fill the gap of previous research that was directed to high-risk groups including men who have sex with men, and injection drug users. It is particularly important to note that key areas of inquiry have shifted towards describing population patterns of risk behaviors for STI/HIV transmission, understanding how epidemics of STIs are generated and informing disease control strategies [2].

This review will outline the patterns of risky sexual behaviors in selected developed countries in specific population groups considered at higher risk or vulnerable, particularly adolescent and young people and men who have sex with men.

Outline of patterns of individual risky sexual behavior:

- Almost everywhere, sexual activity begins for most men and women in the later teenage years (ages 15–19 years), but regional and sex variations between men and women are substantial. In some industrialized countries, sexual activity before age 15 years has become more common in recent decades (though the prevalence is lower than in other regions and the increase is not generally significant). In Europe, the gender gap between age at first sexual is narrowing, mostly among the youngest and those in western and northern Europe [4, 5, 6].

- In regards with multiple sexual partnerships (MCPs), worldwide, men report more MCPs than do women; only in some industrialized countries are the proportions of men and women who report multiple partnerships more-or-less equal. However, it is important to underscore that reporting bias might account for some of the differences observed between men and women [4].

- In industrialized countries, rates of condom use are generally higher than those in non-industrialized countries. Condoms are widely used, more by males than females, and more than before [4].

- The trend towards later marriage in many developed countries has also led to an increase in the prevalence of premarital sexual intercourse. Additionally, the time between first sexual intercourse and living with a partner is about the same for men and for women (about 5 years), and this trend is rather different in other parts of the world where the time between first sexual intercourse and living

with a partner is longer for men than for women (typically 3–6 years compared with 0–2 years, respectively) [4].

The study of sexual behavior lies at the heart of understanding the transmission dynamics of sexually transmitted infections [2], and available data indicate that sexually transmitted infections are increasing in many European countries [7]. The changes observed in the epidemiology of sexually transmitted infections across countries in Europe, in the US, and other developed countries are in large part driven by underlying changes in sexual behavior [7]. This is supported by trends towards larger numbers of sexual partners, concurrent partnerships [8, 9], increasing proportions of adolescents engaging in sexual intercourse at a young age [4,10] and inconsistent condom use with new partners which have been described previously [8, 9].

The changing dynamics in the pattern of sexually transmitted infection underscore the need and demands for up-to-date general population estimates of variables such as rates of partner acquisition and contact with high risk groups like sex workers but also a thorough mapping of underlying sexual risk factors and their determinants.

In Europe, most national representative surveys on sexual behavior have been conducted since the late 1980s and early 1990s [11]. The Nordic countries have at that time been considered 'liberal' in their attitudes toward sexuality, and more permissive in terms of sexual relationships, evident in larger numbers of partners over lifetime than most other European countries [11]. A long term evaluation of Swedish national sex surveys from 1989 to 2007 has recently drawn attention to increasing prevalence of multiple sexual partners and of casual sex without the use of a condom in the general population [12]. Increasing trends in a wide range of behaviors associated with increased risk of STI transmission, including numbers of heterosexual partners, concurrent partnership and payment for sex has also been described for the period from 1990 to 2000 in British national sex surveys [8].

Section 2: Risky sexual behaviors in specific population groups: Adolescent and young

Examining risky sexual behaviors among adolescent and young people is of paramount importance. Adolescent may be particularly prone to sexual risk behaviors such as inconsistent or non-use of condoms, early sexual initiation or having multiple sexual partners, and this may be the result of poor decision making skills of adolescents and may have profound and adverse health consequences which can extend into later life. Sexual risk behavioral patterns adopted during adolescence and young may continue throughout adulthood. It is therefore vital to understand sexual risk trajectories during adolescence and young adulthood.

2.1 Early sexual debut among adolescent and young in developed settings

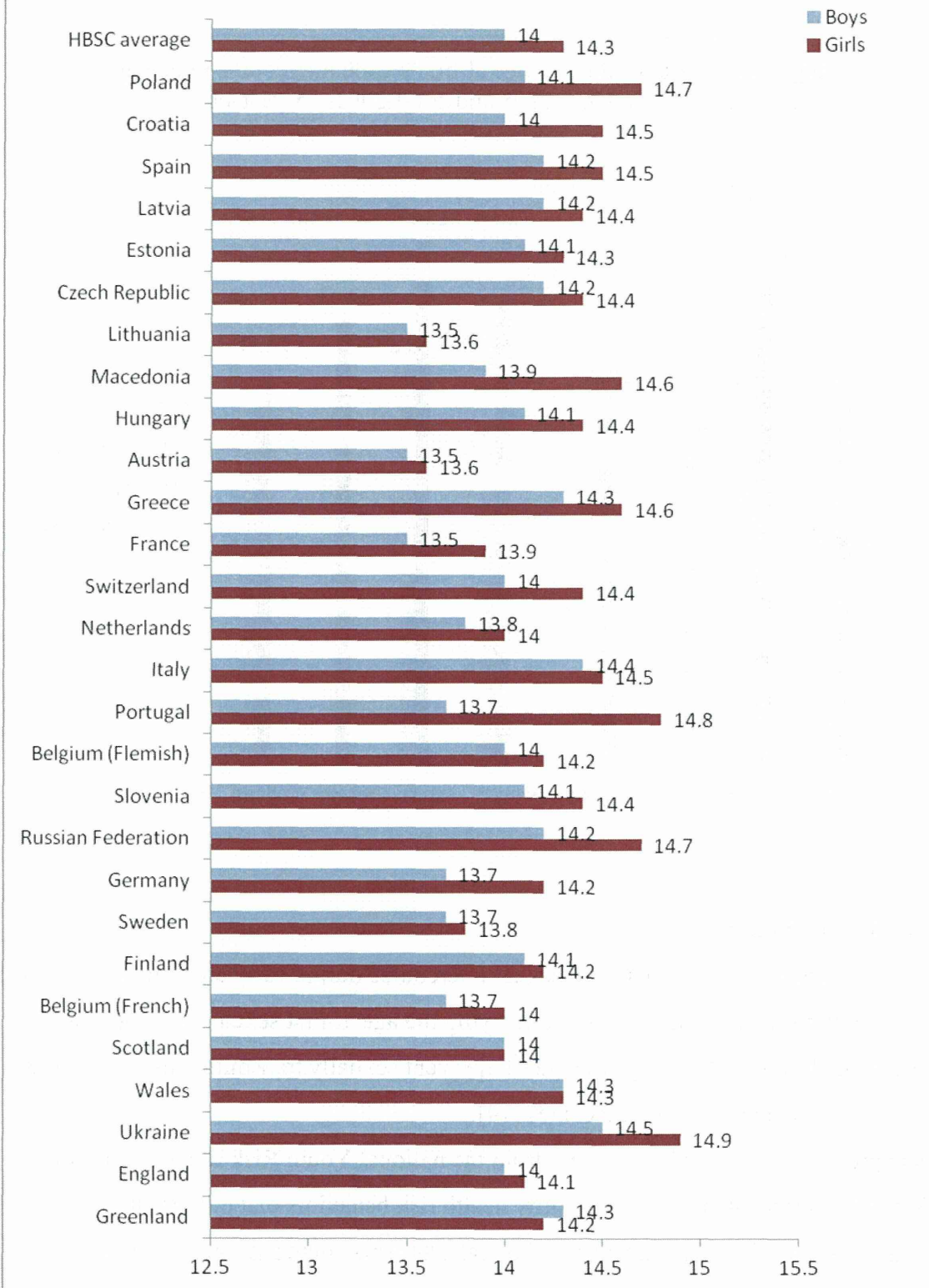
2.1.1 Europe

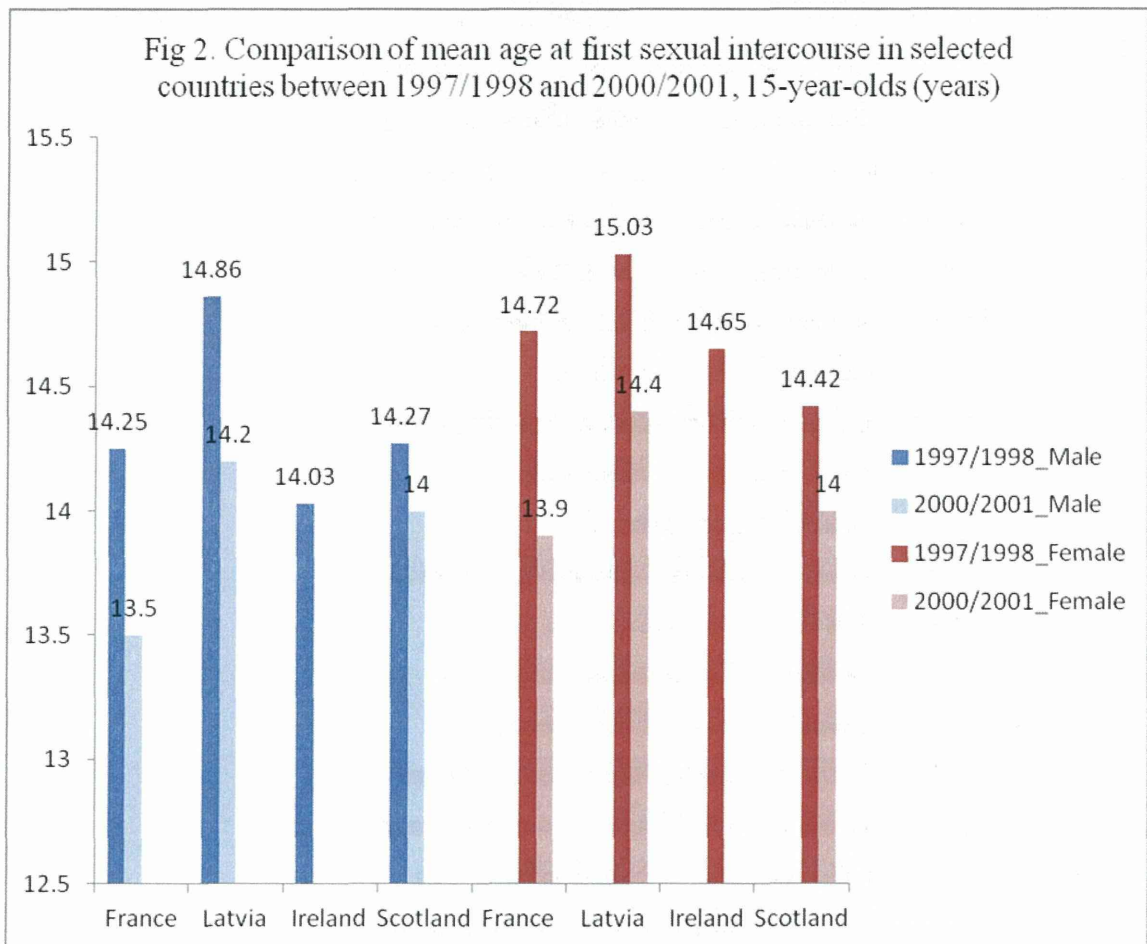
Early sexual onset is well documented as a risk factor associated with number of adverse health outcomes including but not limited to unwanted/unintended pregnancy and contraction of sexually transmitted infections, and was shown to be associated with a range of factors such as depression, substance use, and disruptive family connectedness [5].

According to the 2000/2001 Health Behaviour in School-aged Children survey [5], the mean age at first sexual intercourse was 14.2 years for 15-year-olds, and ranged from 13.5 years in Lithuania to 14.6 years in Ukraine. In most countries and regions, it is slightly lower for boys than for girls, 13.5– 14.5 years and 13.6–14.9 years, respectively, in Lithuania and Ukraine. The largest gender difference, about 1 year, is found in Portugal (Fig 1).

There is a notable decrease in the age at first sexual intercourse in both males and females between the 1997/1998 and the 2000/2001 HBSC survey [13] in the countries who reported their mean age at first sexual intercourse (France, Latvia, and Scotland). (Fig 2).

Fig 1. Mean age at first sexual intercourse, 15 year-olds (years)





2.1.2 United States

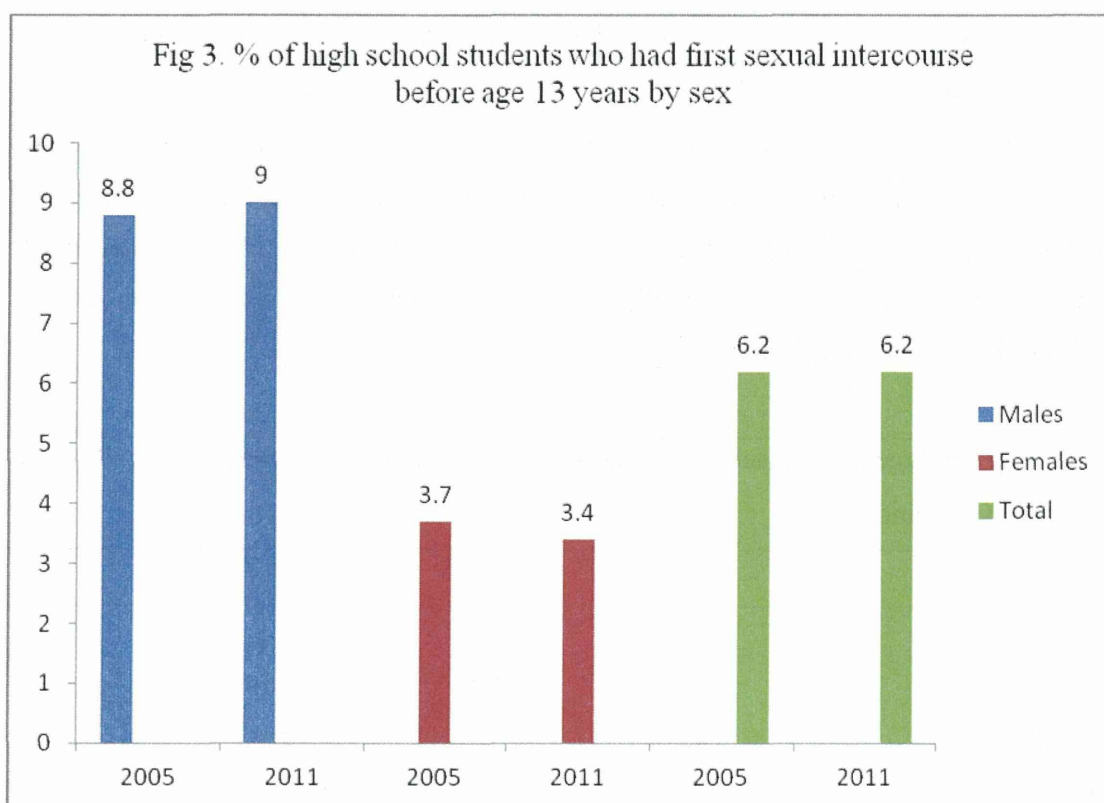
Research from the USA has linked sexual intercourse during early adolescence to future behavioral problems. For this reason, delaying the age at first sexual intercourse has been placed as one of the key strategies to prevent sexually transmitted infections and other related negative health outcomes [14].

Data presented in this subsection are from the national Youth Risk Behavior survey (YRBS), a survey that monitors priority health risk behaviors that contribute to the leading causes of death, disability, and social problems among youth and adults in the United States. The age at first sexual intercourse vary across countries in developed settings [14]. In the United States, the Youth Risk Behavior Surveillance (2011) among adolescents from grade 9-12, reported that nationwide, 6.2% of students had had sexual

intercourse for the first time before age 13 years. Overall, the prevalence of having had sexual intercourse before age 13 years was higher among male (9.0%) than female (3.4%) students. Among students nationwide, the prevalence of having had sexual intercourse for the first time before age 13 years decreased during 1991–2005 (10.2%–6.2%) and then did not change significantly during 2005–2011 (6.2%–6.2%). The prevalence of having had sexual intercourse for the first time before age 13 years also did not change significantly from 2009 (5.9%) to 2011 (6.2%) (Table 1 & Fig. 3)

Table 1. Percentage of high school students who had sexual first intercourse before age 13 years by sex and grade

	1991	2005	2011
Sex			
Males	-	8.8	9.0
Females	-	3.7	3.4
Total	10.2	6.2	6.2
Grade			
9	-	8.7	8.8
10	-	5.9	6.3
11	-	5.2	4.9
12	-	4.1	4.2



2.1.3 Canada

In the 2009/2010 Canadian Community Health Survey (CCHS) [15], 9% of 15- to 24-year olds reported that they first had sexual intercourse when they were younger than 15, and about 25% had had intercourse for the first time at age 15 or 16. These results were not significantly different from 2003 CCHS. However, in 2003, similar percentages of males and females reported having had intercourse before age 15, but in 2009/2010, this was less common among females (8%) than males (10%). (Table 2 & Fig.4)

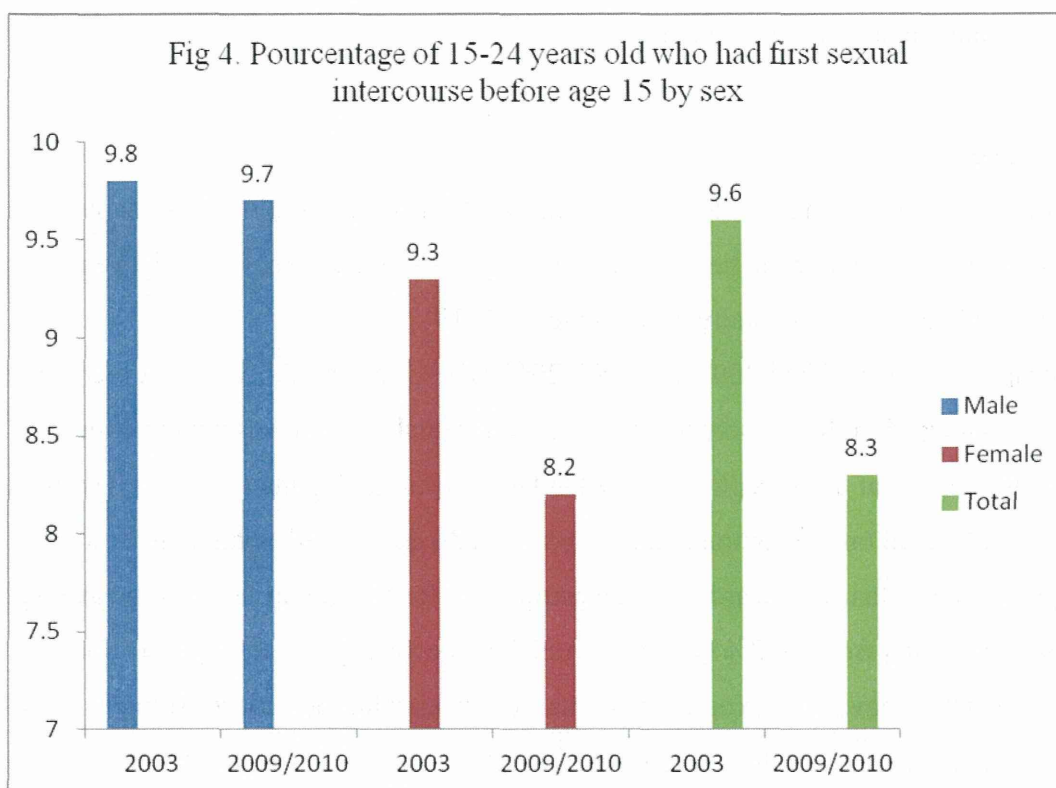


Table 2. Percentage of 15- to 24-year-olds who had first sexual intercourse before age 17 by sex.

Age at first intercourse	2003	2009/2010
Male		
Younger than 15	9.8	9.7
15 or 16	24.8	26.5
Female		
Younger than 15	9.3	8.2
15 or 16	24.8	24.8
Total		
Younger than 15	9.6	8.3
15 or 16	24.8	24.6

2.2 Experience of sexual intercourse

2.2.1 Europe

The European health Behavior in School-aged Children survey (HBSC) have shown substantial differences across the countries and regions in the proportion of 15 years old who reported having had sexually intercourse [5, 6, 13].

The comparison of the 2000/2001 and 2009/2010 HBSC survey indicates that there is an increasing trend in the proportion of 15-year old female who report having ever had sexual intercourse, at the exception of Switzerland, Portugal, Germany, Wales, Ukraine, and England which on the contrary have experienced a downward trend. However, the average trend is balanced towards an increasing trend for female. In females the average trend has increased from 20.2% to 23%. For males, the average trend of proportion of 15-year-olds who have ever experience sexual intercourse has decreased from 28.1% to 15%. However, a closer examination of trend within countries suggests a wide variability with some countries experiencing an increase and other a decrease in the proportion of sexual experience among male. (Fig 5 & Fig 6)

In the 2000/2001 HBSC survey [5], it was found that the percentages of 15-year-olds who had experienced sexual intercourse range from 15% in Poland to 75% in Greenland. In contrast in the 2009/2010 survey [6], it ranged from 16% in Poland to 58.5% in Greenland; highlighting a substantial decrease in this latter. In nine countries and regions, mainly in eastern and central Europe, plus Spain, less than a fifth of young people report ever having had sexual intercourse in the 2000/2001 HBSC survey [5]. At the upper end of the spectrum, in England, Greenland, Scotland, Ukraine and Wales, a third or more have had sexual intercourse. (Fig 5 & Fig 6)

In terms of the gender differences, the examination of 2000/2001 HBSC survey [5] shows that in many countries, were wide. Overall, in many more countries, the genders are almost equal in experienced sexual intercourse, girls were more likely than boys to have experienced sexual intercourse in 6 countries (England, Finland, Germany, Greenland, Scotland and Wales), and boys were twice as likely as girls to have experiences sexual intercourse in nearly one third of the countries. (Fig 5 & Fig 6)

In a much more detailed examination, positive responses among boys ranged from 18% in Spain to around 71% in Greenland. The Czech Republic, Estonia, Poland and Spain cluster at the low end with rates of about 20%. At the opposite end of the spectrum, in nine countries and regions, about a third or more of boys have had sexual intercourse. Among girls, positive responses ranged from 4% in the former Yugoslav Republic of Macedonia to 79% in Greenland. Rates are below 20% in 15 countries and regions but about 33% or more in 6 other countries (England, Finland, Germany, Greenland, Scotland and Wales). Interestingly, in the latter group, more girls than boys declared having had sexual intercourse. The largest differences are found in Germany and Wales. In eight countries, a more traditional pattern prevails with at least twice as many boys as girls having had sexual intercourse. Over 3 times as many boys as girls gave positive answers in Greece and Israel, and over 10 times as many in the former Yugoslav Republic of Macedonia.

Overall, in the 2009/2010 HBSC survey [6], boys were significantly more likely to report having had sexual intercourse in around half of the country. The greatest gender disparity was observed in eastern European countries, Armenia, and Greece. Higher prevalence among girls was reported in seven, mainly Scandinavian countries and the United Kingdom. Detailed insights indicate that the proportion of boys ranged from 15% in Slovakia to 46 % in Greenland, whereby Spain observed an increase from 18% to 71%. The Czech Republic, Estonia, Poland, Spain, Finland, Netherland, and Slovenia cluster at the low end with rates of about 20%. Among girls, positive responses ranged from 3% in Macedonia (MKD, the former Yugoslav Republic of Macedonia) to 71% in Greenland. Rates are below 20% in Romania, Ukraine, Greece, Russian Federation, Armenia, Latvia, Portugal, Ireland, Switzerland, Croatia, MKD, Poland, and Slovenia but about 33% or more in Greenland, Denmark, Wales, Scotland, England, Sweden, Iceland, Norway. In the latter group, apart from Denmark, more girls than boys declared having had sexual intercourse. The largest differences are found in Greenland, Armenia, and MKD. (Fig 5 & Fig 6)

Fig 5. 15-year-olds female who have had sexual intercourse

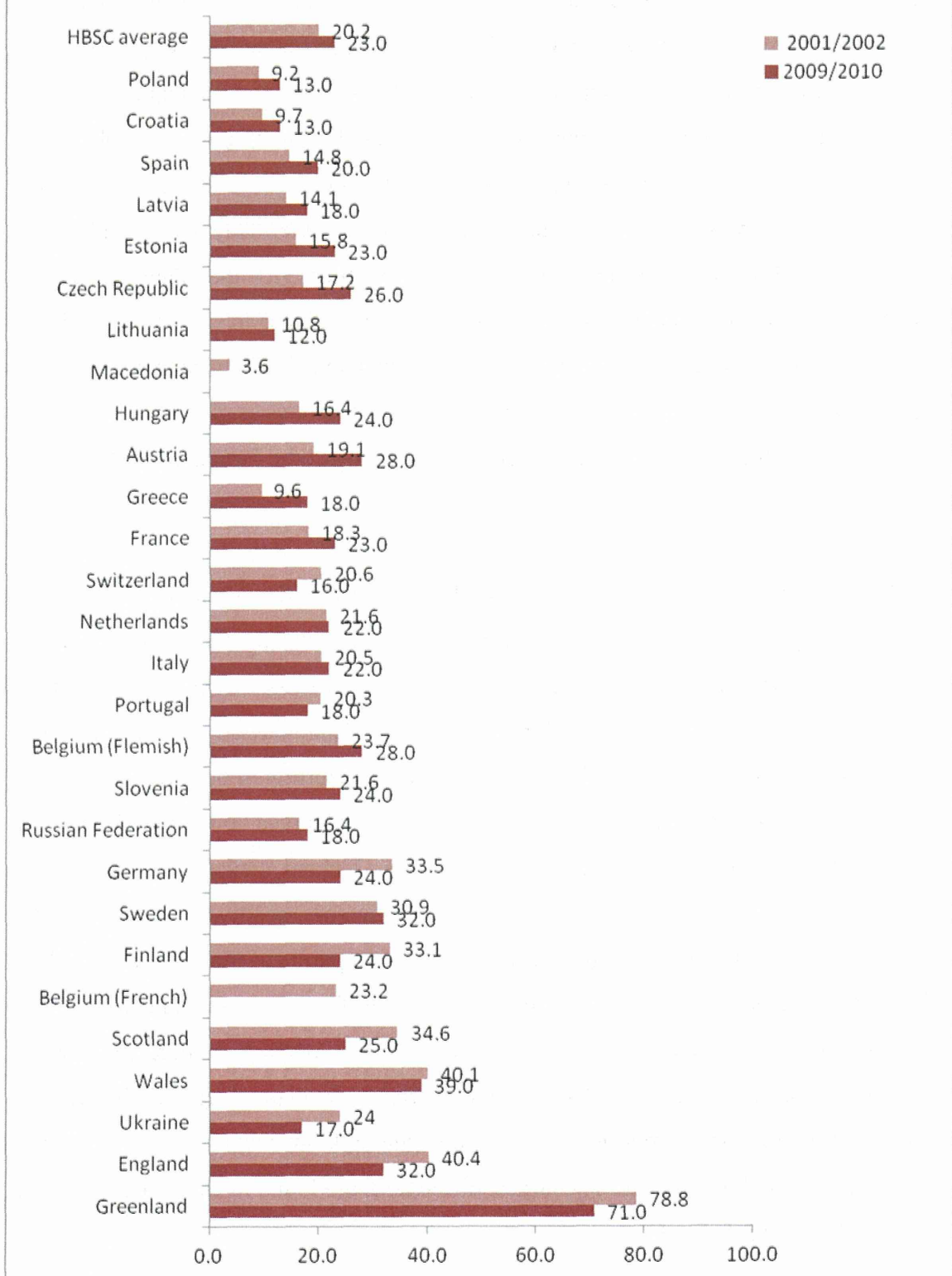
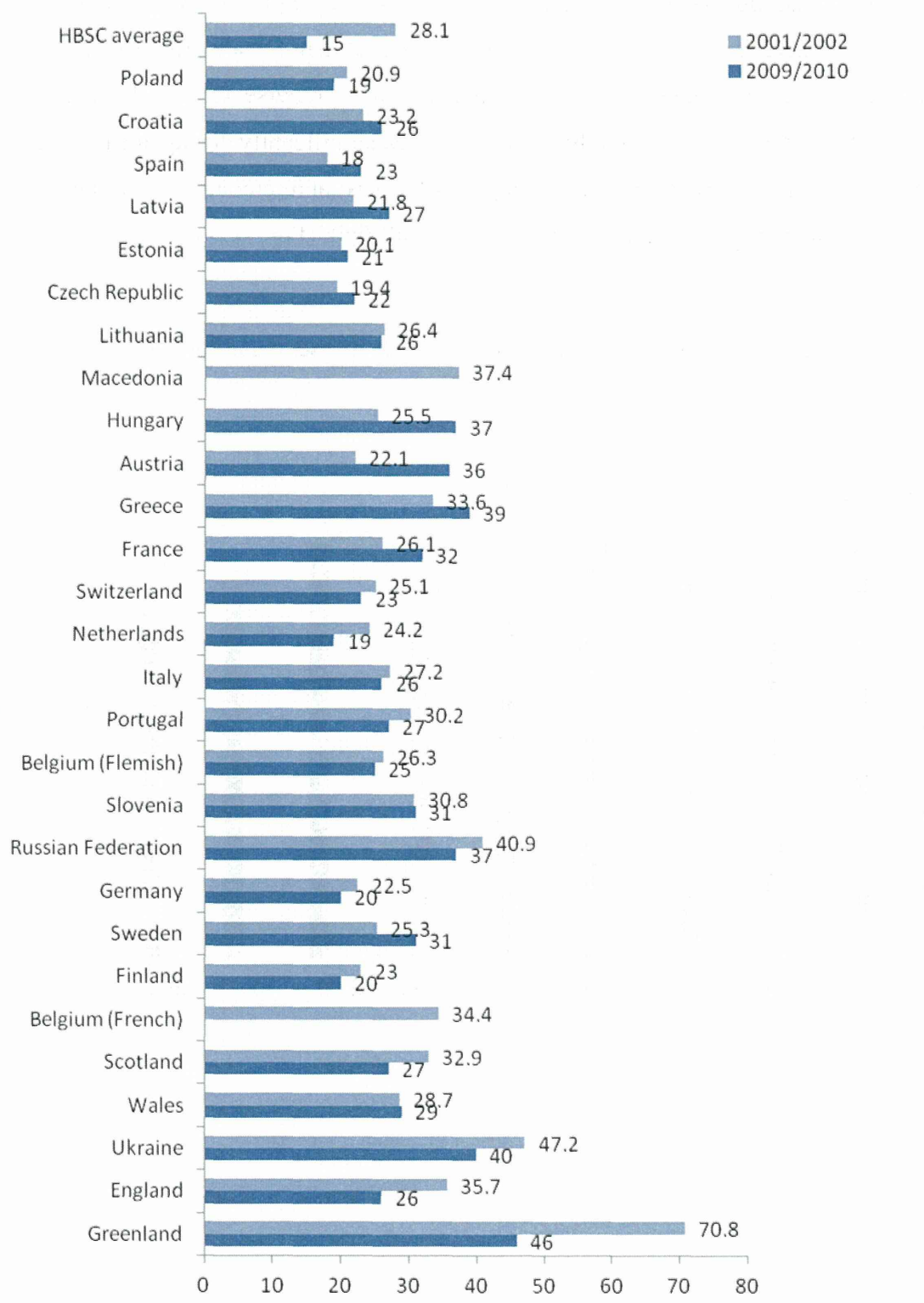


Fig 6. 15-year-olds male who have had sexual intercourse (%)



2.2.2. United States

According to the Youth Risk Behavior Surveillance (2011) [14], 47.4% of students had ever had sexual intercourse in the United States. Overall, the prevalence of having ever had sexual intercourse was higher among male (49.2%) than female (45.6%) students ; nationwide, the prevalence of having ever had sexual intercourse decreased during 1991–2001 (54.1%–45.6%) and then did not change significantly during 2001–2011 (45.6%–47.4%). The prevalence of having ever had sexual intercourse also did not change significantly from 2009 (46.0%) to 2011 (47.4%). (Fig. 7)

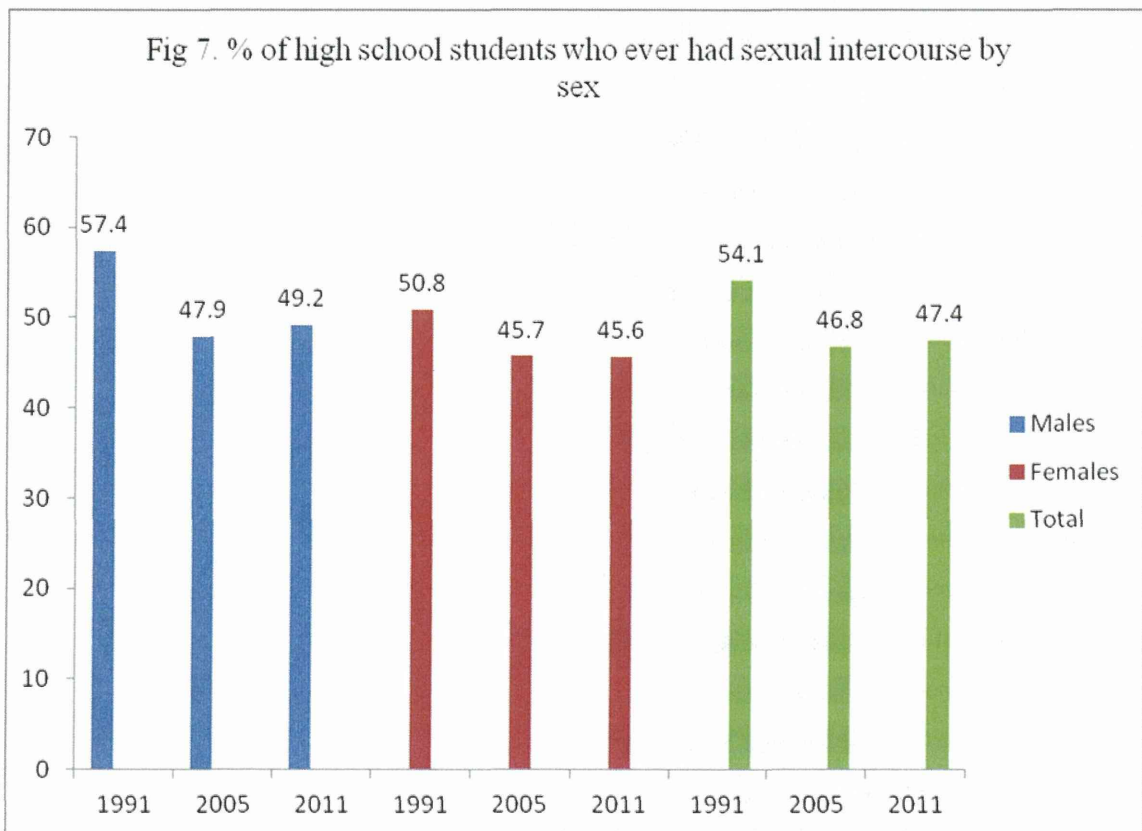


Table 3. Percentage of high school students who ever had sexual intercourse by sex and grade

	1991	2005	2011
Sex			
Males	57.4	47.9	49.2
Females	50.8	45.7	45.6
Total	54.1	46.8	47.4
Grade			
9	39.0	34.3	32.9
10	48.2	42.8	43.8
11	62.4	51.4	53.2
12	66.7	63.1	63.1

Gender differences in the pattern of sexual experience were also reported in the United States. A study examining sexual initiation among minority youth in the United States [16], and indicated that at baseline, 31% of males and 8 % of females reported having already had sexual intercourse, and these figures rose to 66% for male and 52% of female by 10th grade. Similarly for recent sexual intercourse, males at baseline were approximately 4 times more likely to report recent sexual intercourse while by grade 10th, this ratio had narrowed about 1.3 times (54% vs 42%). Another study from the United States examining the growth trajectories of sexual risk behaviors in adolescence and young adulthood have captured the gender differences in risky sexual behavior across time by showing that that boys exhibited more sexual risk behaviors in early years of high school than girls, but girls overtook the boys at the end of high school [17].

2.2.3 Canada

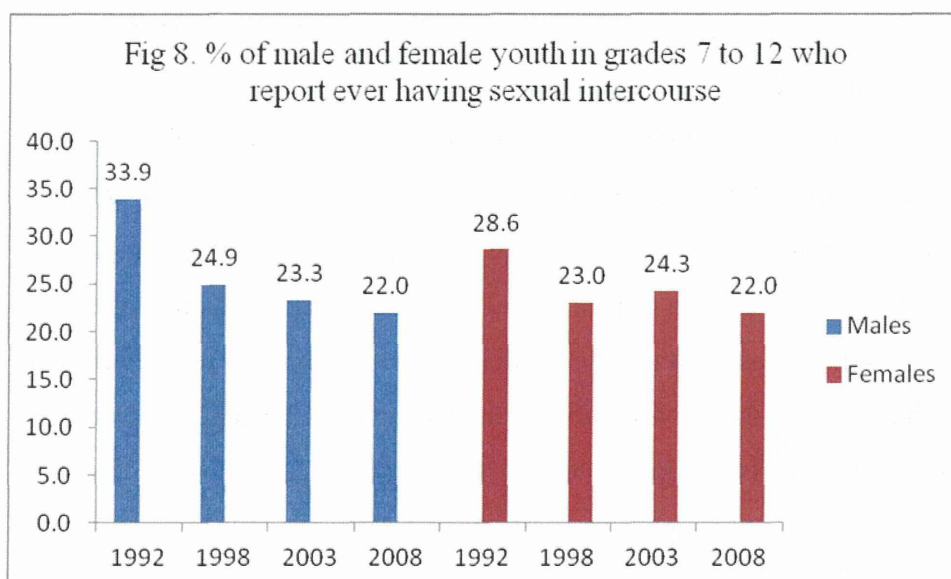
In 2009/2010 CCHS [15], 66% of 15- to 24-year-olds reported having had sexual intercourse at least once, which was not significantly different from 2003. The likelihood of being sexually active rose with age. At ages 15 to 17, 30% reported having had sex, compared with 68% of 18- to 19-year-olds and 86% of 20- to 24-year-olds. The

2003 figures were 30%, 68%, and 85%, respectively.

Table 4. % of Canadian youth aged 15-24 reporting ever having sexual intercourse

	2003	2009/2010
Age group		
15-17	30%	30%
18-19	68%	68%
20-24	85%	86%

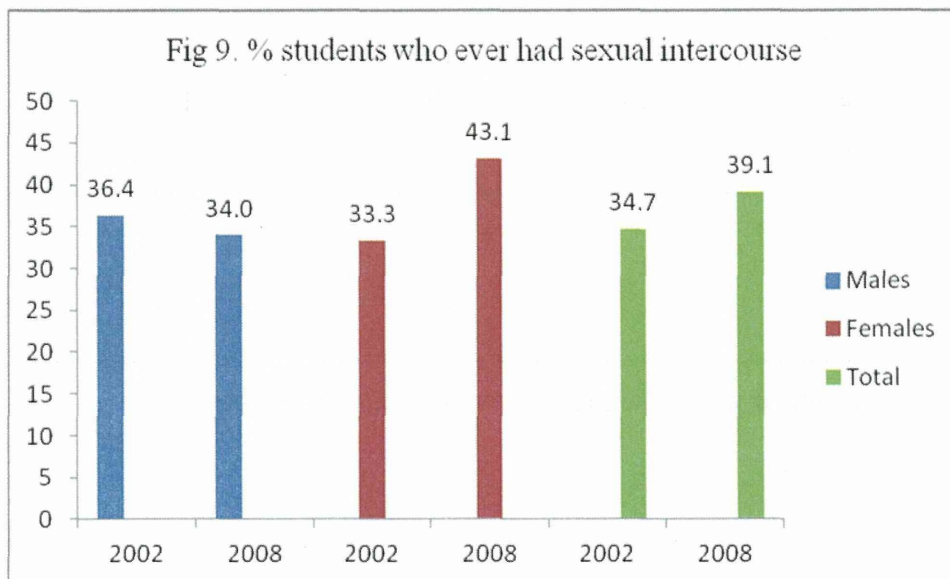
A study examining the trends in sexual health risk behaviors among adolescents in British Columbia [18] indicated that the proportion of adolescents of grade 7 to 12 who reported ever had sexual intercourse decreased over years from 33.9% in 1992 to 22.0% in 2008 among males and from 28.6% in 1992 to 22.0% in 2008 among females. (Fig. 8)



2.2.4 Australia

According to the 2008 National Survey of Australian Secondary Students [19], a greater proportion of young women compared to young men had experienced sexual intercourse although these differences were not statistically significant. Additionally, a

comparison with the 2002 National Survey indicate that a substantial increase in the proportion of females who have experience sexual intercourse from 33.3% to 43.1%. In contrast, the proportion of males who have experienced sexual intercourse did not relatively change. (Fig. 9)



In terms of the grade year, the survey has revealed a downtrend in the age of sexual experience. In 2002, 25.8% of teenagers of year 10 were sexually active compared to 27.4% of year 2008, while 46.8% of teenagers of year 12 were sexually active compared to 56.1% in 2008. In terms of the gender differences, There is a notable increase in the proportion of female teenagers who ever had sexual intercourse. Of female teenagers of year 10, 25% were sexually active in 2002 and increased to 27% in 2008. For those of year 12, the proportion of sexually active increased from 46.8% in 2002 to 56.1% in 2008. In contrast, there is a downward in the proportion of sexually active among male teenagers; from 27.8% in 2002 to 27.1% in 2008 of secondary school students of year 10, and from 48.3 in 2002 to 44.4% in 2008 of those of year 12. (Table 5, Fig 10, & Fig 11)