

# Sexual initiation of youths in selected European countries compared with their sexual and contraceptive knowledge

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## Abstract

The problem of educating youths entering adult life is as old as the history of mankind. The data shown in the introduction indicate that the methods of education depend on culture, religion, climatic zone, and a whole chain of events characteristic for the place where the young man grows up. Research data, however, show that adolescents of the former Eastern Bloc use contraceptives significantly less often and have a more traditional approach to the relationships between a man and a woman. They are, however, more likely to engage in random sexual contacts and accompanied dangerous sexual behaviours. Polish youths have a more liberal approach to the norms concerning sexual activity. The age of sexual initiation lowers gradually, but not as radically as over the western border. These changes occur at a slower rate than in other European countries. Sexual education, which is supposed to prepare the young man, responsible and fully aware of his actions, for adult life, also develops at a slower rate.

## Key words

sexual education, adolescents, contraceptives, sexual behaviour

## INTRODUCTION

As global reports indicate, more and more youths begin their sexual activity while still attending elementary school. The problem of sexual knowledge is a point of interest for psychologists, doctors, sociologists, and most importantly, young people entering adult life. The progressing change of life conditions, submission of one's sexual drive to the common expectations of society, results in systematic and even greater changes in the sexual behaviour of youth worldwide [1, 2, 3].

Initiation of sexual intercourse during adolescence is statistically normative among developed nations. Among young adults surveyed in eleven European nations, the prevalence of sexual initiation before the age of 20 for males ranged from 73% in the Netherlands to 88% in Iceland; for females, the low was in Portugal at 51% and the high in Denmark at 90%. Using data from the mid-1990s, researchers

at the Guttmacher Institute found that differences in prevalence of adolescent sexual debut were minimal between the United States, Sweden, France, Canada and the UK, although adolescents in the United States were slightly more likely to initiate sexual intercourse before the age of 15 [4].

In the US in 2001, 40.8% of tenth-graders (usually 15-years-old) reported ever having sexual intercourse [5]. A survey conducted in the same year in 32 nations found the prevalence of ever having sexual intercourse among 15-year-olds varied from a low of 15% in Poland to a high of 75% in Greenland [6]. How one defines 'early' sexual intercourse, however, is not clear. Whether an 'early' debut should be defined according to the statistical distribution of age at first intercourse within the country of residence, or whether 'early' should be defined by a developmentally driven health standard that reflects adverse consequences to the individual stemming from physical and/or emotional immaturity, has not been adequately examined in the literature. In the US, sexual debut before the age of 16 is generally considered early, based on both the statistical distribution and positive associations with sexually transmitted infections, unintentional pregnancy, and psychological and social problems [7].

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It is clear that a satisfying sexual life depends on many factors, sometimes not evidently connected to sex itself. The level of sexual knowledge depends greatly (but not entirely) on the general knowledge of the mechanisms controlling sexual life, its signs and varieties, as well as the norms and pathologies [8].

The first sexual experience is a major event, having an enormous impact on a young individual's psyche and, as such, cannot be omitted in consideration of human development. A physiological sexual relationship is based on giving and receiving the happiness one human can bestow upon another, regardless of their socioeconomic status. The idea of happiness is relative and difficult to define, despite the fact that it is desired by every human being. The feeling of its real meaning is emotional rather than rational. A happy relationship between two individuals gives each of them much satisfaction, fulfils the need for intimacy and affection, and provides the opportunity for improving the communication and emotional connection of both partners. The emotional and physical closeness with another person greatly improves the quality of life and is one of the main joys of becoming an adult [9, 10].

Sex for young people, despite any changes of morals, is still an expression of their emotions. It is these emotions that give this act a moral rank, which is consistent with the principles of the majority of existing European sexual pedagogics [11].

Reports from the ASTRA group (ASTRA is a regional network of organisations and individual persons acting on behalf of reproductive and sexual rights, as well as reproductive health, and consists of 28 organisations from 19 countries) indicate that the major problem in all countries is the lack of common and reliable sexual education, as well as lack of proper healthcare suitable for young people. Sexual education consistent with modern standards can give youths the opportunity to make conscious decisions regarding their health, as well as allow them to exercise their inherent sexual and reproductive rights. Knowledge of this subject also allows them to protect themselves against such important threats as sexually transmitted diseases (STD), e.g. HIV/AIDS [12].

The lack of education on such matter lead to misinformation of young people, and in consequence to a dramatic increase of STDs, a low modern and more effective use of contraceptives factor, and lastly, a high rate teenage pregnancies [13].

The aim of the study was to evaluate differences of sexual initiation among youths from selected European countries. Additionally, the use of contraception and the sources of young peoples' knowledge about sex and contraception were determined. The objective of this study was also to make a comparison of analysed data between the rural and urban areas.

## MATERIALS AND METHODS

The research commenced after having acquired consent from the Poznań University of Medical Sciences Bioethical Committee (resolution No. 498/08/). The research consisted of 1,111 youths at the age of 15-19, living in selected European countries: France, UK, Ukraine, Germany, Belarus and Poland in the years 2009-2010. The participants were mainly students of selected secondary and higher education schools. The choice of each school was determined by the consent of the proper local education authorities (UK), or the place of

residence of the person conducting the study in the territory of an individual country.

The research tool was a modified questionnaire compiled by M. Hubert et al. [14] for the purpose of studying the sexual behaviours of Europeans. The questionnaire consisted of several parts concerning: sexual behaviours, contraceptive methods used, knowledge about protection against unwanted pregnancy and sexually transmitted diseases, as well as socioeconomic data. Due to lack of consent to put certain questions found in the original Hubert's questionnaire (by the UK Department of Education and the school boards in Poland and Ukraine), an individual modification was applied. The questions posed in the questionnaire were constructed in a way that allowed the respondents to mark several answers at the same.

**Statistic analysis.** In the statistical analysis each of these answers was considered as a separate opinion. The result of multiple responses given to one question each individual was the difference between the number of opinions and respondents. In such case, the number of questioned persons attributed to given groups was taken as the base for each of the percentage distribution calculations. The resultant database was analysed using the IMP 4.0.2/SAS Corporation computer programme.

Statistical analysis consisted of performing a chi-square test and Fisher's exact test. The Pearson test verified the correctness of the aforementioned tests. Accepted level of relevance  $p < 0.05$ .

## RESULTS

The total questioned group of 1,111 individuals consisted of 24.2% males and 75.8% females (Tab. 1).

**Table 1.** Characteristic of study group

N	1111
Male/Female (%)	24.2/75.8
Age (years)	15-19
Country of residence (%)	
- UK	16.9
- France	15.1
- Ukraine	15.9
- Germany	16.7
- Belarus	18.3
- Poland	17.1
Place of residence (%)	
- large city (population over 50,000)	51.0
- average-size city (population 10,000-50,000)	13.5
- small town (population under 10,000)	10.5
- rural areas	25.0
Fathers' education (%)	
- primary	1.8
- vocational	12.1
- secondary	41.8
- post-secondary	5.7
- higher	38.6
Mothers' education (%)	
- primary	2.1
- vocational	11.1
- secondary	39.8
- post-secondary	8.4
- higher	38.6

49.5% of the respondents declared to be sexually active, whereas 50.5% answered negatively (Tab. 2). Boys more often than girls declared themselves to be sexually active (chi-square 69.0,  $p < 0.05$ ). There was no statistically significant influence of the place of residence (urban-rural) on sexual initiation. Children of parents of higher education declared themselves to be sexually active more often in comparison to those with parents of elementary education (chi-square 48.1,  $p < 0.05$ ). French and Belarus youths declared being sexually active more often than those of other countries. The lowest percentage for such statements was in Germany (12.4%) (chi-square 191.7,  $p < 0.05$ ).

**Table 2.** Sexual initiation, motives for sexual initiation, sources of sexual knowledge of youths according to country and place of residence

	UK (%)	France (%)	Germany (%)	Poland (%)	Ukraine (%)	Belarus (%)	Total (%)	City (%)	Village (%)
Declaration of sexual initiation									
No	51.5	7.9	87.6	64.9	64.1	37.7	49.5	57.5	58.2
Yes	48.5	92.1	12.4	35.1	35.9	62.3	50.5	42.5	41.8
Declared motives for sexual initiation									
To sustain relationship	4.1	0.0	0.0	7.9	2.6	9.6	6.0	3.5	0.0
Other	0.0	0.0	11.1	1.7	5.1	5.2	3.4	0.9	6.2
Accident	14.4	18.4	61.1	20.6	12.8	15.3	17.8	21.3	16.7
Curiosity	40.9	37.7	16.7	15.9	7.7	16.1	22.4	29.1	22.9
Love	40.7	43.9	11.1	53.9	71.8	53.8	50.4	45.2	54.2
Parents as source of sexual knowledge									
No	56.4	50.8	54.6	54.5	87.2	0.0	38.8	55.5	80.7
Yes	43.6	49.2	45.4	45.5	12.8	100.0	61.2	44.5	19.3
The press as source of sexual knowledge									
No	57.4	39.7	76.5	53.9	90.1	46.2	57.6	55.6	80.7
Yes	42.6	60.3	23.5	46.1	9.9	53.8	42.4	44.4	19.3
Friends as source of sexual knowledge									
No	31.7	30.9	39.2	25.4	62.4	0.0	24.0	33.1	55.0
Yes	68.3	69.1	60.8	74.6	37.6	100	76.0	66.9	45.0
The television/internet as the source of sexual knowledge									
No	44.6	34.9	58.2	40.7	39.1	19.2	35.0	46.5	32.1
Yes	55.4	65.1	41.8	59.3	60.9	80.8	65.0	53.5	67.9
School as the source of sexual knowledge									
No	0.0	58.7	24.2	57.7	89.4	0.0	34.0	49.3	84.1
Yes	0.0	41.3	75.8	42.3	10.6	100.0	66.0	50.7	15.9
Books as the source of sexual knowledge									
No	84.2	76.2	67.3	67.2	78.1	43.3	63.0	58.5	85.1
Yes	15.8	23.8	32.7	32.8	21.9	56.7	37.0	41.5	14.9

The lowest age of sexual initiation was in Germany with the sexual activity of girls starting at the age of 14.5, and boys at the age of 12.6. In the remaining countries, this age was not so diversified. English girls claimed to have begun sexual activity at the age of 14.7 while English boys at the age of 15.7. In France, Ukraine and Poland the age of initiation was 16.0, 16.6, 18.8, respectively, for boys and 16.7, 15.6 and 16.6 for girls.

The main reason for sexual initiation given by the respondents was love (50.4%), then curiosity (22.4%), accident (17.8%) and to sustain a relationship (6%) (Tab. 2). The most common reason for sexual initiation in Belarus, Ukraine, Poland and France was love, in the UK – curiosity, and in Germany – accident. Respondents at the age of 15-16 more often claimed to have initiated into sex by accident (Tab. 2).

The main source of sexual education given by the respondents were friends (76.0%), then school (66.0%), television/internet (65.0%), parents (61.2%), the press (42.4%), and lastly, books (37.0%) (Tab. 2).

Individuals who obtain sexual knowledge from their parents are less likely to declare being sexually active. Those who obtained sexual knowledge from the press or other sources are more likely to declare themselves being sexually active. Individuals who did not obtain knowledge from their friends or television are less likely to declare being sexually active.

Over half of the respondents did not use any contraceptive methods (Tab. 3); 31% of the respondents used condoms and 17% oral contraceptive pills. Condoms were significantly more often used by English youths (chi-square 25.1;  $p < 0.05$ ). English and French youths were statistically more likely to use oral contraceptive pill, whereas this method was the least popular in the Ukraine (chi-square 19.6;  $p < 0.05$ ).

**Table 3.** Use of contraceptive methods and sources of contraceptive knowledge in youths according to country and place of residence

	UK (%)	France (%)	Germany (%)	Poland (%)	Ukraine (%)	Belarus (%)	Total (%)	City (%)	Village (%)
Use of contraceptive methods									
No	0.0	7.8	22.2	21.5	62.8	14.6	52.0	42.0	58.0
Yes	100.0	92.2	77.8	78.5	37.2	85.4	48.0	68.7	31.3
Parents as source of contraceptive knowledge									
No	63.6	57.9	45.7	69.3	81.6	75.3	68.0	58.5	85.1
Yes	36.4	42.1	54.3	30.7	18.4	24.7	32.0	41.5	14.9
The press as source of contraceptive knowledge									
No	32.3	51.6	75.8	46.6	92.9	86.5	70.2	56.0	79.4
Yes	67.7	48.4	24.2	53.4	7.1	13.5	29.8	44.0	20.6
Friends as source of contraceptive knowledge									
No	80.8	43.6	57.5	44.4	74.5	63.5	60.1	55.5	67.4
Yes	19.2	56.4	42.5	55.6	25.5	36.5	39.9	44.5	32.6
Doctors as source of contraceptive knowledge									
No	77.8	65.9	82.3	78.8	90.1	63.0	73.5	76.5	91.5
Yes	22.2	34.1	17.7	21.2	9.9	37.0	26.5	23.5	8.5
Teachers as source of contraceptive knowledge									
No	66.7	55.6	27.5	68.3	78.9	82.0	67.3	54.2	78.0
Yes	33.3	44.4	72.5	31.7	21.1	18.0	32.7	45.8	22.0
Books as source of contraceptive knowledge									
No	66.7	88.1	60.1	84.1	72.5	73.7	74.5	75.9	70.9
Yes	33.3	11.9	39.9	15.9	27.5	26.3	25.5	24.1	29.1

The contraceptive methods used depended on gender, place of residence and age. Boys in comparison to girls more often used contraceptives (chi-square 41.9;  $p < 0.05$ ). Respondents living in large and average-sized cities were more likely to

use contraceptives than those from rural areas. Respondents over the age of 18 more often used contraceptives (chi-square 10.5;  $p < 0.05$ ) than the younger ones. A statistically significant relationship was noticed between the source of contraceptive knowledge obtained – from parents or doctors – and the frequency of its usage. Individuals who obtained information from these sources were less likely to declare not using any forms of contraceptives. There was no statistically significant influence of the level of education of the respondents' parents on the usage of contraceptives.

The most common source of information about contraception given by the respondents were their friends (39.9%). Their teachers (32.7%) and parents (32.0%) were on the second place. The press as the source of information was rarely given. The least mentioned source of sexual knowledge was doctors (23.5%) and books (26.5%) – Table 3.

Parents were the most common source of information about contraception in Germany and France and the least common in Ukraine (chi-square 45.7;  $p < 0.05$ ). Doctors were the most often mentioned source in France and Belarus, and the least mentioned in Ukraine (chi-square 25.1;  $p < 0.05$ ). Teachers as a source of information were the most common source in Germany and the least common in Belarus and Ukraine (chi-square 95.9;  $p < 0.05$ ). Friends were the most often given source in Poland, contrary to the UK (chi-square 61.8;  $p < 0.05$ ). The press was the most common source of contraceptive knowledge in Poland, UK and France, and the least common in Belarus and Ukraine (chi-square 130.6;  $p < 0.05$ ). Books were the most often mentioned source by Germans and the least mentioned by the French (chi-square 41.9;  $p < 0.05$ ).

## DISCUSSION

One of the most important stages in human biological development is adolescence, which should end in gaining full physical, mental and social maturity. Despite the acceleration of the age of puberty in recent decades, obtaining mental maturity, and most of all a mature approach to sexuality, is not that clear. The first sexual contact (sexual initiation) seems to be one of the most important events for both boys and girls, but, depending on the gender of the individual, it can have a different meaning. It is, however, the crossing of a new threshold, a symbol of entering adult life [15]. A normative age for sexual initiation cannot be determined – the necessity for gaining full biological, psychological, sexual and social maturity as the condition for sexual initiation is emphasized. The beginning of sexual activity is influenced by many factors, such as: biological needs, fascination with ones partner (love), peer pressure, curiosity, pleasure seeking, gender, age, social, family, environmental, cultural and religious conditioning [16].

Results of the presented study indicate that 50.5% of respondents had not yet initiated sexual contacts, while 49.5% answered positively. The lowest age was given by respondents living in Germany – the girls begin sexual activity at the age of 14.5 and the boys at the age of 12.6. In other countries, the results were not so diversified, e.g. English girls claimed to have begun sexual activity at the age of 14.7 while English boys at the age of 15.7. In France, Ukraine and Poland, the age of initiation was 16.0, 16.6 and 18.8, respectively, for boys, and 16.7, 15.6 and 16.6 for girls.

Based on research concerning sexual behaviour conducted by Bozon and Konsula [17] in 12 European countries, the changes in sexual initiation age over the last 50 years can be traced. During this time, the age of sexual initiation of girls decreased significantly (in 1923 the women's age of sexual initiation was 20.5). No such significant decrease, however, can be observed for boys. The change of the age of sexual initiation began to stabilize after the 1970s; in France, for example, it was 17 for boys and 18.1 for girls, whereas in Germany 17.7 for both genders [17]. Declaration of sexual activity was influenced by the level of education of the respondents' parents (the majority with higher education). The place of residence (urban-rural) had no influence. These results differ greatly from the results of studies conducted by Wojnowska et al. [18] as well as Wojnarowska and Mazur [19]. These showed that adolescents of both genders living in cities, in comparison to those living in rural areas, had a higher percentage of sexually active individuals. Analysis of sexual initiation in individual countries also showed that French youths more often declare to have already begun sexual activity. These results, different from other countries, could have been affected by the age distribution of respondents – the French were the oldest studied group.

Polish teenagers still start their sexual life quite late, and many decide to postpone this moment for some later time. This is well shown in the comparison of results of HBSCS (Health Behaviour in School-aged Children Study) research in 2001-2002 on a group of 30 countries. Poland is among the countries with the lowest percentage of young people who went through sexual initiation under the age of 15: less than 10% of girls and less than 20% of boys. Similar results were calculated for girls from: Greece, Israel, Macedonia and Lithuania, and for boys from Spain, Estonia, the Czech Republic and Austria. In all other countries the participation of people declaring sexual initiation at the same age was relatively higher [20]. Similar results were obtained in other countries by analyses of older individuals – students [21]. Only in Japan the percentage of students after sexual initiation was low, and the initiation age as high, the same as in Poland.

In the presented research, the most common reason for initiating sex was love for the partner (50%), curiosity (22%) and accident (18%). As shown, a liberalisation of sexual approach occurs – marriage and love for the partner are no longer the necessary conditions for sexual initiation. The study conducted by Izdebski and Jaczewski indicates that up to 70% of individuals declared that they had initiated sexual contacts solely out of love for their partner (mostly girls), while all others – after marriage. One of every three individuals presented a hedonistic attitude and initiated sexual contacts regardless of feelings for the partner or relationship legalization (boy more often than girls) [22].

The conducted research showed that friends as the main source of sexual knowledge were mentioned most often in Belarus and Poland, whereas school was the most often mentioned source in Germany and Belarus, and the least mentioned in Ukraine. Parents were the most mentioned source of sexual knowledge in Belarus, France, Poland and Germany, while they were the least mentioned in the Ukraine. Television was the most common source of information in Belarus, France and Germany.

According to other studies, the main source of knowledge about sexuality and all its aspects were mass media (television, press, radio, internet), peers, and only a small percentage –

parents (10% of youths talk to their parents, mainly mothers, about their sexual activity). Older teenagers are more likely to talk to their parents who, however, still remain a scant source of information [22].

It is worth emphasising that the knowledge obtained from the mass media and friends is often unreliable, insufficient, and most of the information is delivered chaotically. This is why teenagers (mainly girls), even if they seem well-educated and use professional language, often do not understand the meaning of the words used. The information they acquired is inconsistent [23].

While analysing the statements given by the respondents concerning their conversations with their parents about sex, 55% answered negatively when asked if sex was an object of discussion in their families, while 43% answered positively. English youths answered positively statistically significantly more often, whereas the Ukrainians and Polish most often stated that sex is not an object of discussion in their homes. The other results of the study may have been influenced by the age distribution of the studied youths. The research conducted by the Health Behaviour in School-aged Children concerned students who, more often than individuals not continuing their education to a higher level, come from families of higher social status and education. The characteristics of the respondents in own research were more diversified.

Polish teenagers declare great easiness in talking to their parents about their sexual life. The contacts of Polish teenagers with their mothers seem to be best in comparison to the countries studied during the Health Behaviour School-aged Children Study in years 2001-2002 (Poland, Lithuania, Spain, Hungary, Russia, Czech Republic, France, Portugal, Italy, Netherlands, Ukraine, Sweden, Germany, UK). Almost 100% of girls and boys at the age of 11 do not demonstrate any problems when talking to their mothers. This percentage is lower (93%) at the age of 13 and above 90% at the age of 15. Studies concerning such relations with fathers also indicate a large potential for trust, but not as big as with the mothers. It should be noted that these results are better for boys than girls, which is natural at this stage of development. At the age of 11 about 90% of teenagers show no problems in contacts with their father. At the age of 13 this percentage is only 75% for girls and 86% for boys, whereas at the age of 15 – 64% for girls and 73% for boys [24]. These results are not confirmed by own research.

Analysis of contraceptives used by the youth from selected European countries shows over half of those questioned did not use contraceptive methods. Using contraception depends on the gender (boys more often) and place of residence (people from big/medium cities definitely more frequently use contraceptives, than people from the countryside). Parents' level of education did not show any influence on the contraception use by the youth. The French were the most frequent users of contraception within the analyzed population. The age structure might have been the reason, as the French were the oldest group.

CBOS research from 2008 on a representative sample of 495 people aged 13-21 showed that more than a half of them, after sexual initiation, declared the use of contraceptives. The most popular were condoms (63.2% of respondents). Three times fewer youths used hormonal pills (22.7%) [25].

Survey analysis shows that the most frequent contraception method is condom use (31%), while 17% of respondents declared using hormonal pills. The worldwide Durex report

for 2004 showed that 71% of Polish citizens declared using condoms [26].

The most popular source of information regarding contraception, as proved by the subject analysis, were colleagues and friends, teachers, and – more seldom – parents and the press. The least popular were physicians and books. Having analyzed the results of the subject study it was concluded that parents were the most popular source of information regarding contraception in Germany and France, and the least popular in the Ukraine. A physician was the most popular source in Belarus and France, and again the least popular source in the Ukraine. Colleagues and friends are most trusted in France and Poland, while the last – in the UK. The press is considered a good source of knowledge about preventing pregnancy in the UK, Poland and France, but is not so widespread in the Ukraine. Books are the most popular source in Germany, and the least popular in France.

According to Bielak, girls obtain knowledge about contraceptives from professional journals (52%) and from physicians (7.8%), while young boys and girls from colleagues and friends (7.8%). The medical service is not a source of information for young people, and many of them learn from their own experience [27]. According to Żurawicka et al., the main source of information about contraception are the media (almost 33%), friends and colleagues (22.51%), parents (14.72%), partners and gynecologists (9.96%) [28].

## CONCLUSIONS

1. Nearly half of adolescences aged 15-19 years were sexually active, with the highest rate in France and Belarus and lowest in Germany.
2. Sexual initiation depended on gender (more common for boys) and parents' level of education (more often parents with higher education) and was independent of the place of residence (urban-rural).
3. The most common reason for sexual initiation in Belarus, Ukraine, Poland and France was love, curiosity in France, and accident in Germany.
4. Friends and the mass-media proved to be the most popular source of sexual education among adolescents, while the least popular were doctors and parents.
5. Contraceptive methods used by nearly half of the respondents were most often used by French youths, and least often by Ukrainian adolescents.
6. The use of contraceptive method depended on gender (more often for boys), place of residence (more common for youths living in cities), age (individuals over the age of 18 are more likely to use contraceptives), and was independent of parents' level of education.

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