Sexual health is defined as a state of physical, emotional and social well-being regarding an individual’s sexual behaviour. Adolescence is a key period in the development of personal relationships and sexual behaviour. This HBSC Briefing Paper provides an overview of young people in Scotland’s self-reported engagement in sexual activity in relation to social and individual factors. The data comes from 15-year old pupils who participated in HBSC Scotland national surveys in 2010 and 2014.

Summary of key findings

- Between 2010 and 2014 there was a decrease in the percentage of 15-year old girls who had ever had sexual intercourse from 35.4% to 27.4%
- There was little change between 2010 and 2014 in the percentage of 15-year old boys who had ever had sexual intercourse
- In 2010 a higher percentage of 15-year old girls than boys had ever had sexual intercourse; in 2014 there was no difference between boys and girls
- In 2014, it was found that boys and girls from poorer neighbourhoods were more likely than other 15-year olds to have had sex
- Having sexual intercourse by age 15 is associated with poorer mental well-being and higher levels of risk behaviours

Sexual health of young people in Scotland

In 2010, Scotland had one of the highest rates of early sexual onset among 15-year olds, especially among girls, compared with 36 other countries in Europe and Canada. Whereas the rate of teenage pregnancy remained stable at about 5.6 per 1,000 population over the last decade among under 16-year olds in Scotland, the rate of sexually transmitted infection (STI) diagnosis among young people (aged under 25 years) has increased. Young women are at greater risk than women over 18 years of being diagnosed with genital chlamydia and gonorrhoea. Although the majority of adolescents use condoms during sexual intercourse, the percentages who engage in unprotected or poorly protected sexual intercourse in Scotland are relatively high in international comparisons.
Changes between 2010 and 2014 in the reported prevalence of ‘ever had sexual intercourse’ among 15 year old boys and girls

**Figure 1: Percentages ever had sexual intercourse: boys and girls in 2010 and 2014**

- Among girls, there has been a significant decrease between 2010 and 2014 in the percentages who report that they have ever had sexual intercourse (35.4% to 27.4%). For boys the percentages have remained stable between 2010 (26.9%) and 2014 (24.4%).
- A higher percentage of girls than boys reported having ever had sexual intercourse in 2010: 35.4% vs 26.9% respectively. In 2014, the gender difference was not significant (24.4% vs 27.4%), (Figure 1).

**Socioeconomic context of sexual behaviour (2014 data)**

**Scottish Index of Multiple Deprivation (SIMD):**

In 2014 girls living in most deprived areas (SIMD1 & 2) show highest rates of ever having had sexual intercourse. For, boys this is only seen for SIMD1 and rates are low in SIMD2. (Note: in these analyses, since numbers in each SIMD group are small, findings should be treated with caution). In 2014 a higher percentage of girls who reported having had sexual intercourse were in SIMD groups 1 & 2 than in 2010.

**Social capital**

Girls and boys who report living in a neighbourhood with low social capital were more likely to report ever having had sexual intercourse compared to those living in neighbourhoods with higher social capital.
Family Affluence

Reporting of ever having had sexual intercourse was more likely among boys living in a family with high or low affluence compared to medium family affluence. Among girls, ever had sexual intercourse was more likely to be reported among those living in low or medium affluence families compared to high affluence families (Figure 3).

<table>
<thead>
<tr>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
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<tbody>
<tr>
<td>Boys: 26.5</td>
<td>Girls: 31.7</td>
<td>Boys: 20.0</td>
</tr>
<tr>
<td>n=110</td>
<td>n=89</td>
<td>n=130</td>
</tr>
<tr>
<td>Girls: 26.3</td>
<td>Girls: 26.5</td>
<td>Girls: 23.4</td>
</tr>
<tr>
<td>n=162</td>
<td>n=108</td>
<td>n=102</td>
</tr>
</tbody>
</table>

*Figure 3: Percentages reporting ever had sexual intercourse by family affluence in 2014*

- Boys who report that their family is ‘not at all/not very’ well off were more likely to have ever had sex compared to those who say their family is ‘quite/very’ well off (31.0% vs 24.0%, respectively).
- Boys and girls who ‘sometimes or always’ go to bed hungry were more likely to report ever having had sex than their peers who never go to bed hungry (boys: 31.0% vs 23.2%; girls: 41.9% vs 24.6%).

Social environment and individual factors associated with having ever had sexual intercourse

Family

- Boys and girls who reported that it is easy/very easy to talk to their mother were less likely to ever have had sexual intercourse than those that find it difficult (boys: 20.3% vs 34.7% and girls: 24.6% vs 33.5%).
- Being able to talk to one’s father easily was associated with lower prevalence of ever having had sexual intercourse in girls (19.8% versus 30.3% among those that found talking to their father difficult). No such association was found for boys where the equivalent figures were 22.2% and 25%.
- Percentages of boys and girls who have ever had sexual intercourse varied according to family structure with lowest rates among young people who lived with both parents.

School

- Four measures of support in the school environment were used. Boys and girls experiencing high levels of student support, teacher support and school empowerment were less likely to ever have had sex than their counterparts with lower levels of these types of support. Furthermore, a high level of empowerment within school class significantly decreased the likelihood of ever having had sex for boys but not for girls.
Wellbeing and risk behaviour indicators

Health and wellbeing

Boys and girls with a high level of life satisfaction, and infrequent health complaints were less likely than those with lower life satisfaction and frequent health complaints to have ever had sexual intercourse. Similarly, girls with positive mental health and higher health-related quality of life were less likely to ever have had sex than those scoring lower on these indicators of wellbeing.

Risk behaviour

Boys and girls who have ever smoked cigarettes were more likely to ever have had sex than their peers who have not smoked (boys: 47.9% vs 14.5%, girls: 58.5% vs 13.7%). Similar associations were also observed for ever having drunk alcohol versus not (boys: 28.6% vs 8.1% and girls 32.6% vs 5.4%) and taken cannabis versus not (boys: 50.0% vs 17.4% and girls: 68.9% vs 19.6%).

Background

The World Health Organisation (WHO) emphasises the need for a positive approach to sexuality including the chance of having safe sexual experiences. During adolescence key biological, cognitive, emotional and social changes occur and young people begin to have thoughts and feelings about sex and relationships. Risky sexual health among adolescents includes early age of initiation, inadequate contraception use, sexually transmitted infections (STIs) as well as unintended pregnancies. Early sex can have consequences for young people’s health and well-being, especially if it begins before they are physically and mentally mature enough to cope with it. During adolescent brain development, decision making can be particularly affected by emotions and social context including social factors such as peer influence. Early onset of sexual activity is not only associated with increased risk of STIs and unintended pregnancies, but also other adverse outcomes such as poor mental health, and lower academic performance.

Policy context in Scotland

The Scottish Government’s Sexual Health and Blood Borne Virus Framework aims to improve sexual health outcomes in young people in Scotland, with a focus on reducing the inequality gap. The Framework aims to take an integrated approach by looking beyond individual risk behaviours, and focussing on the shared influences that affect young people. Delivery is through lifelong education, increasing access to integrated services, improving joint working between services, reducing stigma and increasing positive messaging on sexual health and wellbeing.

Relationships, sexual health and parenthood (RSHP) education is a Curriculum for Excellence topic, and is provided in all schools and other educational settings in Scotland. Parents and carers are also supported by NHS and Local Authorities to discuss RSHP to ensure children have access to age appropriate education and information.

The Scottish Government has also invested in social marketing campaigns aimed at encouraging young people to talk about their relationships and sex, and signposting to the Scottish Government sexual health website. In addition to promoting confidence and communication, the campaign aims to help promote positive representations of sexual health and relationships in the media.

HBSC data

The Health Behaviour in School-Aged Children Study (HBSC) in Scotland is the only source of nationally representative self-report data on the sexual behaviour of young people aged 15 years. Previous briefing papers and reports have presented trends from 1998 to 2010 and international comparisons between Scotland and other countries in Europe and Canada in 2002, 2006 and 2010.
Methods

This briefing paper presents 2010 and 2014 national survey data from the HBSC: WHO Collaborative Cross-national Study in Scotland. HBSC is a unique cross-national research study of the health and health behaviours of adolescents across Europe and North America. The HBSC study collects data from 15-year-olds (S4 pupils in Scotland) on reported sexual intercourse and contraception use. A nationally representative sample of 2566 pupils from S4 took part in the survey in 2010, and 2,983 pupils from S4 took part in the survey in 2014.

NOTE: Survey questions and health/social measures referred to in this Briefing Paper are described in full on the HBSC National Study website.18

Discussion of key findings

There has been a decrease between 2010 and 2014 in the percentage of 15-year old girls reporting they have ever had sex. In 2010, a significantly higher percentage of girls than boys reported ever having had sex; in 2014 this difference was no longer significant.

In 2014, boys and girls living in the most deprived areas were more likely to report that they have had sexual intercourse than those living in the least-deprived areas which is in line with other research.19,20 In addition, boys who perceived their families to be well off were found to be at lower risk of ever having been sexually active; and girls in most affluent families were least likely to have ever had sexual intercourse.

Family relationships and family structure were associated with ever having had sexual intercourse in adolescents, as reported previously.21 The current findings emphasise the importance of close relationship to parents in adolescence; being able to easily talk to one's mother or father was associated with lower prevalence of ever having had sexual intercourse.

Schools also have a role to play in promoting sexual health. Adolescents feeling empowered within their school are less likely to have had sexual intercourse. Previous research emphasises potential benefits of promoting empowerment within the context of Sex and Relationship Education by supporting critical thinking of adolescents.22 Pupils may be able to transfer those skills to other areas of their life such as sexual decision making. Pupils reporting positive experiences with respect to perceived care by teachers and social support from students were also less likely to have had sex.

With regards to individual factors, poorer (mental and physical) health indicators were associated with higher prevalence of having had sexual intercourse among boys and girls. Furthermore, girls and boys engaging in other risk behaviours such as substance use had higher prevalence of having had sexual intercourse.

The results of this briefing paper would support the targeting of sexual health prevention programmes at those young people living in more deprived circumstances as well as prevention programmes that aim to empower young people to enhance their decision making skills.

Authors

Mareike Franz was an ERASMUS funded visiting post-graduate student from the University of Bielefeld to the University of St Andrews. Mareike conducted data analysis and contributed to the drafting of this Briefing Paper. She was jointly supervised by Candace Currie, Principal Investigator for HBSC Scotland and Juliet McEachran.
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References